

TACTICAL CONVOY HANDBOOK



U.S. ARMY TRANSPORTATION SCHOOL
TACTICAL TRANSPORTATION BRANCH
FORT EUSTIS, VA

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PREFACE

The purpose of this handbook is to provide the tactical convoy commander with a handy reference for doctrine, tactics, techniques and procedures on convoy operations. This handbook contains extracts from doctrine as well as various convoy products. This handbook is intended to be used as a field guide for tactical convoy operations.

The primary audience for this handbook is the commissioned and non-commissioned officers charged with leading tactical convoys. However, the information contained herein can be used to plan and conduct convoys anywhere and under any conditions. Local reproduction is authorized and encouraged.

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CHAPTER 1 - DOCTRINAL EXTRACTS

The following chapter contains extracts from convoy related field manuals.

EXTRACT FROM FM 55-15, TRANSPORTATION REFERENCE DATA

APPENDIX B ROAD MOVEMENT ORDER FORMAT

(Classification)

Copy of copies
Issuing headquarters
Place of issue (may be in code)
Date-time group of signature
Message reference number

ROAD MOVEMENT ORDER NO.
(OR: ANNEX (ROAD MOVEMENT) to OPERATION ORDER NO)

References: Maps, tables, and other relevant documents.

Time zone used throughout the order:

Task organization:

1. SITUATION

- a. Enemy Forces.
- b. Friendly Forces.
- c. Attachments and Detachments.

2. MISSION

3. EXECUTION

- a. Commander's Intent.
- b. Concept of Movement.
- c. Tasks of Subordinate Unit.
- d. Detailed Timings.
- e. Coordinating Instructions.
 - (1) Order of march.
 - (2) Routes.
 - (3) Density.
 - (4) Speed.
 - (5) Method of movement.
 - (6) Defense for move.
 - (7) Start, release, or other critical points.
 - (8) Convoy control.
 - (9) Harbor areas. 1
 - (10) Halts.

- (11) Lighting.
- (12) Air support.
- f. Other (as necessary).

4. SERVICE SUPPORT

- a. Traffic Control.
- b. Recovery.
- c. Medical.
- d. Petroleum, Oil, and Lubricants.
- e. Water.

5. COMMAND AND SIGNAL

- a. Commanders.
- b. Communications.
- c. Position of Key Vehicles.

Acknowledgment instructions.

Last name of commander

Rank

Authentication:

Appendixes:

Distribution:

NOTES

1. A harbor area is a space set aside for normal halts, traffic control, and emergency congestion relief. Harbor areas are used–
 - To hold vehicles at both ends of a crossing or defile.
 - To make changes in density, especially at first or last light.
 - To contain spillovers in serious delays (likely to be caused by enemy air attack or its results).
 - To allow columns to rest and carry out maintenance and decontamination.
 - To allow elements to change position in column if there is a change in priorities.
1. Only the minimum number of headings should be used. Include any information common to two or more movement numbers under the general data paragraphs.
2. Since the table may be issued to personnel concerned with traffic control, security must be remembered. It may not be desirable to include dates or locations.
3. If the table is issued by itself, not as an annex to a more detailed order, the table must be signed or authenticated in the normal way.
4. Critical point is defined as “a selected point along a route used for reference in giving instructions.” Critical points include start points, release points, and other points along a route where interference with movement may occur or where timing is critical.
5. The movement number identifies a column or element of column during the whole of the movement.

EXTRACT FROM FM 55-30, ARMY MOTOR TRANSPORT OPERATIONS

OPERATIONAL ENVIRONMENT

3-2. **OPERATIONS SECURITY.** There are four steps in the OPSEC planning sequence:

- Determine enemy capabilities for obtaining information about motor transport operations.
- Determine what information obtained by the enemy can compromise the operation.
- Determine which actions taken by motor transport units before an operation, if known and analyzed by the enemy, would give the enemy the information he needs.
- Determine what protective measures are necessary and where they must be implemented to maximize operations security.

Operations security measures include:

- Counter surveillance.
- Signal security.
- Physical security.
- Information security.

a. **Counter surveillance.** Counter surveillance includes all active or passive measures taken to prevent threat forces from seeing your area, equipment, movements, and so forth. Counter surveillance techniques include--

- Camouflaging and toning down trucks, including the headlights and windshields, when they are not moving.
- Moving at night or during periods of reduced visibility using blackout lights.
- Using terrain as concealment.
- Maintaining noise, litter, and light discipline.

b. **Signal Security.** Signal security is the use of communications and electronics security techniques to prevent the disclosure of operational information. It includes the use of communications codes, secure voice equipment, and proper positioning of antennas. Techniques for motor transport units include--

- Keeping radio transmissions short.
- Maintaining signal silence whenever possible.
- Using wire communications when possible.
- Using low power in radios.

c. **Physical Security.** Physical security is the use of security forces, barriers, dispersal, concealment, and camouflage to deny enemy access to facilities, areas, equipment, materiel, and personnel. Physical security protects operational information or activities. Some practical techniques include--

- Employing security elements to the front and rear and, when required, to the flanks of convoys.
- Using listening and observation posts when in garrison and operations areas.
- Identifying avenues of approach and covering them with fields of fire.

- Employing obstacles that impede the enemy.
- Using challenge and passwords.
- Using early warning devices.

d. **Information Security.** Information security is the control of written, verbal, and graphic information to prevent the disclosure of operational information. To ensure information security-

- Never post information out in the open, such as on a vehicle windshield.
- Do not allow local civilians without clearances into work and assembly areas.
- Handle all classified and sensitive documents properly.

5-5. **UNIT SOP.** A complete SOP facilitates planning. At company level, SOPs should conform with those prepared by the next higher headquarters. At a minimum, the SOP should cover the following subjects:

- Duties of the convoy commander and other convoy control personnel.
- Convoy organization.
- Weapons and ammunition to be carried.
- Hardening of vehicles.
- Protective equipment to be worn.
- Preparation of convoy vehicles; for example, information on tarpaulins, tailgates, and windshields.
- Counter ambush actions.
- Operations security measures.
- Immediate action drills.
- Actions during scheduled halts.
- Maintenance and recovery of disabled vehicles.
- Refueling and rest halts.
- Communications.
- Actions at the release point.
- Reporting.

5-6. **PREPARING VEHICLES FOR CONVOY.** This paragraph discusses the responsibilities of key personnel, as well as the elements needed, in preparing vehicles for convoy.

a. **Command Responsibilities.** The commander of the moving unit is responsible for the mechanical condition of his vehicles. Leaders must inspect all vehicles according to appropriate TMs before departing for the mission. **Convoy commanders should also ensure that--**

- Additional fuel, water, and lubricants are provided for en route requirements.
- Loads are inspected.
- Tarpaulin, troop safety straps, and end curtains are provided when required.
- Vehicles are hardened when required.
- Columns are identified with appropriate markings.
- Weapons are inspected.

b. **Marshaling or Assembly Area Inspection Teams.** A technique for large unit movements is to establish marshaling area or assembly area inspection points. As convoys are ready to depart,

they proceed to the inspection point for final checks and driver briefings. Unit level maintenance personnel may be available to assist unit leadership in correcting last-minute minor deficiencies. Trucks with major problems will be returned to the parent unit and replaced with serviceable vehicles.

c. **Hardening Vehicles.** Cover the cargo bed of troop-carrying vehicles with at least a double interlocking layer of sandbags. Cover the cab floor of all vehicles with a double layer of sandbags under the driver's seat. Take care not to hamper pedal movement or hamper the driver's access to them. As an additional precaution, place a heavy rubber or fiber mat over the sandbags to reduce danger from fragments such as sharpened stones, sand, and metal parts of the vehicle. This also prolongs the life of sandbags. Sandbags may also be placed on the fuel tank, fenders, and hood. See Appendix O for more information on vehicle hardening. When contemplating hardening vehicles for escort and/or gun truck duty, *use one escort/gun truck for every eight task vehicles*. Prior approval from higher headquarters must be received before task vehicles are converted into escort/gun trucks.

e. **Convoy Identification.** Each column should be identified by a blue flag on the lead vehicle and a green flag on the rear vehicle. Flags should be mounted on the left of the vehicles, either front or rear. They must be positioned so that they do not interfere with driver vision or functional components of the vehicle. When movement is at night, the lead vehicle shows a blue light and the rear vehicle a green light. The vehicle of the convoy commander and the march unit commanders must display a white and black diagonal flag on the left front bumper. This flag is divided diagonally from the lower left corner to the upper right corner with the upper left triangle white and the lower right triangle black. Trail party vehicles carry an international orange safety flag. State and local police or MP escort vehicles do not display convoy identification flags. See Figure 5-3 for illustrations of flags and flag placement.

The convoy movement order includes a CCN which identifies the convoy during its entire movement. The CCN is placed on both sides of each vehicle in the convoy and, if possible, on the front and back of each vehicle (see Figure 5-4,). It is also placed on the top of the hood of the lead and rear vehicles of each march unit. See Appendix M for detailed information on convoy clearance procedures, to include the assigning of CCNs to both AC and RC convoys. See Appendix P for specifications for convoy warning signs.

f. **Final Preparation.** Final convoy preparation includes organizing the convoy, briefing personnel, and inspecting individual equipment and vehicles. Convoy personnel are usually briefed after the vehicles are lined up. After the convoy commander's briefing, personnel are returned to the control of the march unit commanders who give final instructions. Leaders make final inspections of loads to ensure that they are properly secured and that vehicles are ready to move. See Appendix Q for a sample convoy briefing. Radio operators are instructed to check their equipment and enter the net.

5-7. **NIGHT CONVOYS.** Although night convoys are extremely vulnerable to ambush and sniper fire, CSS doctrine requires that the preponderance of resupply operations be conducted during hours of darkness. Units must be trained in techniques for night convoys, night loading and off-loading, and night refueling. Heed the following guidelines for night convoys--

- Keep night convoys small.

- Use roads that drivers know.
- Make maximum use of night vision devices.
- Rehearse movements.
- Conduct leader reconnaissance.
- Plan night moves in the same manner as daylight moves. However, night moves take longer and there is greater chance for mistakes, injury, and fratricide. When planning a night move, determine if the convoy will operate in an area that requires blackout drive. This decision will be made by the area commander.

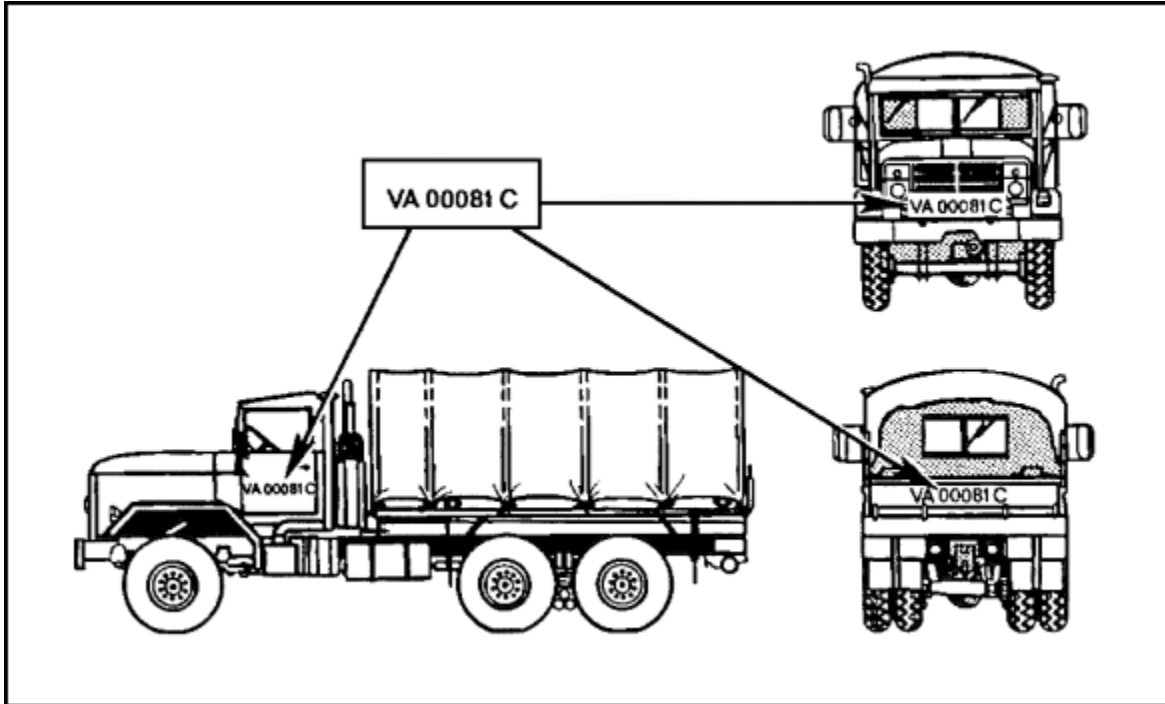


Figure 5-4. Placement of convoy clearance number

CONVOY DEFENSE TECHNIQUES

The motor transport commander must ensure that his troops are trained in convoy defense techniques. The payoff is reduced vulnerability to hostile action and successful mission accomplishment. The damage a convoy incurs when attacked depends on the adequacy of convoy defense training. It also depends on the adequacy of the briefing that convoy personnel receive before the operation (Appendix Q).

6-1. AIR ATTACK. The air threat varies from UAV, cruise missiles, and armed helicopters to high-performance aircraft. Convoys face the greatest danger of an air attack while moving along open roads or during halts where there is little or no overhead cover.

An air attack is a type of ambush. Accordingly, many of the procedures used during a ground ambush also apply to the air attack. For example, the convoy commander must--

- Prescribe alarm signals (unit SOP) (see FM 44-3 for more information on alarms).
- Give instructions for actions to take when under attack.
- Prescribe actions to take in the absence of orders.
- Ensure that defense procedures are rehearsed.
- Review the procedures with convoy personnel before the convoy moves out.

The convoy commander should remember that enemy pilots will seek out and try to surprise the convoy. They will fly at a low, terrain masking altitude. If they attack from higher than 350 meters, small arms fire will have no effect against them, but air defense weapons can be used against them effectively. Enemy pilots will also fly at high speed to make air defense weapons and small arms fire less effective.

a. **Active Defense.** The key to effective small arms fire against aircraft is volume. Put up a large volume of fire with small caliber weapons. Volume small arms fire comes from knowing the effectiveness of small arms fire on low-flying aircraft. Training ensures accuracy and builds confidence.

(1) **Firing positions.** Except for the prone position, the riflemen's basic firing stances stay the same. Maximum use of cover and concealment is essential. A crew served weapons gunner should fire from a protected position if possible.

(2) **Tips for small arms defense.** The following are tips for small arms defense:

- Shoot any attacking aircraft or unauthorized UAV.
- Fire at the nose of an aircraft; fire at the fuselage of a hovering helicopter or slightly above the nose of a moving helicopter.
- Fire in volume--everybody shoots.
- Lead aircraft crossing your position (M16 and M60 lead jets the length of one football field).
- Take cover if time allows.
- Support your weapon if possible.

- Lie on your back if caught in the open.
- Aim mounted machine guns slightly above the aircraft nose for head-on targets.
- Control small arms fire so attacking aircraft flies throughout it.

b. **Passive Defense.** For a logistical convoy, normally without significant air defense firepower, passive measures are most effective. The key is to prevent attacks by hostile aircraft.

(1) **Dispersion.** The formation used by the convoy is a type of passive defense. Factors influencing selection of the best vehicle distance include:

- Mission.
- Cover and concealment along the route.
- Length of the road march.
- Type of road surface.
- Types of vehicles.
- Nature of cargo.
- Enemy threat (ground and air).
- Available defense support.
- Small arms potential.

(2) **Open column.** Open column convoys generally maintain an 80- to 100-meter distance between vehicles. This formation offers an advantage of fewer vehicles damaged by air-to-ground rockets, cannons, or cluster bomb units. However, open columns make control more difficult for the convoy commander when it is necessary to give orders to stop, continue, disperse and seek concealment, or engage aircraft. The column may be more susceptible to attack. It is exposed for a longer period and, if attacked, its defense is less effective since its small arms fire is less concentrated.

(3) **Close column.** Close columns maintain a distance of less than 80 meters between vehicles. This formation has none of the disadvantages noted for the open column formation. However, presenting a bunched up target could be an overriding disadvantage. Where an air attack is likely, it may be wise for the convoy commander to move close column convoys only at night.

(4) **Camouflage and concealment.** Camouflage and concealment techniques can make it more difficult for the enemy to spot the convoy. Not much can be done to change the shape of a vehicle moving down the road, but the type of cargo can be disguised or concealed by covering it with a tarpaulin. Bulk fuel transporters (tankers) are usually priority targets. Rigging tarps and bows over the cargo compartment conceals the nature of the cargo from the enemy pilot. The following are other effective passive measures:

- The operator should look for a bush, tree, or some other means of concealment to break the shape as seen from the air (Figure 6-2).
- Smooth surfaces and objects, such as windshields, headlights, and mirrors, will reflect light and attract the pilot's attention. Camouflage or cover all shiny items before the convoy moves out.
- If vehicles are not already painted in a pattern to blend with the terrain and to break the outline, mud can be used to achieve this effect.

(5) **Air guard duties.** Assign air guard duties to specific individuals throughout the convoy, and give each specific search areas. If the road march lasts more than an hour, soldiers should take shifts at air guard duty. Scanning for a long period dulls the ability to spot aircraft. Seeing the enemy first tips the odds in favor of the convoy, giving it time to react. See FM 44-3 for search and scan procedures.

(6) **Communications security.** Today's communications equipment can be very useful for controlling convoys, but it can also help enemy pilots find you. Use the radio only when necessary and be brief. See Appendix S for added COMSEC precautions.

c. **Passive Reactions.** When aircraft are spotted or early warning is received, the convoy commander has three options: stop in place, continue to march, or disperse quickly to concealed positions.

- If the convoy commander chooses to halt the convoy, the vehicles simply pull to the shoulder of the road in a herringbone pattern. This technique has several advantages:
- It is harder for the enemy pilot to see the convoy when it is halted than when it continues to move.
- It is easy to continue the march after the attack.
- The volume and density of organic weapons will be higher than if the convoy disperses.
- A disadvantage to this option is that a convoy stopped on the open road makes a good target and an enemy attack has a better chance of causing greater damage to the unit.
- The mission and/or terrain may dictate that the march continue. If this is the case, convoy speed should be increased. Continuing the march offers the advantage of presenting a moving target, making it more difficult for the enemy to hit. However, detection is easier and volume and density of small arms fire are reduced.

A simple technique to disperse vehicles is to establish a method in the SOP that, in the event of an attack, odd-numbered vehicles go to the left and even-numbered vehicles go to the right. The key to dispersion is not to make two straight lines out of what was one long line; the vehicles must be staggered (Figure 6-4). This should not be much of a problem if the drivers have been trained to go to trees, bushes, folds in the ground, and so forth, that will give concealment. Once the convoy is dispersed, all personnel, except for vehicular-mounted weapon gunners, dismount and take up firing positions.

Advantages of this option are that it is more difficult for the enemy pilot to detect the vehicles and get multiple hits. However, this method has several disadvantages:

- It is easier for the enemy pilot to spot the convoy as it begins to disperse.
- The volume and density of small arms fire are reduced.
- It takes longer to reorganize the convoy after the attack.

6-2. ARTILLERY OR INDIRECT FIRE. Enemy artillery units or indirect fire weapons may be used to destroy logistical convoys or to harass and interdict the forward movement of supplies and personnel.

a. **Active Defense.** Active defensive measures against artillery are extremely limited but must not be overlooked. Active measures include--

- Directing counterbattery fire if the direction and approximate distance to the enemy artillery can be estimated.
- Directing small arms fire or artillery fires against the enemy FO if he can be located.
- Coordinating air strikes against the enemy artillery.

b. **Passive Defense.** The formation in which the convoy moves can be a type of passive defense. See the discussion of open and closed convoys under Passive Defense for Air Attacks.

- The convoy commander has three options when confronted with incoming artillery rounds: halt in place, continue to march, or disperse quickly to concealed positions. Regardless of the option selected, the actions to be taken and the signal directing the action should be covered in the unit SOP. The primary consideration is the immediate departure from the impact area.
- The convoy should only be halted when the artillery concentration is ahead of the convoy. The convoy commander should look for an alternate route around the impact area and the convoy should remain prepared to move out rapidly.
- The mission or terrain may require the convoy to continue. If this is the case, increase speed and spread out to the maximum extent the terrain will allow. Casualties can be reduced by avoiding the impact area, increasing speed, wearing protective equipment, using the vehicle for protection, and increasing dispersion.

6-3. SNIPER FIRE. Take extreme caution when sniper fire is received to ensure that any return fire does not harm friendly troops or civilians in the area. The best actions are passive. Ensure all personnel wear Kevlar helmets and available body armor at all times. All vehicles should move through the area without stopping. Escort personnel should notify the march element commander by giving a prearranged signal, like a smoke grenade thrown in the direction of fire, and attempt to locate and destroy the sniper by long-range fire if in a free-fire zone.

NOTE: Prevent convoy personnel from random firing by designating personnel to return fire. Do not return fire in a no-fire zone.

The convoy commander may order additional fire or supporting forces into the area to destroy, capture, or drive off the sniper. Convoy personnel should be aware that a heavy volume of fire is frequently used by the enemy to slow down a convoy before an ambush.

NOTE: Remember all details so the incident can be reported to higher headquarters.

6-4. AMBUSH. This paragraph provides guidance in developing and employing counterambush tactics and techniques. The very nature of an ambush--a surprise attack from a concealed position--places an ambushed unit at a disadvantage. Combat situations may prevent a convoy from taking all the measures necessary to avoid being ambushed. Therefore, a convoy must take all possible measures to reduce its vulnerability. These are passive measures supplemented by active measures taken to destroy or escape from an ambush. For information on the types of ambushes, see FM 21-75.

No single defensive measure, or combination of measures, will prevent or effectively counter all ambushes in a situation. The effectiveness of counterambush measures is directly related to the state of training of troops and the leadership ability of the leaders.

The best defense is to avoid being ambushed. Take the following actions to avoid an ambush:

- Select the best route for your convoy.
- Make a map reconnaissance.
- Make a ground reconnaissance.
- Make an aerial reconnaissance.
- Obtain current intelligence information.
- Use OPSEC to deny the enemy foreknowledge of the convoy.
- Do not present a profitable target.
- Never schedule routine times or routes.

Take the following actions to reduce the effectiveness of ambushes:

- Harden vehicles.
- Cover loads.
- Space prime targets throughout the convoy.
- Wear protective clothing.
- Use assistant drivers.
- Carry troops and supplies.
- Use prearranged signals to warn the convoy of an ambush.
- Use escort vehicles (military police, tanks, armored vehicles) or gun trucks.
- Thoroughly brief all convoy personnel on immediate action drills.
- Practice immediate action drills.
- Maintain the interval between vehicles.
- Move through the kill zone, if possible.
- Stop short of the ambush.
- Do not block the road.
- Rapidly respond to orders.
- Aggressively return fire.
- Counterattack with escort vehicles.
- Call for artillery support.
- Call in TACAIR support.
- Call for the reserve force.
- In the event of ambush during night convoy operations under blackout drive, turn on service drive lights and increase speed to clear the ambush area. Be aware that drivers wearing night vision goggles will be temporarily blinded when service drive is turned on.

a. Road Not Blocked. Guerrillas are seldom able to contain an entire convoy in a single kill zone. This is due to the extensive road space occupied by even a platoon-size convoy and because security or lack of available forces may limit the size of the ambushing force. More often, a part of a convoy is ambushed--either the head, tail, or a section of the main body. That part of the convoy that is in the kill zone and receiving fire must exit the kill zone as quickly as possible if the road to the front is open. Vehicles disabled by enemy fire are left behind or, if blocking the road, pushed out of the way by following vehicles. Armored escort vehicles must not block convoy vehicles by halting in the traveled portion of the road to return fire. Vehicles that have not entered the kill zone must not attempt to do so. They should stop and personnel should dismount, take up a good defensive position, and await instructions. Since

escort vehicles may have left the road to attempt to overrun a hostile position, elements of the convoy should not fire on suspected enemy positions without coordinating with the escort forces.

Other actions that convoy personnel can take to neutralize the ambush force include:

- Call for artillery fire on enemy positions.
- Call for gunship or tactical air or army aviation fire on enemy positions.
- Direct gun trucks and other vehicles mounted with weapons to lay down a heavy volume of fire on the ambush force.
- Call for reaction forces.
- Direct all nondriving personnel to place a heavy volume of fire on enemy forces as rapidly as possible as vehicles move out of the kill zone.

NOTE: Vehicles must keep their distance to reduce the number of vehicles in the kill zone. A motor transport convoy with a limited escort is seldom able to defeat a hostile force and should not attempt to do so. When part of the convoy is isolated in the kill zone, vehicles that have not entered the ambush area must not attempt to do so. They should stop; personnel should dismount, take up a good defensive position, and await instructions until supporting forces have cleared the ambush. Normally, a transport unit will not deploy to attack a hostile force unless it is necessary to prevent destruction of the convoy element. It relies on supporting air, artillery, escorts, and reaction forces.

b. Road Blocked. When an element of a convoy is halted in the kill zone and is unable to proceed because of disabled vehicles, a damaged bridge, or other obstacle, personnel will dismount, take cover, and return a maximum volume of fire on enemy positions. When dismounting, exit the vehicle away from the direction of enemy fire. Security/escort troops from vehicles that have passed through the ambush area dismount and lay down a base of fire on the ambush position. Reaction forces should be called in as soon as the ambush attack is launched. When a security escort is provided and a combat emergency arises, the escort commander has operational control of the security element to attack and neutralize the hostile force. Normally, the security force will take action to neutralize the ambush while the convoy escapes from the kill zone. In an ambush situation, immediate reaction and aggressive leadership are essential to limit casualties and damage to vehicles, cargo, and personnel. If immediate air or artillery support is available, personnel will be restricted to a specified distance from the road to avoid casualties from friendly fire. In this situation, personnel in the kill zone establish a base of fire, while others take up defensive positions away from their vehicles and wait while supporting fire is called in on the enemy positions. Fire in the kill zone may be from only one side of the road with a small holding force on the opposite side. To contain the convoy element in the kill zone, mines and booby traps are frequently placed on the holding force side. The security escort must take care in assaulting the main ambush force as mines and booby traps are commonly used to protect its flanks.

When the enemy is dislodged, the road must be cleared and convoy movement resumed as soon as possible. Wounded personnel are evacuated using the fastest possible mode. When disabled vehicles cannot be towed, their cargo should be distributed among other vehicles if time permits. When it is not feasible to evacuate vehicles and/or cargo, they will be destroyed upon order from the convoy commander. If at all possible, radios and other critical items will be recovered before

the vehicles are destroyed. Under no circumstances will they be allowed to fall into enemy hands.

c. Mines and Booby Traps. Mines and booby traps are frequently part of an ambush. Command-detonated mines are often used to start an ambush. Mines will also be planted along the shoulder of the road for harassment and interdiction. A booby trap system may be used against personnel in vehicles and could consist of hand grenades. Claymore mines or artillery shells may be suspended from trees and command-detonated when a vehicle passes.

The following guidelines have proven effective in decreasing damage by mines in convoy operations:

- Track the vehicle in front.
- Avoid driving on the shoulder of the road.
- Whenever possible, do not run over foreign objects, brush, or grass in the road.
- Avoid fresh earth in the road.
- Watch local national traffic and the reactions of people on foot. (They will frequently give away the location of any mines or booby traps.)
- When possible, arrange for the engineers to sweep the road immediately before the convoy is scheduled to move over it.
- Use heavy vehicles such as tanks to explode small mines when deployed in front of the convoy.
- Harden vehicles.
- Wear protective equipment.

VEHICLE HARDENING

As the nature of conflict changes, so does the threat to logistics units. War and certain other operations--especially peacekeeping or peacemaking--place renewed emphasis on convoy security and reinforce lessons learned in Vietnam. Current threats include the use of command-detonated and pressure-sensitive mines placed on, above, or along the shoulders of roads traveled by military vehicles and the ambushing of convoys and harassment with sniper fire. These methods of disrupting military operations are highly effective, cheap, require limited time and labor, are easy to coordinate, and can be accomplished by an unsophisticated enemy. To counter these threats, motor transport units may be provided with security forces and supporting arms firepower. Also, special vehicle-hardening techniques using sandbags and other improvised material have proved successful in protecting convoy personnel, equipment, and cargo. This appendix describes these techniques. Although effective, vehicle-hardening techniques must be tailored to fit the specific environment in which the motor transport units are operating.

O-1. HARDENED VEHICLES. A hardened vehicle is made less vulnerable to the effects of explosives and small arms fire by adding sandbags, armor plating, ballistic glass, and other protective devices. Hardening may make certain vehicle components and cargo less vulnerable. Its primary purpose, however, is to protect the truck's occupants. The protection afforded is significant and often means the difference between injury and death.

O-2. SANDBAGS. Sandbags are effective in reducing the effects of blasts, preventing fire from reaching the driver, and providing protection from small arms fire and fragmentation. Sandbags are usually readily available and do not permanently impair the flexibility of vehicles. Sandbags can easily be added or removed from the vehicle as the situation dictates. One drawback to using sandbags is that their weight limits the vehicle's capability to haul cargo.

a. **Cab.** Experience shows that using sandbags to harden vehicle cabs for protection against mine blasts saves lives (Figure O-1). Normally, the cabs of all vehicles subject to detonating mines are hardened. Certain cautions, however, must always be observed. Sandbags should be placed so that they--

- Do not restrict the movement of foot pedals, levers, or controls.
- Do not interfere with the normal functions performed by the driver.
- Do not restrict driver vision.

To reduce the sandblast effect when a mine is detonated near the vehicle, various materials may be placed on top of the floorboard sandbags (such as rubber mats, light metal plates, plywood, or scraps of runway membrane material). Wetting down the sandbags is also effective but contributes to deterioration of the metal.

To properly prepare the vehicle cab, double-stack sandbags under the passenger seat and on the cab floor. Stack the sandbags two high under the driver's seat; in some vehicles this may not be

possible. Remove the tools from the BII storage compartment and place them inside the bed. Place sandbags in the storage compartment to give the driver required protection. As an added precaution, place a heavy rubber or fiber mat over the sandbags. This reduces danger from fragments (such as stones, sand, and metal parts from the vehicle).

NOTES:

1. If the tools remain in the BII storage compartment and the vehicle detonates a mine, the tools may become secondary projectiles that can injure the driver. Also, if sandbags cannot be placed under the passenger seat because batteries are located there, then stack the sandbags on the seat. Never place sandbags directly on the batteries.
2. The cab of a 5-ton M923 cargo truck needs about 14 to 20 sandbags, while a 2 1/2-ton truck requires about 12 to 18 sandbags.

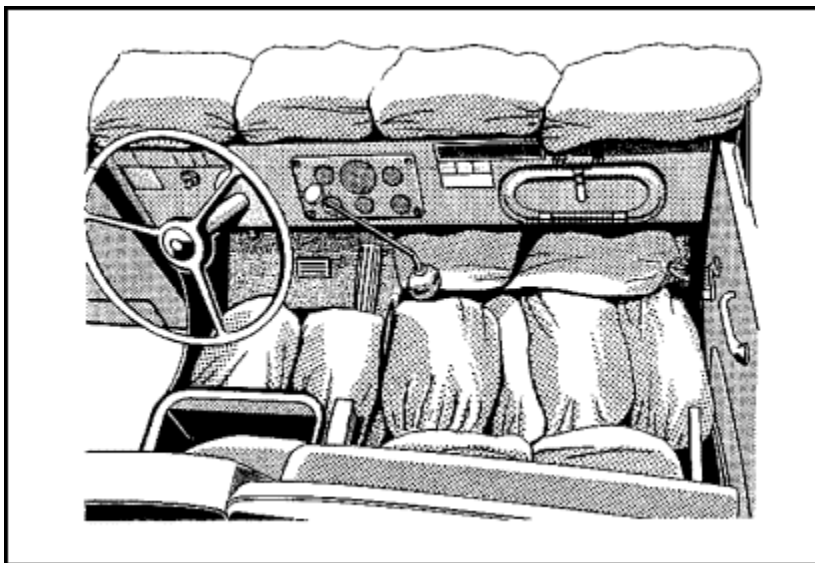


Figure O-1. Proper placement of sandbags in the cab

Cover side windows and the front windshield with wire mesh to protect personnel from rocks and grenades. The convoy commander will decide whether to have windshields removed, lowered, or left in place. If the windshield interferes with the use of weapons and blackout operations and must be lowered, place a single layer of sandbags under the windshield, lower the windshield onto the bags, place a second layer of sandbags over the windshield, and then cover both with canvas (Figure O-2). Placing sandbags under the windshield ensures that--

- Constant vibrations of the vehicle do not damage the windshield.
- Sand is not blown into the driver's face.
- Glass will not shatter and injure the driver and passenger.

NOTE: Leaving the windshield in place protects against heavy and driving rain, incoming grenades, and decapitation of personnel from wire stretched across the road.

b. **Cargo Bed.** Depending on the type of load, the cargo bed may or may not be hardened. For example, if troops are being transported, the bed needs to be hardened with a double layer of sandbags. The bags also need to be properly fitted to the contours of the vehicle. Stack the bags

five high around the sides of the vehicle to add protection. To hold the sandbags in place, construct a support structure and place it inside the bed of the vehicle. This structure can be made by using four-by-fours on the corners and two-by-sixes in between (Figure O-3).

NOTE: Caution must be taken to ensure that the sandbags do not exceed the allowable weight of the vehicle bed. Double stacking the sandbags increases the possibility of exceeding the vehicle's payload capacity. The mission, coupled with the enemy threat, must determine the extent of hardening (single- or double- layer sandbags). The bottom line is to ensure soldier safety.

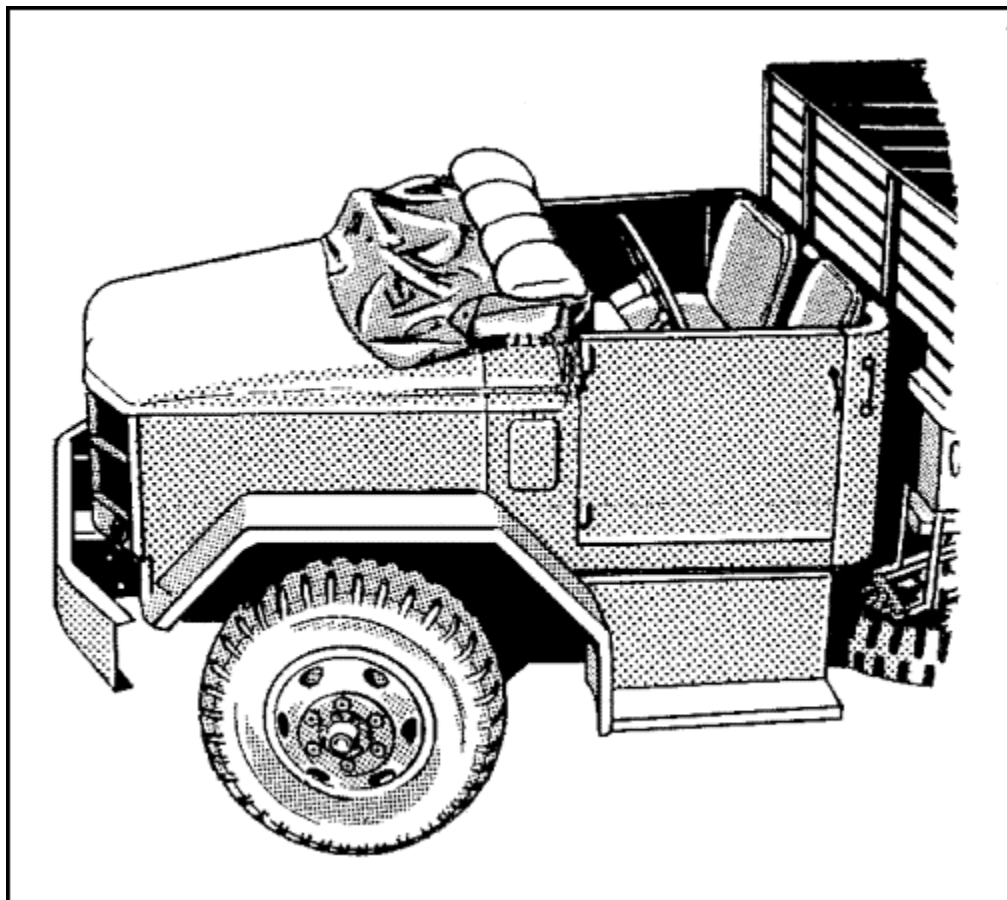


Figure O-2. Proper placement of sandbags under the windshield

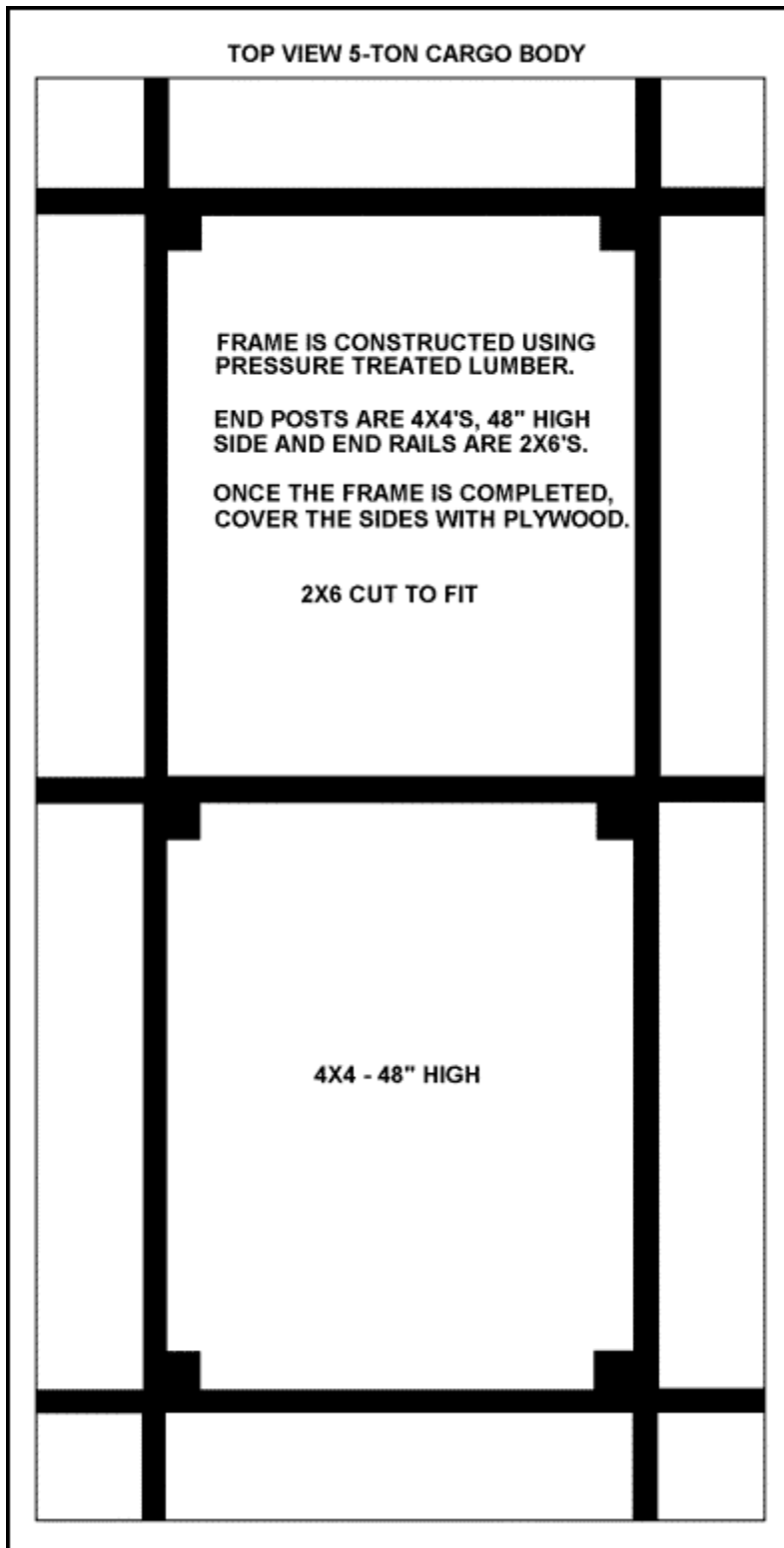


Figure O-3. Support structure for the bed of the truck (continued)
 It takes about 226 sandbags (dry, weighing about 40 pounds each) to prepare the bed of a 5-ton, M923 cargo truck. Distribution is as follows: 86 on the floor bed (single layer); 5 high on each side (50 per side = 100 bags); 20 in the front; and 20 in the rear of the bed (Figure O-4).

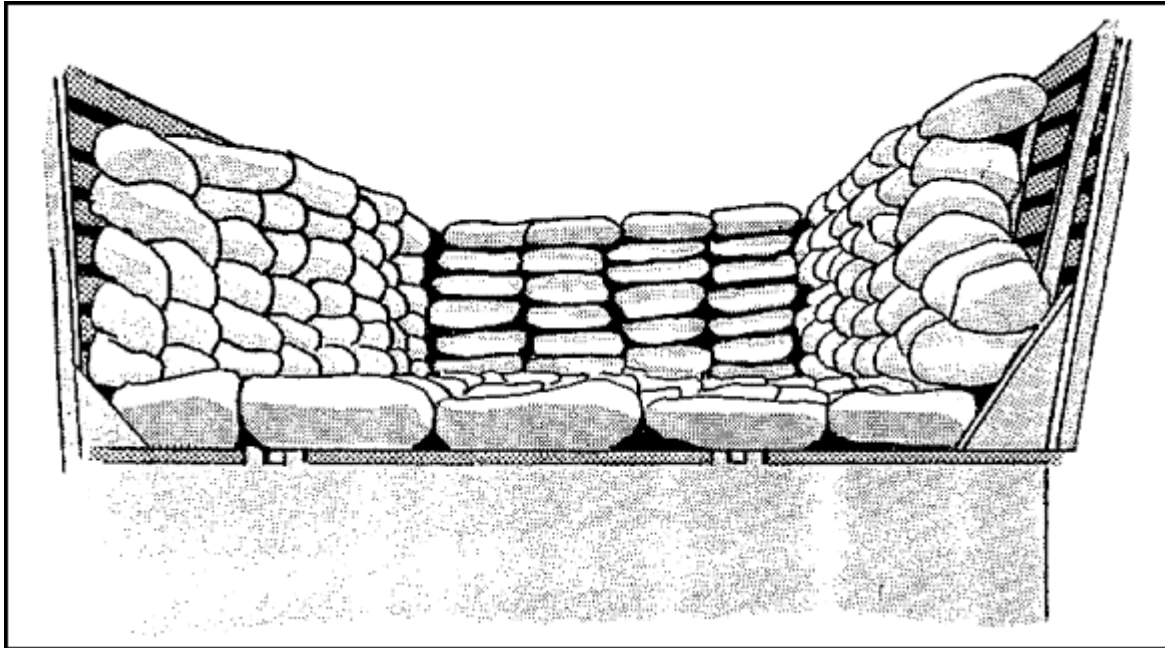


Figure O-4. Sandbagged 5-ton M923 cargo truck

c. **Fuel Tanks.** Protective plating around the fuel tank will lessen the damage to the fuel tank. It will also help to ensure that the fuel tank is not pierced, thus immobilizing the vehicle. This protective measure is especially critical when a vehicle is caught in the kill zone of an ambush. An alternative solution to this problem is to hook up a 5-gallon can of fuel in a safe location for use as an auxiliary fuel tank. This will allow the vehicle to travel a safe distance outside the kill zone if all the fuel is drained from a damaged fuel tank.

NOTES:

1. A 5-ton M923 cargo truck requires about five sandbags to provide top protection. Consider placing protective plating around the sides and bottom of the fuel tank to increase protection.
2. Older vehicles in the Army inventory may still be operating on MOGAS. If a tank filled with MOGAS is ruptured, the fuel may ignite and seriously burn operating personnel.
3. When putting sandbags or protective plating on or around the fuel tank, ensure that the hanger straps of the fuel tank do not crack or break.

O-6. **GUN TRUCKS.** Logistical convoys cannot always depend on military police support or added firepower. To provide more firepower for a convoy, units developed the gun truck. The purposes of a hardened gun truck are to--

- Provide a base of fire.
- Help counter enemy attacks.
- Increase survivability of the convoy.

The gun truck is equipped with a crew-served weapons system, preferably in a protective position. In Vietnam this principle worked well and provided convoys a means of self-defense.

Deploy the gun truck in the convoy where it can best provide the needed firepower. If adequate communications assets are available, they should be located with the gun truck and the convoy commander. This enables the convoy commander to call the gun truck forward when needed. (A predesignated signal is required to bring the gun truck forward and inform the crew-served weapon system personnel of the enemy location.) If communications assets are not adequate, pyrotechnics may be used to signal the gun truck to move forward.

The gun truck should not be pulled up right on top of the enemy location. The crew-served weapons on the gun truck can cover a significant distance. Therefore, the vehicle should be situated where it has a clear field of fire to engage the enemy with the maximum effective range of the weapon. If necessary and if available, multiple gun trucks can be used. When using multiple gun trucks in a convoy, overlapping fields of fire greatly increases the convoy's chance of survival.

NOTES:

1. Based on availability, types of weapon systems, and size of the convoy, the placement and number of gun trucks may vary. With company-size and larger convoys, a minimum of two gun trucks should be used to provide overlapping fire. One gun truck for every eight vehicles in the convoy is recommended.
2. Consider using the MK19 or M203 to penetrate prepared defensive positions since small arms fire may not be capable of destroying enemy positions

O-7. BALLISTIC TEST RESULTS. It is critical that the most protective material available be used to harden a vehicle. Ballistic tests show that sand is about twice as effective as clay in hardening vehicles. At a maximum velocity of 3,250 feet per second at a range of zero feet, it takes about .6 feet of sand and 1.2 feet of clay to stop a 5.56-mm round. At a maximum velocity of 2,750 feet per second, it takes about .9 feet of sand or 1.7 feet of clay to stop a 7.62-mm round. Finally, at the maximum velocity, it takes about 1.4 feet of sand or 2.6 feet of clay to stop a 50-caliber round. Using the most protective substance could mean the difference between life and death for our most precious resource--our soldiers.

O-8. CAMOUFLAGE AND CONCEALMENT. Camouflage and concealment techniques can be used to make it more difficult for the enemy to spot the convoy. The type of cargo being transported can be disguised or concealed by a tarpaulin. Other effective measures include the following:

- Camouflaging or covering shiny surfaces before convoy departure.
- Painting vehicles in a pattern to blend in with the terrain and break the outline.
- Training operators to look for other means of concealment to break the outline of the vehicle.
- Covering vehicle bumper markings. The vehicle bumper markings can provide a great deal of intelligence information to the enemy.

O-9. MINES AND BOOBY TRAPS. Forces engaging in ambush frequently use mines and booby traps. Command-detonated mines are often used to initiate an ambush. Mines may also be planted along the shoulder of the road to harass and interdict. A booby trap system may be used against personnel and equipment. Convoys have employed the following guidelines to effectively limit damage from mines:

- Track the vehicle in front.
- Avoid driving on the shoulder of the road.
- Whenever possible, do not run over foreign objects on the road.
- Avoid potholes and fresh earth on the road.
- Watch local national traffic and the reactions of people on foot (they will often give away the location of any mines or booby traps).
- When possible, arrange for the engineers to sweep the road ahead before the convoy moves over it.
- Use a 2 1/2-ton or larger truck as the lead vehicle instead of a HMMWV. Hard vehicles such as tanks are useful in exploding small mines in front of the convoy.

Harden vehicles.

- Use water in vehicle tires when there is a threat of mines exploding under the tires.
- Increase ground clearance distance between the point of explosion and the vehicle, if possible.

Use the following personal safety measures:

- Wear protective equipment.
- Use safety belts. Ensure seat belts are tight; otherwise, whiplash may occur during an explosion. Also, fasten the seat belt as low as possible on the stomach.
- Use correct posture. Keep the backbone straight and supported by a backrest (to better absorb shock) and place feet flat on the floor.

Slow the vehicle's speed to reduce the potential of accidents. Adjust the speed based on the situation.

Disperse vehicles and maintain intervals.

NOTE: In Somalia, around Mogadishu, the Army experienced command-detonated mines of 30, 50, and 60 pounds. These devices were placed in one of the many potholes in the road and wired for command-detonation. To avoid such obstacles and/or minimize damage, implement the above techniques.

Some indicators that have proven effective in identifying the location of potential mines are--

- Damaged vehicles.
- Signs of digging, holes in the road, potholes, concrete removal, or puddles.
- Boxes along the roadside.
- Wires on the road surface.
- Evidence of vegetation disturbance.
- Disturbances in previous tire tracks.
- Differences in plant growth, such as wilting or dead foliage.
- Irregularities in color or texture of the ground.
- Signs warning local populace.
- The enemy is likely to place mines on--
- Frequently used roadways leading to and from construction sites.
- Brush and other traffic obstructions placed on roadways.
- Bridge bypasses.
- Obvious turnarounds and shoulders.

SAMPLE CONVOY BRIEFING

This appendix contains an outline for a comprehensive and effective prebriefing of convoy personnel. It is properly organized and covers the critical information needed to execute any conceivable convoy operation.

1. Situation:
 - a. Friendly forces.
 - b. Support units.
 - c. Enemy situation.
2. Mission:
 - a. Type of cargo.
 - b. Origin.
 - c. Destination.
3. Execution:
 - a. General organization of the convoy.
 - b. Time schedule.
 - c. Routes.
 - d. Convoy speed.
 - e. Catch-up speed.
 - f. Vehicle distance.
 - g. Emergency measures.
 - Accidents.
 - Breakdowns.
 - Obstacles
 - Separation from convoy.
 - Ambush.
 - Action of convoy personnel if ambushed.
 - Action of security forces during ambush.
 - Medical support.
 - h. Hazards of route and weather conditions.
 - i. Defensive driving.
4. Administration and Logistics:
 - a. Control of personnel.
 - b. Billeting arrangements.
 - c. Messing arrangements.
 - d. Refueling and servicing of vehicles, complying with spill prevention guidelines.
5. Command and Signal:
 - a. Location of convoy commander.
 - b. Succession of command.
 - c. Action of security force commander.
 - d. Serial commander's responsibility.
 - e. Arm and hand signals.
 - f. Other prearranged signals.
 - g. Radio frequencies and call signs for--
 - Control personnel.
 - Security force commander.
 - Fire support elements.
 - Reserve security elements.
 - Medical evacuation support.

EXTRACT FROM FM 100-23, PEACE OPERATIONS

“Meanwhile, I shall have to amplify the ROE so that all commanding officers can know what I am thinking, rather than apply their own interpretation, which might range from "ask them for lunch to 'Nuke' em for breakfast.”

Admiral "Sandy" Woodward
Commander of the Task Force
(Falkland Islands, 1982)

RULES OF ENGAGEMENT, JTF FOR SOMOLIA GROUND FORCES

Nothing in these rules of engagement limits your right to take appropriate action to defend yourself and your unit.

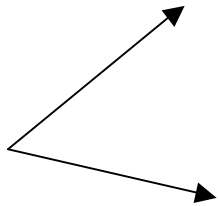
1. You have the right to use force to defend yourself against attacks or threats of attack.
2. Hostile fire may be returned effectively and promptly to stop a hostile act.
3. When US forces are attacked by unarmed hostile elements, mobs, and/or rioters, US forces should use the minimum force necessary under the circumstances and proportional to the threat.
4. You may not seize the property of others to accomplish your mission.
5. Detention of civilians is authorized for security reasons or in self-defense.

Remember

- The United States is not at war.
- Treat all persons with dignity and respect.
- Use minimum force to carry out the mission.
- Always be prepared to act in self-defense.

EXTRACT FROM FM 101-5-1, OPERATIONAL TERMS AND GRAPHICS

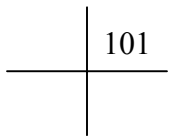
MAP GRAPHICS



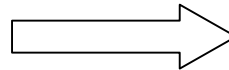
PRINCIPAL DIRECTION OF FIRE



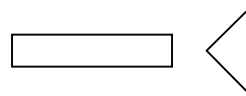
FOXHOLE



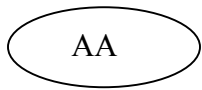
TARGET REFERENCE POINT



MOVING CONVOY



HALTED CONVOY



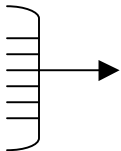
ASSEMBLY AREA



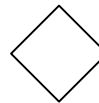
MAIN SUPPLY ROUTE



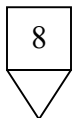
ALTERNATE SUPPLY ROUTE



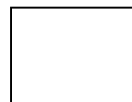
AMBUSH



ENEMY UNIT



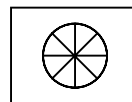
CHECK POINT (CP8)



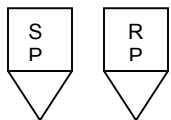
FRIENDLY UNIT



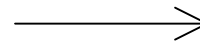
COORDINATION POINT



TRANS UNIT



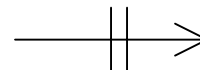
START POINT
RELEASE POINT



M16



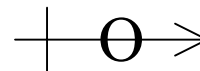
SAW



.50 CAL



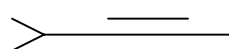
M203



MK19



MINEFIELD



LAW/AT4



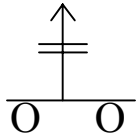
WIRE



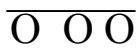
CONCERTINA



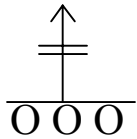
TRIPLE STRAND
CONCERTINA



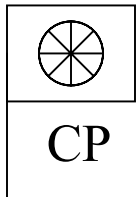
HMMWV GUNTRUCK WITH .50 CAL



PLS



PLS GUNTRUCK WITH .50 CAL



COMMAND POST



LP/OP



DEAD SPACE



STREAM



CLAYMORE

CHAPTER 2 - CONVOY SPECIFIC TE&OS

The following chapter contains task, condition, and standards for convoy operations.

TASK: DEFEND MARCH ELEMENTS (63-2-1006)

CONDITION: Threat forces attack the march column. The unit is conducting a tactical road march. The threat is capable of launching ground, air, and indirect fire attacks. The march column has radio communications with higher HQ staff element. CAS sorties and indirect fire support have been allocated, but with low priority. Pyrotechnics are available for signaling and marking locations. Higher HQ movement order and TSOP are available.

Some iterations of this task should be performed in MOPP4.

TASK STANDARD: Attacks are repelled by proper immediate action techniques and march is resumed IAW TSOP and movement order.

TASK STEPS and PERFORMANCE MEASURES	GO	NO GO
<p>*1. March commander supervises reaction to <u>sniper fire</u>.</p> <ul style="list-style-type: none"> a. Locates approximate location of sniper incident on map from march element reports. b. Identifies whether area is a free fire zone or restricted fire zone. c. Authorizes return fire only if sniper(s) are located. d. Directs march elements to increase march speed and interval between vehicles until they have cleared the area. e. Provides instructions to follow-on march elements. f. Forwards incident report to higher HQ staff element. <p>2. Unit takes action against <u>sniper fire</u> . (071-311-2007, 071-312-3031)</p> <ul style="list-style-type: none"> a. Reports sniper fire to march commander immediately upon contact. b. Returns fire immediately that kills snipers or suppresses their fire (designated personnel only). c. Increases column rate of march and vehicle interval. <p>*3. March commander supervises defense against <u>ambush, road blocked or road not blocked</u>. (04-3303.01-0019, 061-283-6003)</p> <ul style="list-style-type: none"> a. Identifies location of ambush site on map with map overlay. b. Directs march elements under attack to employ correct protective actions as prescribed in higher HQ movement order and TSOP. c. Provides instructions on halt points and security requirements to all march elements. d. Forwards initial incident report to higher HQ staff element. e. Directs hardened vehicles with automatic fire capability into position to lay down 		

concentrated fire on threat position(s).

f. Directs the march elements ahead and march element following to organize security teams to attack flanks of threat ambush party.

g. Maintains constant communications with all march elements engaging threat to immediately make adjustments to tactical situation.

h. Forwards subsequent SITREP reports to higher HQ staff element as situation changes.

i. Requests immediate CAS and/or indirect fire support from higher HQ staff element.

j. Directs use of pyrotechnics for signaling or marking areas.

k. Develops contingency plans to displace elements not under attack and withdraw elements under attack.

4. Unit defends against **ground ambush (road not blocked)**. (071-311-2007, 071-312-3031)

a. Reports ambush to march commander immediately upon contact.

b. Identifies threat location(s).

c. Returns fire immediately that kills threat and suppresses their fire (non-driving personnel).

d. Stops vehicles (not in kill zone).

e. Increases rate of march until out of kill zone (vehicles in kill zone).

f. Keeps roadway clear by pushing disabled vehicles aside.

g. Organizes security element(s) of soldiers not in kill zone (senior member present).

h. Directs fire and maneuver of security elements to allow remaining vehicles to pass through kill zone (senior member present).

i. Forwards SITREP to march commander.

5. Unit defends against **ground attack (road blocked)**. (071-311-2007, 071-312-3031, 071-326-0503, 071-326-0513)

a. Reports ambush to march commander immediately upon contact.

b. Dismounts vehicles on opposite side of direction of ambush.

c. Returns fire immediately which kills threat or suppresses their fire (soldiers in kill zone).

d. Takes up firing positions while awaiting orders (soldiers not in kill zone).

e. Organizes security element(s) of soldiers not in kill zone (senior member present).

f. Directs fire and maneuver of security elements to allow removal of road block (senior member present).

g. Forwards SITREP to march commander.

- *6. March commander requests **indirect fire support**. (061-283-6003)
- a. Requests fire support IAW instructions in the higher HQ movement order or TSOP.
 - b. Identifies grid direction to threat location.
 - c. Identifies threat target location using grid coordinates or shift from a known point.
 - d. Transmits call for fire in proper sequence.
 - e. Transmits fire adjustments information in proper sequence to the fire support element, if an "Adjust" fire mission.
 - f. Transmits "end of mission" and surveillance report if fire was sufficient.
- *7. March commander requests **CAS**.
- a. Verifies threat position(s).
 - b. Requests CAS by means prescribed in higher HQ movement order.
 - c. Supervises preparation of unit personnel for friendly strike.
 - d. Directs marking of friendly unit location(s) with prescribed colored smoke.
 - e. Communicates strike effectiveness to higher HQ staff element.
8. Unit employs passive defense measures against **air attack**. (071-326-0513, 441-091-1040)
- a. Provides the prescribed signal to alert column.
 - b. Staggers vehicles to avoid linear patterns.
 - c. Drives vehicle in shadows or woodline.
 - d. Assumes firing positions.
 - e. Fires only upon command.
 - f. Reports all aircraft actions to higher HQ staff element.
9. Unit employs active defense measures against **air attack**. (441-091-1040, O1-0401.20-0001)
- a. Employs the prescribed signal to alert march elements.
 - b. Identifies threat aircraft visually.
 - c. Disperses vehicles to concealed locations.
 - d. Assumes firing positions.
 - e. Prepares crew-served weapons for firing.
 - f. Fires weapons at attacking aircraft only if fired upon or on command.
- *10. March commander supervises **reorganization after attack**.
- a. Identifies status of all personnel. equipment. and cargo through march element

reports.

b. Coordinates requirements within march elements for load transfer, vehicle repairs, mortuary affairs, and medical transportation.

c. Requests emergency destruction authorization from higher HQ staff element for unrepairable items.

d. Forwards SITREP to higher HQ staff element.

11. Unit **reorganizes after the attack**. (081-831-0101, 081-831-1000, 081-831-1005, 081-831-1007, 081-831-1016, 081-831-1017, 081-831-1025, 081-831-1026, 081-831-1033, 081-831-1034, 081-831-1040, 081-831-1041, 081-831-1042, 101-515-1900, O3-4995.90-0010)

a. Maintains 360-degree surveillance.

b. Treats casualties.

NOTE: See task 8-2-0003 for detailed treatment procedures.

c. Reports casualties.

d. Requests air ambulance support through march commander.

e. Reestablishes chain of command, if necessary.

f. Secures landing zone, if air ambulance is required.

g. Transports casualties.

NOTE: See task 63-2-R316 for detailed casualty transportation procedures.

h. Performs mortuary affairs functions.

NOTE: See task 10-2-C318 for detailed mortuary affairs procedures.

i. Assesses damage to vehicles and cargo to determine operability and reparability.

j. Performs BDAR for recoverable vehicles.

k. Removes critical items from unrecoverable vehicles.

l. Requests emergency destruction of vehicles and non-medical equipment from march commander.

m. Forwards SITREP to march commander.

n. Reorganizes march elements.

o. Resumes march.

TASK: CONDUCT TACTICAL ROAD MARCH (63-2-1003)

CONDITION: Time specified in movement order to cross SP has arrived. All equipment is uploaded and vehicles are positioned for departure. The route of march is identified. Convoy operations may be performed during daylight or darkness, including blackout conditions. The convoy may go through an urban area. Radio and visual signals are used for march column control. The higher HQ TSOP and OPORD with movement order are available. Maps and overlays with checkpoints, RP, and critical points are available. Column may conduct halts during movement.

Some iterations of this task should be performed in MOPP4.

TASK STANDARD: SP, checkpoints, and RP are crossed at times specified in the movement order or times adjusted on the road movement table by higher HQ staff element. At MOPP level 4, performance degradation factors increase travel time.

TASK STEPS and PERFORMANCE MEASURES	GO	NO GO
<p>*1. March commander <u>initiates convoy</u>. (O1-7200.75-0100)</p> <ul style="list-style-type: none"> a. Directs lead vehicle to cross SP at specified time. b. Verifies vehicles have crossed the SP. c. Forwards SP crossing report to higher HQ staff element when unit elements have crossed the SP. <p>*2. March commander <u>reports convoy information to higher</u> HQ staff element.</p> <ul style="list-style-type: none"> a. Forwards checkpoint(s) clearance report as checkpoints are crossed. b. Reports all ground sightings that conflict with maps and map overlays. c. Forwards en route NBC information. d. Reports all threat sightings using SALUTE format. e. Employs correct SOI/SSI codes in all transmissions. <p>*3. March commander <u>enforces march discipline</u>. (O1-7200.75-0100)</p> <ul style="list-style-type: none"> a. Assumes position(s) along march route that provides command presence at points of decision for reaction to changing tactical situation. b. Enforces all movement policies defined in the TSOP and movement order, with emphasis on formation, distances, speeds, passing procedures, and halts. c. Adjusts formation distances and speed consistent with NBC, terrain, and light conditions. d. Enforces security measures, with emphasis on air guards surveillance, manning of automatic weapons, and concealment of critical cargo. e. Communicates to unit leaders and operators, by radio or proper visual signals, any 		

violations of march discipline, security procedures, or changes to current orders.

f. Enforces COMSEC measures, including radio silence periods IAW the movement order and SOI/SSI.

4. **Unit employs march discipline.**

a. Maintains designated march speed specified in movement order or as prescribed by the march commander.

b. Maintains proper vehicle interval as specified in movement order or as adjusted by the march commander.

c. Adjusts formation distances and speed consistent with NBC, terrain, and light conditions.

d. Dons eye protection goggles if driver or passenger is in a vehicle without cover or when windshield is lowered.

e. Crosses all check points as scheduled.

f. Reacts correctly to march commander's arm/hand signals.

g. Maintains ground and air surveillance that covers 360 degrees until movement is completed.

5. Unit conducts **scheduled halt(s).**

a. Stops column at prescribed time and location.

b. Moves vehicles off road to positions that provide overhead cover while maintaining the prescribed interval between vehicles.

c. Occupies hasty defensive positions with 360 degree protective coverage (passengers).

d. Reports scheduled halt to the battalion CP.

e. Performs during-operation PMCS on vehicles (operators).

f. Inspects vehicle loads for safety and security.

g. Begins departure at specified time in the movement order.

h. Reports resumption of march to higher HQ staff element.

6. Unit conducts **unscheduled halt(s).**

a. Alerts march column with prescribed arm/hand signal.

b. Reports halt and circumstances immediately to higher HQ staff element.

c. Moves vehicles off the road while maintaining the prescribed interval between vehicles.

d. Occupies hasty fighting position with 360 degree protective coverage.

e. Resumes march as soon as reason for halt is rectified.

f. Reports resumption of march to higher HQ staff element.

- | | | |
|---|--|--|
| <p>7. Trail party <u>recovers disabled vehicle</u>. (O3-4995.90-0010)</p> <ul style="list-style-type: none"> a. Posts guard to maintain surveillance until recovery operation is completed. b. Inspects disabled vehicle for reparability. c. Repairs disabled vehicle, when possible. d. Tows disabled vehicle to applicable maintenance facility. e. Reports vehicle status to march commander. <p>8. Unit conducts a <u>night convoy</u>.</p> <ul style="list-style-type: none"> a. Briefs drivers on night conditions. b. Provides visual adjustment period if march began during daylight. c. Prepares vehicles for blackout conditions IAW the TSOP. d. Maintains prescribed interval between vehicles. e. Wears night vision goggles (selected personnel). f. Wears regular eye protection goggles (all other personnel). g. Employs ground guides during poor visibility periods. <p>9. Unit conducts <u>convoy through an urban area</u>.</p> <ul style="list-style-type: none"> a. Verifies all weight, height, and width restrictions along route of march. b. Employs close column formation. c. Obeys traffic control directions unless escorted by military or HN police. d. Employs directional guides at all critical intersections. <p>*10. March commander monitors <u>unit crossing RP</u>. (O1-7200.75-0100)</p> <ul style="list-style-type: none"> a. Verifies that lead vehicle has crossed RP at specified time. b. Verifies that vehicles that have crossed RP. c. Forwards SITREP to higher HQ staff element. | | |
|---|--|--|

TASK: CONDUCT KFOR CONVOY

CONDITIONS: The platoon is a component of a larger force conducting Stability and Support Operations. The unit receives an order to conduct a convoy planned by the higher headquarters to gather information; monitor an agreement; or demonstrate a U.S. force presence. Local populace and factions may or may not be cooperative. The unit is based in a secure site (base camp, observation post or checkpoint). The larger force has established a QRF. The unit has guidance provided by the Rules of Engagement (ROE) and from Mission Instructions such as a peace mandate, Terms of Reference (TOR), Status of Forces Agreement (SOFA), and Rules of Interaction (ROI). Civilians are in the area. Government agencies, nongovernmental organizations, and local and international media may be in the area. This task should not be trained in MOPP4.

TASK STANDARDS: Plt accomplished its mission in accordance with the OPORD. The convoy leader reported information as required during the convoy and provided an after action report to higher headquarters IAW unit SOP. Civilians were treated with respect. The unit complied with the ROE, Mission Instructions, higher headquarters order and other special orders.

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
<p>NOTE: Presence patrols reassure the local population of the presence and commitment of US forces. They also provide an opportunity to gather information. The size of the element will vary depending on the mission</p> <p>* 1. Unit leader conducts mission analysis and troop leading procedures with special emphasis on the following:</p> <ul style="list-style-type: none"> a. Complies with requirements specified and implied in operations order. b. Develops necessary security measures. c. Provides for overwatch element (e.g., a sniper team or a rifle/weapons squad) if appropriate. d. Identifies higher headquarters Critical Combat Information Requirements (CCIR) and Information Requirements (IR). e. Obtains sufficient information about persons who are to be apprehended if encountered so as to be able to identify them. f. Requests liaison officers, local guides, and interpreters as needed. g. Coordinates check points and reporting procedures with higher headquarters. h. Identifies requirements for overt recognition methods IAW unit SOP and OPORD (flag or guidon, placard, lights, vests, etc.). i. Identifies special equipment requirements to accomplish task(s). j. Selects tactical movement techniques and formation options. 		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
<ul style="list-style-type: none"> k. Establishes casualty evacuation (CASEVAC) procedures. * 2. Unit leader coordinates with the QRF commander. At a minimum the platoon leader: <ul style="list-style-type: none"> a. Confirms QRF radio frequency(ies), call sign(s), and recognition signals. b. Identifies probable link-up points. c. Confirms link-up procedures. d. Confirms battle hand off procedures. e. Confirms procedures for transfer of information. * 3. Unit leader briefs patrol plan. <ul style="list-style-type: none"> a. Selects members to attend briefing. b. Employs modified patrol order format. Order covers as a minimum: <ul style="list-style-type: none"> (1) General situation: Include faction elements' locations and activities, danger areas (e.g., minefields), presence and missions of other patrols, cultural considerations, and weather forecast. (2) Mission (primary and secondary). (3) ROE relevant to mission. (4) CCIR and IR collection requirements. (5) Route. (6) Timing Departure, return, contact times, etc.. (7) Checkpoints and control measures. (8) Radio procedures (code words, frequencies, reporting frequency and interval, emergency procedures). (9) Coordination measures and requirements with other units and patrols. (10) CASEVAC procedures. (11) Debriefing requirements. (12) Required equipment. (13) Schedule for precombat checks, inspections, and rehearsals. (14) QRF request procedures. c. Reviews ROE provisions and Mission Instructions on the use of force. * 4. Unit conducts Pre Combat Checks (PCI). <ul style="list-style-type: none"> a. Ensures all equipment is present and operational. 		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
<p>b. Requires each soldier to demonstrate his understanding of the ROI and Mission Instructions as pertains to use of force.</p> <p>c. Requires each soldier to demonstrate his knowledge of the patrol mission, route, radio frequencies, and call signs.</p> <p>* 5. Unit conducts rehearsals in order of priority by time available.</p> <p>a. Employs force IAW ROE and MI.</p> <p>b. Establishes contact with a group/element from a faction, or a group, or a person whose status is unknown.</p> <p>c. Reacts to hostile action (e.g. sniper).</p> <p>d. Apprehends a wanted person.</p> <p>e. Reacts to special situations as identified in the unit order or SOP.</p> <p>f. Implements casualty evacuation (CASEVAC) as necessary.</p> <p>* 6. Platoon Leader conducts final coordination prior to beginning patrol</p> <p>a. Receives information on latest civilian/FWF situation (S2), friendly situation (S3), and minestrikes (ENG/S2)</p> <p>b. Disseminates information to all soldiers</p> <p>7. Unit conducts patrol.</p> <p>a. Implements the patrol plan.</p> <p>b. Does not deviate from specified route.</p> <p>c. Maintains radio contact, using code words and reporting at intervals specified in the patrol plan.</p> <p>d. Collects information IAW the operations order (OPORD).</p> <p>e. Collects incidental information.</p> <p>f. Reports information as required in unit SOP and OPORD.</p> <p>8. Lane Events</p> <p>a. Report an Illegal Check Point. (XVIII ABN CORPS KOSOVO TTPs) Upon discovery of an illegal detention or checkpoint immediately contact higher headquarters and provide SPOT report.</p> <p>b. Report Illegal Wood Cutting (XVIII ABN CORPS KOSOVO TTPs). Inform Company HQ's. This infraction is handled by the UNMIK-P.</p> <p>c. React to House Explosion (XVIII ABN CORPS KOSOVO TTPs).</p>		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
<p>(1) Patrol leader informs higher headquarters. HQ notifies TFF through their LNO EOD/ MPs/ Maneuver CDR receive notification from LNO MPs will notify UNMIK-P</p> <p>Makes a tentative plan.</p> <p>In all cases the maneuver element cordons/secures the scene with 360-degree security but does not disrupt the crime scene.</p> <p>Identify and detain (hold) potential witnesses.</p> <p>MPs arrive and establish C2 node to provide connectivity with TFF HQ and serve as an interface between UNMIK-P and the maneuver force on the ground.</p> <p>Upon arrival UNMIK-P is in charge of the crime scene and KFOR forces are in support of the UNMIK-P efforts.</p> <p>UNMIK-P conducts their investigation with KFOR in support.</p> <p>d. React to Mine Strike (JRTC TE&Os).</p> <p>(1) Convoy halts, All personnel remain mounted, no vehicles move Senior person assesses situation, determines casualties based on reports from all vehicles in convoy</p> <p>(3) Establish 360 degree security from vehicles</p> <p>(4) Senior person accounts for all sensitive items SEND SITREP to higher HQ</p> <p>(5) Senior engineer (If available), or senior person, designates a sweep team to clear a footpath to the affected vehicle using non-metallic probes and/or mine detectors. Mark left and right limits of footpath using non-metallic materials (spray paint, chem lights, HEMMS poles, wooden stakes, engineer tape held down with rocks, etc.) every 3 meters</p> <p>(6) At the same time, the last vehicle in the convoy clears a footpath to the rear and establishes radio commo-link with higher HQ. Distance to clear to rear is designated by senior person or rear vehicle commander.</p> <p>(7) Sweep team clears footpath to injured personnel and begins first aide.</p> <p>(8) Mark any mines found with engineer tape or any non-metallic material. Do not put the marking object closer the 12 inches from the suspected mine. Do not probe to find a mine.</p>		

TASK STEPS AND PERFORMANCE MEASURES	GO	NO-GO
<p>(9) Clear an extraction lane from vehicle to vehicle—extending from vehicle #1 to past the last vehicle to the designated safe area or limits of the minefield.</p> <p>(10) Extract casualties to and LZ/PZ site designated by the senior person. Be prepared to clear the LZ/PZ site if necessary. Initiate CASEVAC using 9-line format.</p> <p>(11) Extract and account for all personnel and sensitive items</p> <p>(12) Mark, record, and report the minefield to higher headquarters</p> <p>e. Discovery of Human Remains (XVIII ABN CORPS KOSOVO TTPs).</p> <p>The patrol leader informs higher headquarters.</p> <p>Unit immediately secures the site, does not touch, or allow anyone to touch the bodies or any evidence.</p> <p>Annotate details about the location</p> <ul style="list-style-type: none"> a. 8 Digit grid b. Detailed description of the site (number of victims, description of evidence on site). c. Patrol leader takes digital photos of the site if it is an atrocity site or mass grave, a murder victim, or operationally related. Only MP/CID will take photos of human remains at scenes of accidents or when the human remains are those of a US or Allied KFOR soldier or civilian employee. <p>(4) MPs arrive and establish C2 node to provide connectivity with TFF HQ and serve as an interface between UNMIK-P and the maneuver force on the ground.</p> <p>(5) Upon arrival UNMIK-P is in charge of the scene and KFOR forces are in support of the UNMIK-P efforts. If it involves a US or Allied KFOR soldier, CID will conduct joint investigation with UNMIK-P.</p> <p>(6) UNMIK-P conducts their investigation with KFOR in support.</p> <p>f. React to Sniper (JRTC KOSOVO TE&Os)</p> <p>Unit reacts to contact</p> <ul style="list-style-type: none"> (1) Convoy Leader immediately speeds up until well clear of the area (2) Convoy Leader immediately contacts higher headquarters and provides SPOT report 		

CHAPTER 3 - FSB CONVOY TACSOP

The following chapter contains a sample light infantry brigade Forward Support Battalion Convoy Tactical SOP.

GENERAL TACTICAL CONVOY OPERATIONS

1. **PURPOSE:** This chapter describes standard procedures for tactical convoy operations under the command and control of the FSB.

2. **DEFINITIONS:**

a. Convoy. Six or more vehicles moving outside the BSA perimeter temporarily organized to operate as a column, with or without an escort and proceeding together under a single command or using the same route.

b. Convoy Commander. The officer or NCO in charge of a convoy operation. This will usually be a unit commander or XO.

c. Serial Commander. The officer or NCO in charge when a large convoy is divided into 2 or more serials for control purposes.

d. March Unit Leader. The officer or NCO in charge of a march unit, when serials are further divided into march units for control purposes.

e. Truck Commander (TC) . The senior individual in any vehicle.

f. Vehicle and element intervals.

(1) Open column: Vehicles, in convoy or as single vehicles, maintaining a 100 meter interval during daylight and 40 meters at night.

(2) Closed column: Vehicles operating in closed column maintaining a 50 meter interval or an interval equal to twice the speedometer reading, but not less than 20 meters at the slowest speed.

g. Speed Limits: Do not exceed maximum speed limits. Enemy activity is the only reason to exceed maximum speed limits. Road conditions may dictate slower speeds.

3. **RESPONSIBILITIES:**

a. The S-2/3 section, FSB is responsible for:

(1) Debriefing each convoy commander after each mission.

(2) Advising the companies and convoy commanders of significant deviations to planned movements, enemy situation, alternate routes, rules of engagement and specific instructions.

(3) Producing and providing company and convoy commanders with current operational and intelligence overlays.

(4) Coordinating combat support (i.e. fire support, MP support, route clearance) in advance of tactical convoy operations.

(5) Synchronizing convoy operations with Support Operations.

b. The Support Operations section, FSB is responsible for:

(1) Exercising staff supervision over vehicle operations in support of logistics missions.

(2) Directing and coordinating daily operations to ensure an appropriate level of asset utilization, economy of operations, timely support to supported units, and maintenance of a sufficient readiness posture.

(3) Coordinating with Movement Control Teams (MCT) and the MCC on all military highway commitments.

(4) Coordinating with higher, lower, and adjacent headquarters for the proper employment of FSB vehicles.

(5) Synchronizing convoy mission support requirements with Bn S-2/3.

c. Company Commanders are responsible for:

(1) Coordinating with the Support Operations section, FSB, significant deviations to planned movements.

(2) Ensuring their subordinate leaders perform Pre-Combat Inspections (See Tab 5-A).

d. Convoy Commanders are responsible for:

(1) Taking all possible measures to guarantee the security and safety of convoy members and passengers first.

(2) Taking appropriate actions to safeguard cargo second.

(3) Developing and executing the convoy security plan.

(4) Conducting a thorough convoy briefing IAW CAM Pam 350-2 , Figure 2-1 prior to the start of each convoy (Tab 5-B).

(5) Taking necessary actions to ensure march discipline and convoy control.

(6) Issuing movement instructions; ensure every vehicle has a strip map indicating all CPs, SP, and RP.

(7) Providing a closure report to Bn S-2/3 or Battle Captain within 1/2 hour of closure.

(8) Rehearsing the convoy prior to movement, to include the visual signal and reaction system.

e. Security Team Commanders are responsible for:

(1) Taking directions from the convoy commander.

(2) Directing actions of security team against threat element.

(3) Ensuring safe passage of convoy equipment, personnel, and cargo.

(4) Conducting route reconnaissance in conjunction with Convoy Commander and briefing the Convoy Commander of potential danger areas and recommend actions on contact. Confirm or deny intelligence brief.

(5) Understand the visual/verbal signal system.

f. Vehicle TCs are responsible for:

(1) Providing overall command of vehicle and personnel.

(2) Directing movement of vehicle and dismounted personnel.

(3) Maintaining communications both mounted and dismounted.

(4) Directing gunner's observation and fire.

(5) Ensuring maintenance and readiness of both vehicle and weapon system.

(6) Observing 10 o'clock and 3 o'clock.

(7) Understanding and utilizing verbal/visual signal system.

(8) Ensuring all soldiers know their sector of fire.

(9) Rehearsing crew served weapons team in partner assisted crew served stand in the event of attack from rooftop or window.

- g. Vehicle Drivers are responsible for:
 - (1) Vehicle maintenance and readiness.
 - (2) Special and emergency equipment, i.e., slave cables, snow chains, tow bar, etc.
 - (3) Proper maneuvering and location of vehicle.
 - (4) Ensuring level firing platform and line of sight for weapon system.
 - (5) Following TCs directives.
 - (6) Ensuring communications equipment is operational.
 - (7) Observing from 9 o'clock to 2 o'clock.
- h. Vehicle Gunners are responsible for:
 - (1) Maintenance and readiness of their weapon system.
 - (2) Fires IAW TC directives.
 - (3) Accurate and effective fire.
 - (4) Reporting observations to the TC.
 - (5) Observing assigned sector IAW vehicle position in the convoy.

4. TACTICAL CONVOY CONSIDERATIONS:

a. Every convoy will have, at a minimum, 1 primary and 1 alternate route. Convoys may also use multiple routes, one for each unit or march unit. When multiple routes are used, the alternate route will be one of the multiple routes. Each major route will have checkpoints at each major road intersection a start point (SP) and a release point (RP). Vehicles will travel in a march unit of at least 3 or more vehicles with radio communications capability; single vehicles are easy prey to the enemy.

b. Convoy Organization:

(1) Advance Guard:

(a) The FSB S-3 or Battle Captain may use an advance guard to clear the route from the point of origin to the destination point. At a minimum, Bn S-3 will make coordination with MPs for route reconnaissance.

(b) The advance guard will normally be a HMMWV or 5 ton with a crew served weapon and four personnel. Armored vehicles are ideal for use as the Advance Guard and Security. Consider an M-1 Abrams with a mine clearing device for Advance Guard. The advance guard will check out the primary and alternate routes. Military police may be used as the advance guard.

(c) Upon arrival at the destination point, the advance guard will contact the FSB S-3 or Battle Captain. The FSB S-3 or Battle Captain may then use the advance guard vehicle to provide security along the route.

(2) Advance Party: The advance party composition and actions are as indicated in Chapter 3 of this SOP.

(3) March unit configuration will normally include 5 - 7 vehicles with cargo and 2-3 escort vehicles (See figure 4-1). BSA establishment or relocation convoys may include 4 - 8 march units of 15 - 20 vehicles each.

(a) As a minimum, the following items will be cross-loaded into each convoy:

- i. one combat lifesaver with aid bag per 2 vehicles.
- ii. means for vehicle self recovery, i.e. one tow bar, chains or wire rope per vehicle type in convoy.

- iii. mine detector.
- iv. fuel, water, and food.

(b) Convoy numbering system: Security vehicles are numbered front to rear with the advance guard as "1" and the trail as the number of security vehicles in the convoy. Main body vehicles, referred to as "Cargo" are numbered front to rear with the convoy commander in the first cargo vehicle as "Cargo 1".

STANDARD MARCH UNIT CONFIGURATION

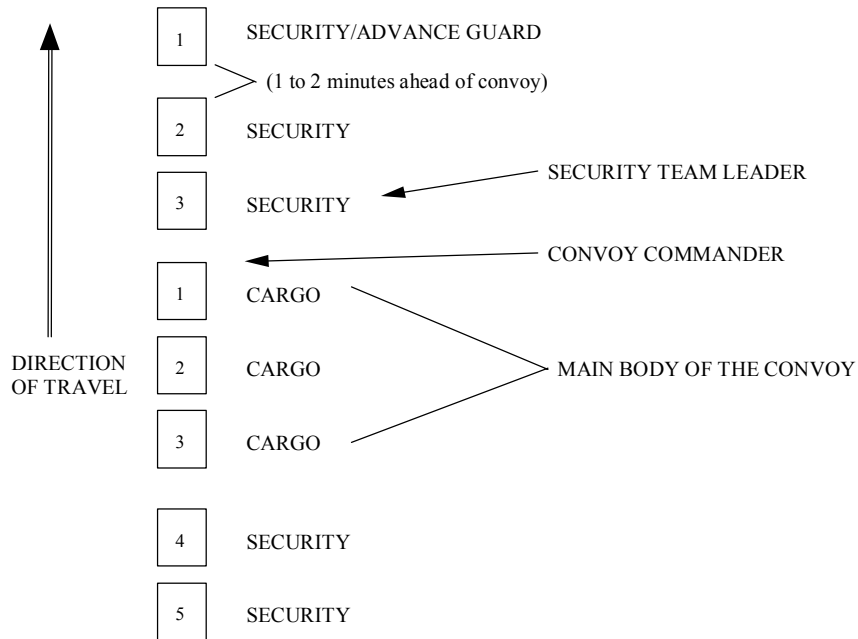


Figure 5-1

(c) Convoy reporting system:

- i. YELLOW - refers to a passive threat, e.g., road intersections, indigenous personnel, etc.
- ii. RED - refers to an active threat, i.e., convoy is receiving fire.
- iii. CLOCK POSITION - refers to the direction of passive/active threat.
- iii. CLOCK POSITION - refers to the direction of passive/active threat.

iv. Call signs are numbers that indicate your location in the convoy, (Figure 5-1). Threat is reported by spotting vehicle, color code, and location, e.g., "Cargo 1 this is 2, Red 3" means the 2nd security vehicle is informing the Convoy Commander, in Cargo 1, that there is an active threat at his 3 o'clock position.

(d) Air Guards: Air guards will be established and positioned for each convoy. Each air guard will have a rehearsed, assigned sector of observation/fire. The senior occupant of each vehicle is responsible for ensuring that at least one air guard is assigned.

i. Air guard requirements for type vehicles are as follows:

<u>Type Vehicle</u>	<u>Air Guard Requirement</u>
M998/M1038	Yes
M1031	No
M997	No
LMTV/FMTV	Yes
Forklift	No
M936	No
M978	No

ii. Air guard will sit in the rear and observe skywards for air threat and the tops of buildings and upper floor windows in an urban environment. Canvas covers will be at least partially removed in cargo vehicles. Air guards will only fire in accordance with the Rules of Engagement (ROE), in self defense, or on orders from the senior individual present.

(e) Communications During the Convoy: Convoys will be conducted under strict radio discipline. This condition should remain in effect until enemy contact is made, to report check points, serious accidents, and/or to request fire/close air support (CAS).

(f) Lights: Use of service drive lights per vocal order of local commander. Maximum use of night vision devices will be in effect during hours of darkness..

(g) Speed and interval are as listed below, unless otherwise specified:

<u>Road Surface</u>	<u>Visibility</u>	<u>Lights</u>	<u>Max speed (MPH)</u>	<u>Max Catch-up</u>	<u>Interval</u>
Hard	Daylight	Low	35	40	100 m
Hard	Night	Low	25	30	50 m
Dirt	Daylight	Low	20	25	100 m
Dirt	Night	BOD	15	20	50 m

5. COMBAT SUPPORT CONSIDERATIONS:

a. Combat Support Assistance: When planning the convoy movement, the FSB S-3 will request combat support assistance as follows:

(1) Indirect Fire Support:

(a) At a minimum, preplanned artillery targets, groups or series of targets along route and at the RP, will be coordinated with the FSO prior to movement.

(b) Coordinate communication channels for march units to call for fire. Emergency requests for fire support must go straight to the artillery control net, not through the FSB CMD Net.

(c) Brief all individuals on frequency/call signs for requesting artillery fire.

(d) Movement Orders must include a Fire Support Annex. Convoy commander will coordinate indirect fire support through the Bn S-3/Battle Captain.

(2) Close Air Support:

(a) Preplanned requests for close air support will be routed through the FSO. The convoy commander will perform a radio check with the S-3 prior to convoy departure.

(b) Immediate requests for close air support will be coordinated through the Bde S3.

(3) Aviation: Requests for aviation support will be requested by the FSB S3 to the Bde S3. Attack helicopter support should always be requested when the BSA is to displace for a considerable distance. The convoy commander will perform a radio check with aviation assets prior to convoy departure.

(4) Military Police: Military Police assistance will be coordinated by the FSB S-3/Battle Captain through the Bde S-3. MPs will be coordinated to conduct route reconnaissance, by the Bn S-3/Battle Captain. The convoy commander will perform a radio check with MP assets prior to convoy departure.

(5) Engineer Support: Engineer support will be requested to reduce barriers encountered along the route.

6. ACTIONS ON ENEMY CONTACT:

a. Enemy Air Attack:

(1) Lead vehicle of convoy march unit will make the decision to take cover off the road and the rest of the vehicles will follow. Vehicles will herringbone, if possible, and seek good overhead concealment. Signal for air attack is initiated by reporting "Bogy Drill, Bogy Drill" if ammo is available, or short horn blasts if not. Convoy commander will immediately notify higher.

(2) Once the vehicles under attack have located positions off the road with good overhead concealment, all personnel will dismount, remove portable radios and all weapons, and take up defensive positions at least 40 feet away from the vehicle, and attempt to down the aircraft with a large volume of fire. March unit commanders will pass the "all clear" signal radio or verbally.

b. Indirect Fire Attack: When attacked by indirect fire, vehicles will continue moving at a faster rate and drive through the attack. Lead vehicle will signal the attack by calling "Arty Drill, Arty Drill" over the radio, although signal should not be necessary. Damaged vehicles will get off road to the opposite side of attack if ambushed. Trail vehicles will ensure that personnel left behind are picked up and their positions reported to the FSB Battle Captain/ S-3.

c. Sniper Fire: When attacked by sniper fire, vehicles will attempt to drive through. Radio signal is "Sniper, Sniper." If sniper is spotted, place suppressive fire on sniper or use artillery/air support to suppress sniper.

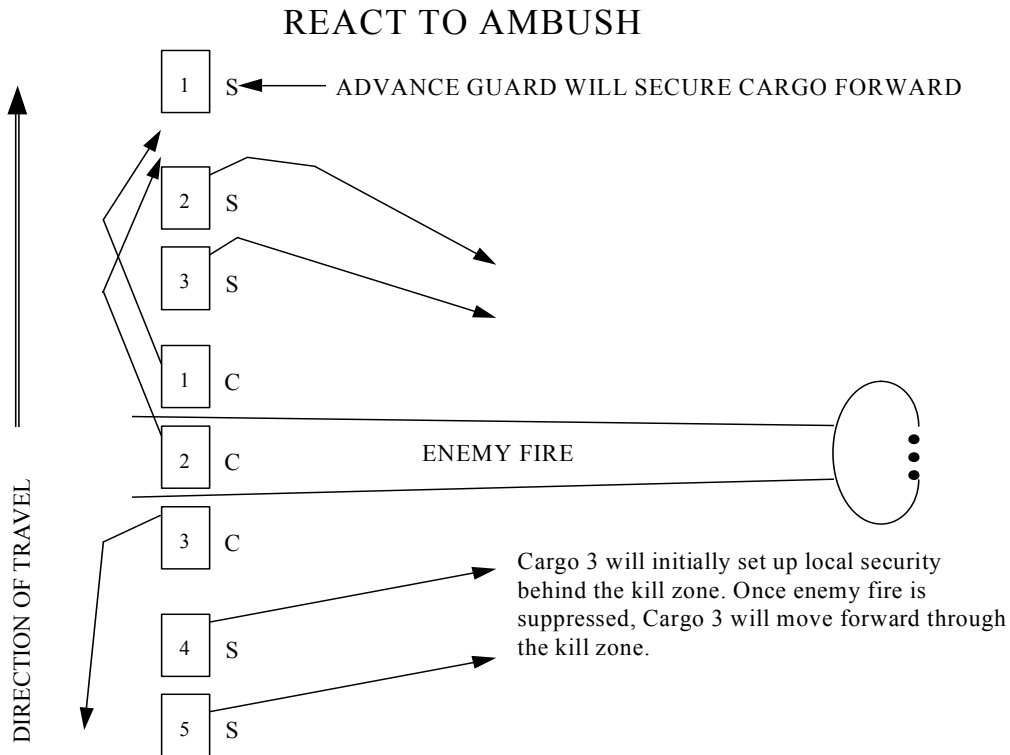


Figure 5-3

d. Far Ambush (enemy is beyond 200 meters and their fire is not disabling):

- (1) Element within the ambush returns fire to suppress ambush fires
- (2) Attempt to call in indirect fire or close air support on enemy. Use GPS whenever possible to determine grid coordinates.
- (3) Speed up march unit to get out of the kill zone. If ambush fire is disabling, take action for a close ambush.

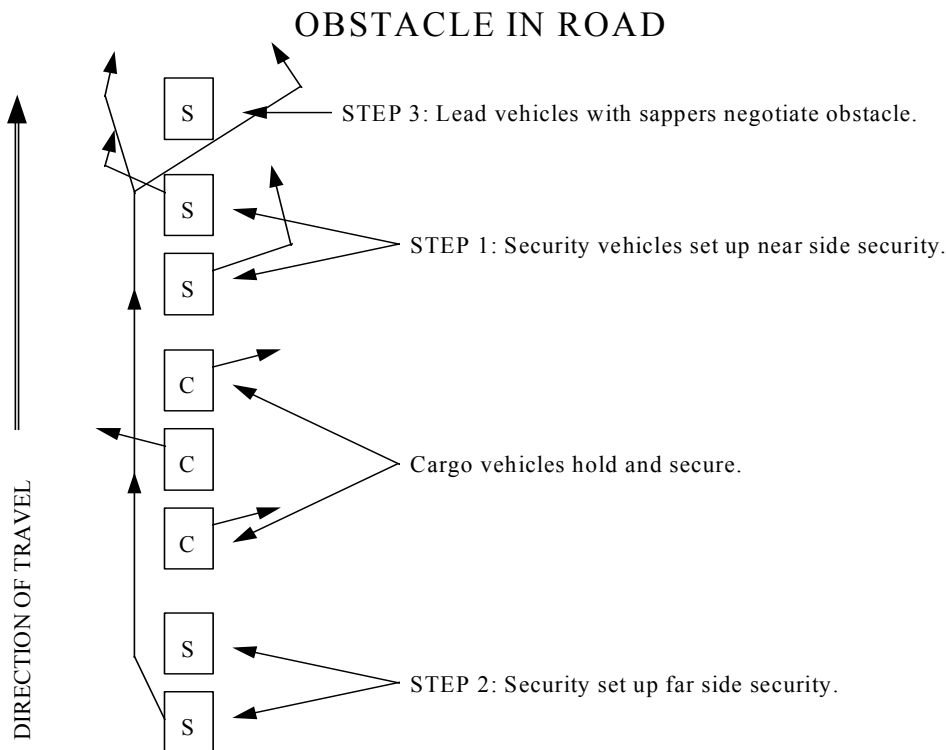
e. Close Ambush, road not blocked (Figure 5-3): The convoy commander will:

- (1) Signal convoy's actions by calling "Road Warrior" over the radio.
- (2) Direct personnel in front of and behind kill zone to halt outside of the kill zone. Dismount and assemble personnel on the opposite side of the road from the ambush fire. Personnel will provide local 360 degree security.
- (3) If situation dictates, convoy personnel not in the kill zone will assemble and prepare to maneuver against flank of ambush on orders of senior leader. Convoy personnel will coordinate all intended actions with senior leader prior to execution of any attack or counter attack plans. Ensure no indirect friendly fire is impacting the objective while flanking the objective. This will ensure a coordinated effort.
- (4) Convoy commander will report their situation to the FSB Battle Captain requesting support, changes in route or implementation of offensive maneuver against the ambush element.
- (5) Do not pursue the enemy if he has broken contact.

f. Obstacle in the road. Assume all obstacles are covered by direct, indirect fire and that it is booby trapped. The lead vehicle will set up in a position to provide overwatch on the obstacle.

Personnel trained in mine clearing techniques (Sappers, if available) will determine if obstacle is booby trapped and/or negotiable. If unsuccessful, the lead vehicle will pull over on side of road. Convoy commander will:

- (1) Direct remainder of convoy to halt and establish defensive perimeter around vehicles.
- (2) Direct security team to maneuver against suspected enemy position.
- (3) Remove injured personnel from the damaged vehicles, treat injuries, and evacuate to clearing station.
- (4) Remove damaged vehicle from the road if passage is restricted on both sides.
- (5) Report status to FSB Battle Captain and continue movement unless directed otherwise.



g. Close Ambush, road blocked. Convoy commander will:

- (1) Signal convoy's actions by calling "Ambush, Ambush" over the radio.
- (2) Execute "Road Warrior" drill, except that the lead element is in contact and must destroy the ambush element. Priority is to get all personnel out of the kill zone.
- (3) Remember the principle of:
 - (a) SUPPRESS - suppress enemy with high volume of fire from covered positions.
 - (b) OBSCURE - use smoke to conceal your movements.
 - (c) SECURE - secure both sides of the obstacle.
 - (d) CLEAR - clear the obstacle.

h. Spot Reports: March unit commanders will submit a spot report on all enemy activity encountered on convoy.

7. ACTION FOR DISABLED/LOST VEHICLES:

a. Vehicles that breakdown on a convoy will pull off the side of the road and report the problem to the convoy commander. If the disabled vehicle is blocking the road then another vehicle will push it off the road. Attempt self recovery with another vehicle if threat is minimal. Personnel from the disabled vehicle will mount other convoy vehicles and proceed with the convoy. Security team will guard the vehicle until a quick reaction force with recovery capabilities arrives. When possible, use GPS to give vehicle position. If downed vehicle is essential to convoy mission or security, convoy commander may halt convoy while vehicle is recovered.

b. Vehicles involved in accidents that immobilize the vehicle will be treated the same as disabled vehicles with one exception. Injured soldiers will be transported with the convoy and aid rendered.

c. Vehicles that become lost will report their situation to the convoy commander. Do not stop the vehicle. Keep driving in the same area until help arrives. Keep a log of direction and mileage. Convoy commander will request an aerial search.

d. March unit commanders will report the following information to FSB Battle Captain upon arrival at destination point:

(1) Convoy number.

(2) Status of missing vehicles, destroyed, broken down, lost detained, etc.

(3) Status of missing personnel.

8. ACTIONS AT NEW BSA SITE:

a. Each vehicle will follow appropriate quartering party representatives at the RP to designated vehicle site.

b. Report convoy closure to the FSB Battle Captain.

c. Begin occupation of BSA as indicated in Chapter 3.

CONVOY COMMANDER'S CHECKLIST

1. Convoy commander brief (OPORD format)
2. Mission
3. Current area intelligence
4. Time schedule
5. Route - Primary/Alternate
6. Convoy speed (to include MOUT, Rural, catch-up)
7. Convoy distance (to include MOUT, Rural)
8. Emergency measures
9. Chain of command
10. Destination
11. Type of formation (security team)
12. Call signs and frequencies
 - a. MORTARS:
 - b. HELICOPTERS:
 - c. MPs:
 - d. CLOSE AIR SUPPORT:
13. Start point
14. Check points
15. Release point
16. Type of cargo (personnel/equipment)
17. Select method of escort
18. Conduct radio checks

CONVOY BRIEFING CARD

TASK ORGANIZATION:

Convoy Element
Advanced Guard
Convoy Security
Rear Guard

1. Situation

a. Enemy

- (1) Weather and effects
- (2) IPB-danger areas, known natural and manmade obstacles

b. Friendly

- (1) Higher HQ
- (2) Elements supporting the convoy (ATK Helo, Armor, FA, ADA, MPs, ENs)

2. Mission

3. Execution

a. Route, SP, RP, Check points

b. OOM, location of all support and combat elements

c. Alternate route

d. Air corridors for evac and ATK air

e. Convoy execution:

- (1) Advanced Guard
- (2) Convoy
- (3) Rear Guard

f. Actions on contact

- (1) Halts
- (2) Mines/obstacles
- (3) Ambush with and without obstacle
- (4) Indirect Artillery
- (5) Sniper Fire
- (6) Air Attack
- (7) Vehicle breakdown
- (8) Casualty Evacuation
- (9) Accidents

g. Tasks to Subordinate Units:

h. Coordinating Instructions: ROE in effect, PIR, and IR

4. Service Support

a. Classes of supply (I, III, IV, V, VIII)

b. Recovery

c. Casualty Evac

d. EPW handling

5. Command and Signal

a. Location of Convoy Cdr

b. Assumption of Command

c. SOI Information

d. Code words

CONVOY REHEARSALS CHECKLIST

1. Assigned seating/sectors of fire for personnel
2. Actions at halts
3. React to contact
4. Order of mounting and dismounting vehicles
5. Counter ambush actions
6. Prearranged signals
7. Actions of barrier breaching team/escort team at blocked ambush
8. How to support barrier breaching team with fire when breaching blockade

ROUTE RECONNAISSANCE CHECKLIST

1. Which Route? (ID by name/CPs/Primary or Alternate)
2. Route Width? (c=traveled way, d=shoulder)
3. Single or Double flow? (wheeled or tracked)
4. Route Type? (X, Y, or Z)
5. Overhead Clearance? (lowest clearance)
6. Location/Description of Obstructions? (Bridges, roadblocks, slopes, curves)
7. Current Traffic / Where? (vehicle/pedestrian and grid)
8. General Road Conditions?
9. Time / Distance Between Checkpoints?
10. Location Description of potential Ambush Sites? (Translates to Target Reference Points)
11. Location Description of Congested/Potentially Congested Areas?
12. Suitability for night / NVD driving?
13. Recon Team Leader's Overall Impression Remarks

CHAPTER 4 – CONVOY TACTICS, TECHNIQUES & PROCEDURES (TTPs)

The following chapter contains TTPs taken from various sources such as the Center for Army Lessons Learned.

TACTICAL CONVOY OUTLINE

(Transportation Corps Professional Bulletin, Winter 2002)

“Convoys are more vulnerable to attack than ground maneuver forces and they, along with all other seemingly routine operations, should be planned and executed as a combat operation.”

MEMO, QRF HQ
Mogadishu, Somalia
19 OCT 93

All too often tactical convoys are treated like administrative moves instead of the combat operation they really are. Convoy briefings focus on seatbelts and speed limits as opposed to the enemy threat. Tactical convoys must be treated like a combat operation. They take additional planning and coordination over and beyond the normal line-haul operation. The probability for running into enemy contact is greater and therefore more detailed preparation is necessary. What follows is a framework to assist with the planning and execution of a tactical convoy. It is not an all-inclusive list, but it will give the convoy commander a checklist in order to successfully complete the mission. The outline that follows is based on my experiences with tactical convoys at the National Training Center and the Joint Readiness Training Center.

1. **Receive the mission.**
2. **Determine Convoy Commander and Assistant Convoy Commander.** By dividing the roles and responsibilities of a convoy between two (or more) personnel, more can be done in less time with a highly effective outcome. Generally, the convoy commander should handle the administrative portions (officer business) while the assistant convoy commander concentrates on staging, inspection, and rehearsals (NCO business).
3. **Convoy Commander determines timeline based on METT-T.** A six-hour lead-time for any mission will facilitate proper planning for a tactical convoy. Experience and standard operating procedures (SOP) will facilitate a tactical convoy in a time-constrained environment.
4. **Convoy Execution Matrix.** A one-page matrix that contains the following will ensure each driver has enough information needed to complete the mission, though they be the lone survivor. Should be completed by the convoy commander.
 - a. Mission
 - b. Frequencies/Points of Contact
 - c. Timeline
 - d. Detailed Strip Map

- e. Enemy Situation
 - f. Check Points, Release Points, Rally Points, etc.
 - g. Additional information needed to complete the mission
- 5. Manifest-personnel, supplies, sensitive items.** Completed by the assistant convoy commander and forwarded to higher.
- 6. Route Reconnaissance.**
- a. Map recon at a minimum
 - b. Route recon most preferred
- 7. Prepare strip map.** A good strip map will allow drivers to complete the mission without the use of a map. Include SP/RP, main route, alternate route, critical points, check points, distance between check points, north orientation, and major terrain features.
- 8. Determine Named Areas of Interest (NAI) and forward to S2.** In addition to route reconnaissance, determining NAIs along a route will enhance the convoy commander's vision of the battlefield. For example, an NAI may be established at restrictive terrain along the route that may be favorable to an enemy ambush. By establishing the enemy's course of action, the convoy can be redirected to a safer route.
- 9. Stage/Pre-Combat Checks (PCC).** Assistant Convoy Commander's responsibility. By staging the vehicles early on, it allows the assistant convoy commander to conduct pre-combat checks while verifying manifest data.
- a. Line up all vehicles in order of march
 - b. Conduct individual PCCs
 - c. Conduct vehicle/equipment PCC
 - d. Mechanic assists with vehicle PCC
 - e. Harden vehicles
 - f. Confirm manifest
 - g. Test Fire Guntruck/Rat Patrol at a minimum
- 10. Guntruck.** A guntruck will provide the convoy with much needed firepower in order to deter and/or destroy an enemy threat. Many times the enemy will choose not to attack a well-armed convoy.
- a. Placed where it can best provide needed firepower
 - b. Must have communication to be effective
 - c. One per eight vehicles is recommended
 - d. Hardened
 - e. Test fire prior to departure
 - f. Thoroughly briefed/rehearsed

11. **Rat Patrol.** A Rat Patrol is an advance security element that can be used in lieu of or in conjunction with a convoy escort. Their purpose is to drive ahead of the convoy as a reconnaissance element in order to provide the convoy with information on the route and enemy situation.
 - a. One or more HMMWVs with top, door and windows removed
 - b. Crew-served weapon or Squad Automatic Weapon (SAW) at minimum
 - c. Binoculars
 - d. Communication
 - e. Thoroughly briefed/rehearsed on route/movement technique
 - f. Should not be convoy guntruck
 - g. For more on Rat Patrols, read the article in CALL, Training Techniques, 3d Quarter, FY02
12. **OPSEC.** Throughout each phase of planning, preparation and execution, every effort must be made to maintain operational security (OPSEC) in order to deny intelligence to the enemy.
 - a. Camouflage trucks, windows, headlights
 - b. Use night moves
 - c. Use proper radio techniques
 - d. Cover unit information
 - e. Cover cargo
 - f. No names/information on windshields
 - g. Destroy convoy execution matrix and radio fill if captured
13. **Coordination.** When coordinating with the receiving unit, adjacent unit, escort and reaction forces, ensure the following.
 - a. Confirm radio freq, call sign, signals
 - b. Link-up points
 - c. Link-up procedures
 - d. Battle hand-off procedures
 - e. Information transfer procedures
 - f. Availability of material handling equipment (MHE)
 - g. Refuel sites
 - h. Procedures for remaining overnight (RON)
14. **Things to consider.** Other aspects to consider when planning a convoy.
 - a. Enroute recovery

- b. Ambulance/medical coverage. Note: Most ambulances have radio communication capability
 - c. Disperse combat lifesavers throughout convoy
 - d. Designate responsibilities such as aid and litter teams
 - e. Rest plan for drivers
 - f. Window screens to prevent grenades
 - g. Supply guard to prevent pilferage
 - h. MP, infantry or other escort
 - i. Disperse commodities throughout the convoy
 - j. Convoy signals
 - k. Enroute targets (fire support)
 - l. Air Cover (close air support)
 - m. Air guard
 - n. Deception plan
 - o. Closure report at destination and upon return
15. **Briefing.** Two hours prior to start time is optimal
- a. Tactical brief. Enemy/friendly situation update (given by S-2 is preferred)
 - b. Convoy Execution Matrix
 - c. Safety Brief. Use Risk Management and Risk Reduction techniques
 - d. Battle Drills. A technique is to have laminated tall charts with graphic representations in order to better demonstrate procedures prior to rehearsals
 - i. Air Attack
 - ii. Artillery
 - iii. Far Ambush
 - iv. Near Ambush
 - v. Near Ambush/Road Blocked
 - vi. Minefield
 - vii. Unplanned Halt
 - viii. Use of floating rally points
 - ix. Herringbones
 - x. Actions at Halt: Time, duration, purpose, and procedure.
16. **Rehearsals.**
- a. Battle Drills. What is expected of everyone? Who does what in each situation?

- b. Routes. A technique is to paint routes and terrain features on a large piece of canvas. This allows the “sand table” to be moved. It also allows drivers to “walk” the route prior to departure.
- c. MEDEVAC/CASEVAC. What happens if casualties are sustained? Are the aid and litter teams designated and do they know what to do?
- d. Communication. To include audio, visual, and radio. Redundant means of communication is a must. What is the plan if primary communication goes down?
- e. Rat Patrol/Guntruck. Are roles and responsibilities understood?

17. Conduct Convoy.

- a. Mechanic available prior to SP in case of vehicle problems
- b. Vehicles started one-half hour prior to SP
- c. Call in SP, CP, RP, and significant activities to higher. Know frequencies and call signs of adjacent units in case of emergency
- d. Close the loop with destination. Let headquarters know the convoy has arrived at its destination and inform them when departing
- e. The S-3 must be integrated into the convoy process. Once the convoy is on the road, it is now a moving piece on the battlefield that must be tracked by the S-3 shop as though it were a combat patrol

18. Debrief upon return to S2. Drivers are one of the best sources of intelligence about the battlefield. By ensuring that all drivers are debriefed after each convoy, the S-2 can ensure the next convoy traveling that route has all the proper and current intelligence

At the time of the writing of this article, CPT Dean J. Dominique was the Senior Transportation/DISCOM (Forward) Observer Controller at the Joint Readiness Training Center (JRTC). He has deployed to the National Training Center as a mechanized infantry platoon leader, transportation platoon leader, and company commander of a medium truck (PLS) company. He is currently an instructor in the Tactical Transportation Branch at Fort Eustis. He can be reached for comment at Dean.Dominique@eustis.army.mil. For more tactical convoy tools, go to <http://www.geocities.com/tacticalconvoy>.

CONVOY EXECUTION MATRIX

CONVOY # _____ CONVOY CDR _____

ASST CONVOY CDR _____

MISSION	TIME PERIOD	CHALLENGE	PASSWORD

COMMAND & CONTROL

WHO	CALL SIGN 24/48	FREQ 24/48	MSRT	NAME/UNIT
CONVOY CDR				
ASST CONVOY CDR				
COMPANY TOC				
BN TOC				
UNIT POC				
CONVOY ESCORT				
MEDEVAC				
GUN TRUCK				
RANGE CONTROL				
SPARE				
SPARE				

TIMES AND LOCATIONS

WHAT	WHERE	WHEN	WPN STATUS	MOPP STATUS	ADA STAT
STAGE					
PCI					
CONVOY CDR BRIEF					
SP					
RP/LINK-UP POINT					

CHECK POINTS

CP #	LOCATION	DISTANCE	ROAD COND	ENEMY SITUATION

STRIP MAP

NORTH _____

RATE OF MARCH DAY/NIGHT ____ / ____ INTERVAL ____ / ____

CONVOY EXECUTION MATRIX

CONVOY EXECUTION MATRIX (PAGE 2)

VEHICLES IN ORDER OF MARCH

(This form filled out by Assistant Convoy Commander)

OOM #	TRK #	TRLR #	F/R #	SUPPLIES	NAMES	SENSITIVE ITEMS

TOTALS

--	--	--	--	--	--	--

WEATHER DATA

DATE	% ILLUM	SUNRISE/ SET	MOONRISE/ ET	NVG START/STOP	CONDITIONS

RISK FACTOR _____ REVIEWER _____

CONVOY RISK MANAGEMENT CARD

CONVOY RISK MANAGEMENT CARD

Mission: CONVOY CDR ASST CONVOY CDR
 (Circle one in each category)

PLANNING

Guidance	Preparation Time		
	Optimum	Adequate	Minimal
Hey You	3	4	5
FRAGO	2	3	4
OPORD	1	2	3

Score _____

MISSION CONTROL

Task Organization	Type of Convoy		
	Nontactical/ Garrison	Day Tactical	Night Tactical
OPCON	3	4	5
Attached	2	3	4
Organic	1	2	3

Score _____

SOLDIER ENDURANCE

Rest in last 24 hours	Length of Operation			
	1-2 hr	3-5 hr	6-8 hr	9+ hr
0-3 hours	3	4	5	6
4-5 hours	2	3	4	5
6+ hours	1	2	3	4

Score _____

TRAFFICABILITY

Terrain Type	Road Type			
	Improved	Unimproved	Trail	Cross Country
Mountainous	3	4	5	5
Desert/Jungle	2	3	4	5
Flat/Rolling	1	2	3	4

Score _____

SOLDIER SKILLS

Task	Experience			
	Experienced	Familiar	Not Experienced	OJT
Complex	3	4	5	5
Routine	2	3	4	5
Simple	1	2	3	4

Score _____

VISIBILITY

Terrain Type	Weather/Light			
	Clear/Day	Rain/Day	Snow/Dust/Day	Night
Mountainous	3	4	5	5
Desert/Jungle	2	3	4	5
Flat/Rolling	1	2	3	4

Score _____

0-12
13-20
21-25
26 +
TOTAL _____

Low Risk
Medium
High Risk
Very High

Approval Level: SQD LDR PLT LDR CO CDR BN CDR

NOTE: IF 2 OR MORE AREAS ARE ASSIGNED RISK FACTORS OF 5 OR MORE, THE OVERALL RISK IS CONSIDERED "HIGH." ADD 3 POINTS TO THE TOTAL FOR HAZARDOUS OR SENSITIVE ITEMS CARGO.

Approving Authority Signature _____ Date _____

Briefed by _____ Date _____

TC Initials _____ Driver Initials _____

This card is prepared by the Convoy CDR. Each truck will carry a copy in the dispatch book.

CONVOY RISK REDUCTION WORKSHEET

Check all that apply	Hazard	Risk Level (Low, Med, High)	Control Measures	Residual Risk
	Adverse Terrain		Drivers training, convoy brief	
	Air Attack		Convoy defense, battle drills, harden vehicles, commo	
	Ambush		Convoy defense, battle drills, harden vehicles	
	Barricades		Convoy defense, rehearsals, battle drills, breach teams	
	Blackout Drive		Drivers training, convoy brief	
	Breakdown		PMCS, PCI's, Class II, SPO's (stripmap)	
	Exhaust Fumes		Enforce no sleep rule (TC's), PMCS, PCI's	
	Cargo (HAZMAT)		Training, PCI's	
	Civilians		Commo, Convoy briefs, training	
	Cold Weather		Cold weather training, PCI's	
	Communication		Training, commo personnel, PMCS, PCI's	
	Desert Environment		Training, convoy briefs	
	Disorientation		Convoy briefs, stripmap (SOP's), training (plugers, etc)	
	Driver Inexperience		Driver placement, training	
	Enemy ATK		Rehearsals, battle drills, convoy briefs, harden vehicles	
	Fratricide		VS-17 panels, on vehicles, markings, commo	
	Halt		Rehearsals, battle drills, convoy briefs	
	Heat		Water, rest halts, convoy brief (safety)	
	Heavy Rain		PMCS, drivers training, reduce speed	
	Limited Visibility		NVG's, chemlight markings, training	
	Long hauls		Drivers training, SOP's, rest halts, convoy briefs	
	Minefield		Rehearsals, battle drills	
	Mud		Recovery training, Drivers training (all wheel drive)	
	NBC Attack		Rehearsals, PCI's, recons, commo, training (NBC teams)	
	Recovery Operations		Training (with maint, self recovery-wench, toe-bar	
	Reduced Visibility		Intervals, chemlight markings, training	
	Roll Over		Drivers training, recovery, SOP's (seatbelts, kevlar)	
	Sleep Deprivation		Enforce sleep plan, rest stops, work rotations	
	Sniper Fire		Battle drills, convoy briefs, training	
	Snow/Ice		reduce speed, drivers training (use of CTIS),	
	Strong Winds		Reduce speed, drivers training, convoy briefs	
	Sudden halt		Intervals, training, battle drills (SOP's)	
	Sunlight		Clean windows, sunglasses	
	Fire		Fire extinguishers, evacuation drills	

Definitions

High – Good chance of death or serious injury

Med – May cause injury or possibly death

Low – Little chance of death or injury



(RISK MANAGEMENT WORKSHEET)

A. NA110 PRESENCE

START MILES _____

END MILES _____

VEHICLE #

2. Date Started From:

RISK MANAGEMENT WORK SHEET

1. MISS ON TAG <

3. Date Reported

4. Reported by: [Name and Job Title]

5. Hazards

6. Initial Risk Level

7. Controls

8. Subsequent Risk Level

11. How to implement

12. How to Supervise

13. Controls Effective

- 1. Mirror Strikes
- 2. Narrow Road
- 3. Pedestrians
- 4. Traffic/Accidents
- 5. Weather
- 6. Vehicle Breakdown

- 1. Drivers Window Up
- 2. Pass Carefully
- 3. Maintain Speed and
- 4. Distance Defensive Driving
- 5. Wet weather Gear
- 6. Veh has water & POC Cold
- 7. Stay on approved routes,
- 8. Situational awareness
- 9. OGA Van maintains internal communications with Low-Boy
- 10. Drive and Asst Driver alternate every 2hrs or 100miles.

- 1. Convoy Briefs
- 2. Safety Briefs
- 3. PCI
- 4. PMCS

- 1. Convoy Brief
- 2. Safety Brief
- 3. PCI

3. Overall Risk Level after Controls are implemented (Circle One):

LOW MED HIGH

10. Risk Description/Action by: (Rank/Last Name/Duty Station)

Example Risk MGMT Card

(RISK MANAGEMENT WORKSHEET)

START MILES _____

END MILES _____

VEHICLE # _____

2. U.S. Start
End: _____

RISK MANAGEMENT WORK SHEET

1. MISS ON TAG <

3. Date Reported _____

4. Reported by:
Patrol and Jurisdiction: _____

	6. Initial Risk Level	7. Controls	8. Residual Risk Level	11. How to implement	12. How to Supervise	13. Controls Effective
<p>9. Overall Risk Level after Controls are implemented (Circle One):</p> <p style="text-align: center; font-size: 2em;">LOW MED HIGH</p>						
<p>10. Risk Determination by: (Rank/Last Name/Duty Station)</p>						

CONVOY PCI CHECKLIST

INDIVIDUAL CHECKLIST

- Weapon
- Kevlar
- LBE w/ 2 canteens (topped off)
- First Aid Pouch w/dressing
- Ammo pouches w/ basic load
- Flashlight w/ batteries
- I.D. tags
- Military ID card
- MRE
- Civilian Drivers License
- MOPP Gear
- Combat Lifesaver Kit
- Mission Brief
- OVM Keys
- AAA Card

VEHICLE CHECKLIST

- Completed 5988E (before PMCS)
- Current Vehicle dispatch
- Truck topped off
- Additional Package products
- VS-17 panel
- Extra fuel can
- Class I basic load (mre's and water)
- Radio check (if applicable)
- BII complete
- Snow chains w/tie down
- Tow Bar
- All cargo secured
- Road Guard Belt
- Flashlight
- Map
- Warning triangles
- Fire extinguisher

RUCK SACK (as needed for mission)

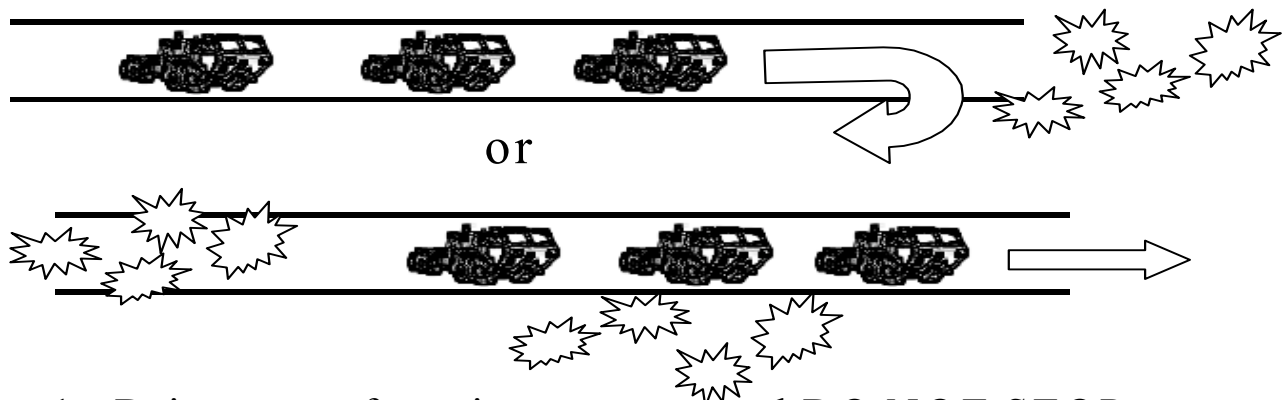
- Sleeping Bag
- 1 set BDU's
- 2-T shirts
- 2 PR underwear
- 2 PR socks (blk / grn)
- Polypro top/bottom
- Cold Weather boots
- Personal hygiene kit
- Goretex top/bottom
- Wet weather gear
- Cold weather gloves
- Polypro glove insert
- MREs 3 each

LEADER CHECKLIST

- Bino's
- Radio check(internal, cmd, A&L)
- Convoy Movement Order
- Map of sector with current graphics
- Strip Map
- Sensitive items/personnel list
- Combat Lifesaver w/kit
- Current situation brief
- Risk Assessment
- GPS (operational)
- Vehicle and Personnel manifest

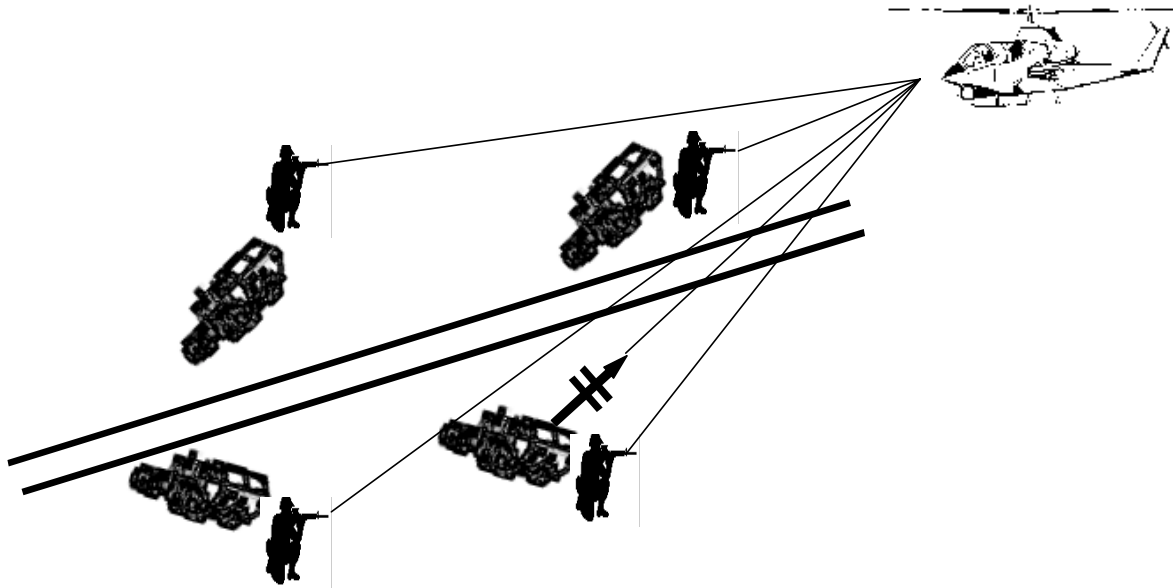
BATTLE DRILLS

React to Indirect Fire



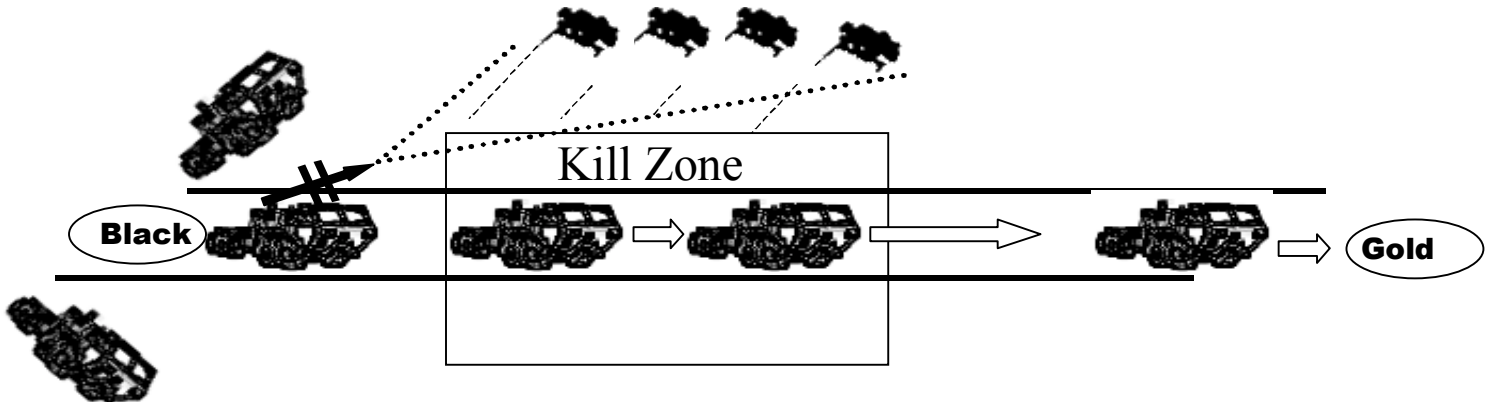
1. Drive away from impact area and **DO NOT STOP**
2. Fire upon and kill the observer if spotted
3. Increase convoy speed
4. Use running lights as a visual sign
5. Increase distance between vehicles - do not bunch up
6. Consolidate and reorganize
7. Use alternate route if necessary
8. Report actions to higher headquarters

Defend Convoy from Air Attack



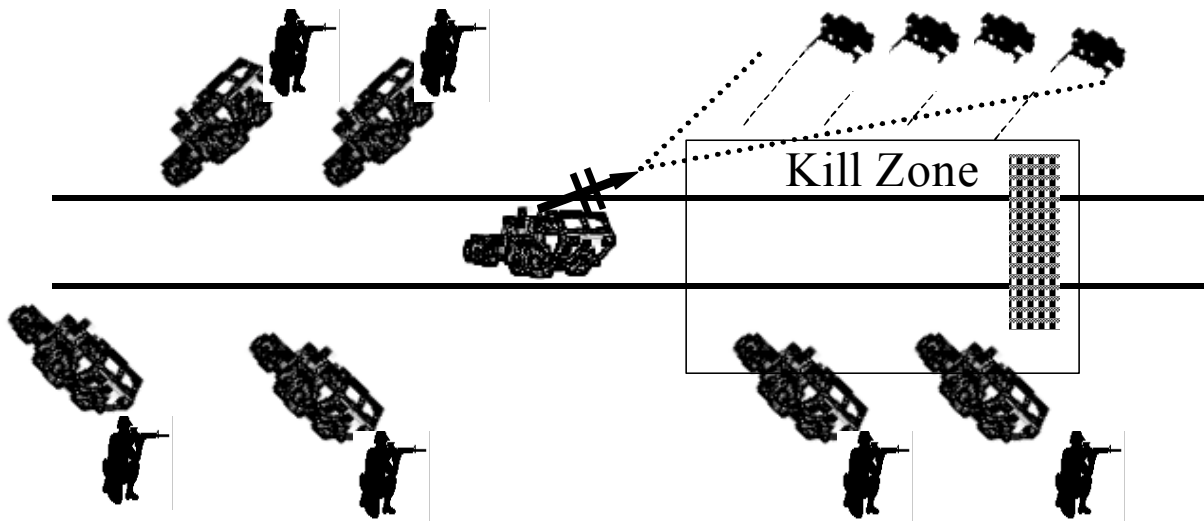
1. Identify aircraft as threat
2. Herringbone and disperse vehicles
3. Assume fighting positions away from vehicles
4. Fire weapons at and destroy attacking aircraft
5. Volume of fire is key
6. Consolidate and reorganize
7. Report actions to higher headquarters

React to Ambush



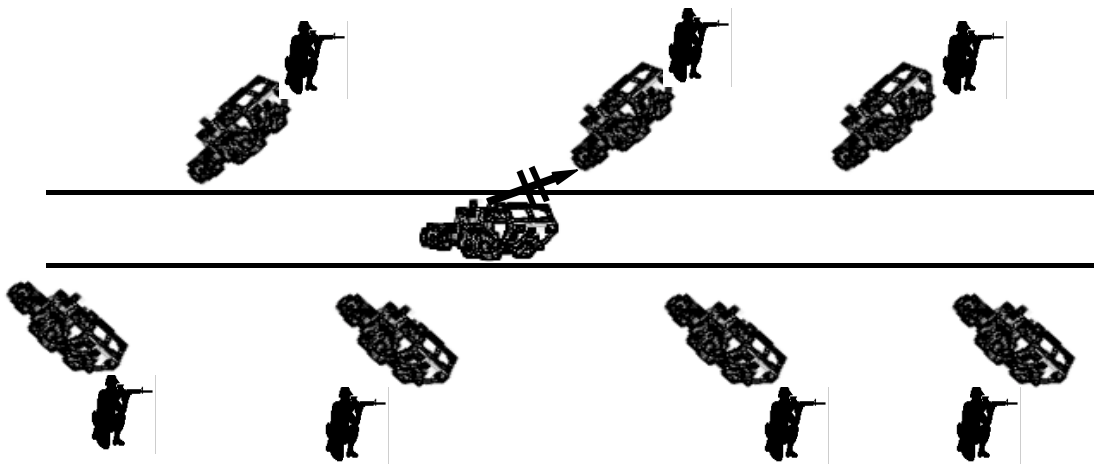
1. Report ambush to convoy commander
2. Vehicles in kill zone increase speed to clear area
3. Immediately return fire to kill and suppress
4. Use turn signals to show the direction of the attack
5. Soldiers not in kill zone will herringbone vehicles and take up a defensive position.
6. Gun Truck moves into position to lay suppressive fire
7. Senior member organizes security element
8. Senior member directs fire and maneuver to allow remaining vehicles to pass through kill zone if possible
9. Security element may have to consolidate, reorganize and then use alternate route
10. Consolidate and reorganize
11. Forward SITREP to higher headquarters

React to Ambush - Road Blocked



1. Report ambush to convoy commander
2. Vehicles in kill zone dismount on opposite side of ambush
3. Immediately return fire to kill and suppress
4. Use turn signals to show the direction of the attack
5. Soldiers not in kill zone herringbone vehicles and take up a defensive position.
6. Gun Truck moves into position to lay suppressive fire
7. Senior member organizes security element
8. Senior member directs fire and maneuver to clear road block and pass vehicles through kill zone if possible
9. Convoy may have to consolidate, reorganize and then use alternate route
10. Consolidate and reorganize
11. Forward SITREP to higher headquarters

Reorganization After Attack Consolidate & Reorganize



1. Herringbone and maintain 360 degree security
2. Treat casualties
3. Request MEDEVAC
 - a. Secure landing zone
 - b. Evacuate all casualties
4. Reestablish chain of command if necessary
5. Assess damage to vehicles and cargo
 - a. Crossload critical cargo
 - b. Request destruction of vehicles and equipment if necessary from higher HQ.
6. Reorganize and resume convoy using alternate route if necessary.

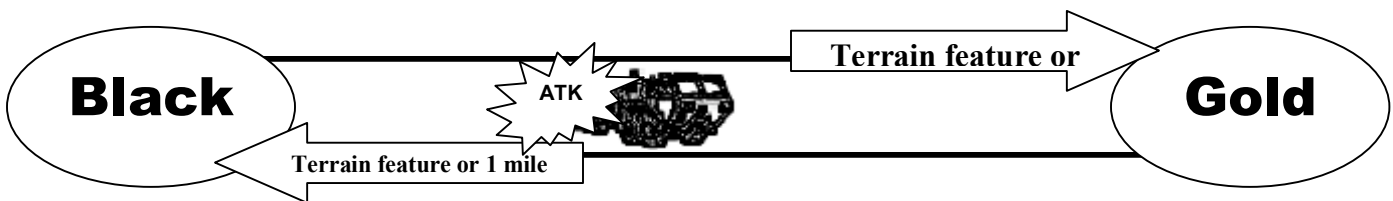
React to Minefield/Boobytrap



1. Follow the tracks of the vehicle in front
2. Use ground guides if possible
3. Avoid driving on the shoulder of the road
4. Do not run over foreign objects
5. Watch reaction of local nationals
6. Have engineers sweep the road
7. Harden vehicles
8. Wear protective equipment

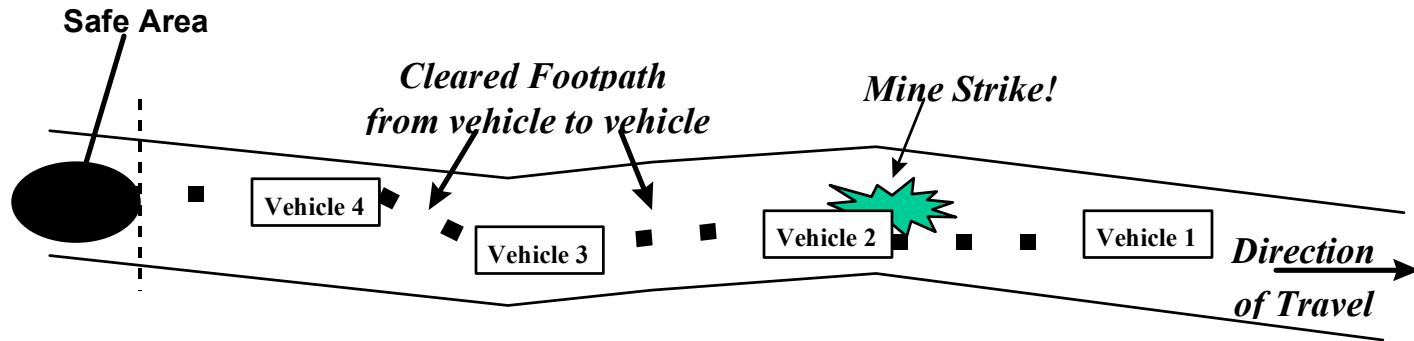
Reorganization After Attack

Floating Rally Points



1. Floating rally points will be used for consolidation and reorganization.
2. Rally point Gold is located 1 mile ahead on the far side of an easily identifiable terrain feature if possible.
3. Rally point Black is located 1 mile back on the far side of an easily identifiable terrain feature if possible.
4. RP Black will only be used when forward progress is impossible. Convoy will then use alternate route.

REACT TO A MINESTRIKE WHILE MOUNTED



General Situation: Vehicle #2 in a 4-vehicle convoy strikes a mine. Vehicle #1 believed to be in a minefield. Extent (start or end) of minefield is unknown. There are casualties and/or deaths in Vehicle #2.

Procedures:

1. Convoy HALTS **all personnel remain mounted** no vehicles move.
2. **Senior person assesses situation, determines casualties** based on reports from all vehicles in convoy.
3. Senior person accounts for all sensitive items **Send SITREP** to higher HQ.
4. Establish **360 degree security** from vehicles.
5. Senior Engineer (if available), or senior person **designates a sweep team to clear a footpath** the affected vehicle using non-metallic probes and/or mine detector **Mark left and right limits of footpath** using non-metallic materials (spray paint, chem lights, HEMMS poles, wooden stakes, engineer tape held down with rocks etc.) every 3 meters.
6. At the same time, the **fast vehicle in the convoy clears a footpath to the rear** establishes a Radio communication link with higher headquarters. Distance to clear to rear is designated by senior person or rear vehicle commander.
7. Sweep team clears footpath to injured personnel and begins first aid.
8. **Mark any mines found** with engineer tape or any non-metallic material. Do not put the marking object closer than 12 inches from the suspected mine. DO NOT PROBE to find the mine.
9. **Clear an extraction lane from vehicle to vehicle** extending from Vehicle #1 passed the last Vehicle to the designated Safe Area or limits of minefield.
10. **Extract casualties** to an approved TFE HLZ site designated by the senior person. Clear HLZ if necessary.
11. Extract and **account for all personnel and sensitive items**
12. **Mark, record, and report the minefield** higher headquarters.

CONVOY RAT PATROLS

(Center for Army Lessons Learned)

The ambush is set. As the enemy commander waits for his target, he goes over every detail repeatedly. Although this is supposed to be an easy target, he still wants to make sure nothing is left to chance. The mission is to interdict a logistics convoy in order to deny his U.S. opponent critical supplies. Intelligence indicates that the U.S. supply convoys pass this same route twice a day at regular intervals. The command and control element usually is leading with little, if any, security.

Out of the corner of his eye, the enemy commander sees a flash of light in the distance. The convoy is lumbering slowly into the kill zone. A smile comes across his face as he notices what looks like the command vehicle leading the way. He activates the command-detonated mine under the lead vehicle, thereby eliminating the convoy commander along with his communications. The machineguns open fire and destroy the targets in priority order: supplies, troops, and equipment. As his soldiers sweep the kill zone, he reflects back on his intelligence brief. The information was correct; it was an easy target. He has destroyed all supplies, troops, and equipment. His mission is complete.

Logistics convoys are prime targets for an enemy force. They typically are large lumbering beasts of essential supplies heading to troops on the front lines. A typical convoy can have virtually all classes of supplies intermingled throughout. This is one of the reasons they are of such high value. In the perfect world, each convoy would have some type of escort, whether it be MPs or tactical support. But many times that type of support is not available due to combat operations. This leaves convoys on their own, and ultimately, unprotected. By interdicting these supplies, the enemy can have a direct impact on the combat power they face, and apply minimal force due to poorly prepared convoys.

How do you prevent such a calamity as convoy commander? One technique is the “convoy rat patrol” or CRP. What is a convoy rat patrol you ask? Simply put, it is an advance security element that precedes a convoy (in the absence of an MP escort), thereby reconnoitering the route, providing overwatch, and possibly preventing your convoy from being destroyed. The fundamentals to a well-executed CRP are organization, planning, pre-combat checks, and rehearsals.

ORGANIZATION

A technique for organizing the CRP is to reserve 2 HMMWVs with 2-3 heavily armed soldiers per vehicle. Do not use your gun truck in place of the CRP and vice versa, instead use them together as a complimenting force. It is generally best to have the same personnel run these CRPs in order to provide permanence and condense train-up time. Equipment includes an automatic weapon (make sure its test fired), communications, binoculars, compass, and map with graphics at a minimum. If possible, have your mechanics remove the windshield along with doors and vehicle top. This will allow a maximum observation of the battlefield while minimizing signature due to light reflection. When running multiple convoys, it will be crucial

to rotate your personnel, and you may only be able to lead each convoy with only one vehicle. In this case, use the most experienced and rehearsed team members. CRP leaders must be well trained on mounted land navigation as well as call for fire skills.

PLANNING/REHEARSALS

The CRP team leaders must have a comprehensive understanding of the route, the enemy, and the terrain along the route (METT-T). Each CRP must know the enemy's capabilities and potential ambush sites. This begins with a detailed consultation with the S-2. If possible, named areas of interest (NAIs) should be developed along with en route targets. The team members must understand the commander's intent for the CRP as well. The CRP needs to recognize that it is not a fighting force and must not become decisively engaged. If they spot the enemy first, they should stay out of weapons range and call back with a systematic SALUTE report. If they are spotted, they should return fire and move back while informing the convoy. Again, the CRP should not be used as a fighting force, but as a reconnaissance element.

PCC/REHEARSAL

Prior to departing, the team leaders must inspect all personnel, weapons, and equipment for serviceability and accountability. A "single-shot .50 cal" will do little to deter a determined enemy bent on killing. Communication must be established with the convoy commander as well as the guntruck in order to coordinate fires. Internal Standard Operating Procedures (SOPs) and checklists should be developed for PCC/PCIs and actions on contact. Rehearsals are then conducted with all key elements. In case of a time crunch, focus on actions on contact first. Instructions must be unambiguous and all actions rehearsed between the convoy commander, the CRP, gun truck, and higher headquarters.

EXECUTION

The Rat Patrol moves tactically ahead of the convoy in a bounding overwatch. Points can be designated on the map for each CRP element to bound forward to. The CRP teams should alternately move ahead of the convoy to recon possible ambush sites and stop short of IV lines to provide eyes and ears for the convoy commander. This can alleviate the misfortune of large convoys rolling into a roadblock or bottleneck. The CRP does not need to travel precisely on the route trekked by the convoy. Conversely, they should use the terrain to their full advantage in order to mask movement while trying to locate the enemy first.

WAR STORY

No kidding there I was, conducting a tactical convoy at the National Training Center. The temperature was rising and the supplies were moving. Out ahead of the convoy was the infamous rat patrol. Rat patrol spotted a lone BRDM waiting to attack my convoy. By using the terrain to mask its movements, the CRP with a lone SAW gunner was able to tactically maneuver to a covered position and engage the enemy at my command. The intent was to provide suppressive fire until the gun truck could maneuver to a better position to fire upon the lone

bandit. However, the BRDM quickly withdrew under the hail of 5.56mm. This then allowed the convoy to pass on to its destination unimpeded.

In a low intensity scenario, the CRP spotted civilians on the battlefield that had set up a hasty roadblock in restrictive terrain. Thanks to early notification, the convoy was able to herringbone and take up defensive positions several kilometers away from what eventually became an ambush site.

CONCLUSION

In conclusion, a properly executed CRP can save lives and ensure the soldiers engaged in active combat on the front lines have the supplies needed to close with and destroy the enemy. If the convoy in the beginning of the article had organized, planned, rehearsed and executed a CRP, the convoy could have been saved. The convoy could have been directed to use an alternate route, had increased security placed along that route, or to rain artillery on the ambush in order to clear the route. The supplies may arrive late, but they will arrive alive.

CPT Dean J. Dominique is the Senior Transportation/DISCOM (Forward) Observer Controller for the CSS Division, Operations Group, Joint Readiness Training Center.

METHODS AND TECHNIQUES FOR CONVOY PROCEDURES IN PEACE OPERATIONS

by LTC Donald Koehler, CALL CAAT 14, Bosnia

INTRODUCTION

During peacekeeping operations, particularly during Operation JOINT GUARD/JOINT FORGE in Bosnia-Herzegovina, one of the most common tactical operations was the conduct of routine road movements or convoys. The purpose of this article is to outline some of the methods that were developed at the brigade and battalion level for the successful completion of this mission. The successful conduct of road movements or convoys was a command concern at all levels. Some of the most usable procedures and lessons learned were at the brigade and battalion level. Units incorporated convoy operations into their tactical standing operating procedures (TACSOPS) as stand-alone chapters. One brigade defined the convoy mission in the following manner:

MISSION

You will conduct patrols and convoys for a number of reasons. Some of the typical missions are:

- Show SFOR presence in an area of operations
- Conduct reconnaissance
- Participate in a joint mission with a multi-national unit (Russian or NORDPOL Brigade)
- Conduct logistical resupply operations

Units treated convoy operations as tactical operations instead of administrative movements. This was reflected in the level of standardization and planning that was devoted to these operations.

Most units used a 72-hour planning cycle for the planning and execution of convoys. A typical scenario follows:

3 Days or 72 Hours Out

- Initial convoy list compiled at headquarters.
- First mention of upcoming convoy at nightly convoy briefing (purpose, unit, route, tentative schedule).

2 Days or 48 Hours Out

- Convoy commanders appointed.
- Second mention of upcoming convoy at nightly convoy briefing (purpose, unit, route, tentative schedule).
- Vehicles begin Technical Inspection (TI) and dispatch process.

Day Prior or 24 Hours Out

- Convoy commanders received detailed briefing concerning:
 - Local situation and reporting criteria from the S2.
 - Weather.
 - Radio frequencies.
 - Confirmation of graphics and checkpoints.
- Convoy commander provides:
 - Time/Route confirmation.
 - Manifest (# vehicles, bumper numbers, # personnel).
 - Completes convoy tracking cards.
- Actions:
 - Continuation of technical inspection and dispatch process.
 - Rehearsals as needed for actions in case of mine strike, encountering roadblock or mass demonstration, ambush, sniper, vehicle breakdown.

Day of Convoy

- Convoy staged and inspected per appropriate checklist.
- Convoy commander reports: the start point (SP), checkpoints (CP), significant activity and release point (RP).
- Task force Tactical Operations Center (TOC) records convoy's progress through use of both convoy cards and map posting.
- Convoy commander submits debriefing report, accounts for personnel and sensitive items and ensures that after operations maintenance is conducted at mission conclusion.

CONDUCT A PATROL/CONVOY

MISSION

You will conduct patrols and convoys for a number of reasons. Some of the typical missions are:

- a. Show SFOR presence in an area of operations.
- b. Conduct reconnaissance.
- c. Participate in joint mission with a multi-national unit (Russian or NORDPOL BDE).
- d. Conduct logistical resupply operations.

PCI

1. Radio checks with the TF TOC and every vehicle. Have MEDEVAC freq set and posted.
2. Check dispatches to ensure that they are up to date and that the Q/C is current.
3. Conduct a functional check on the patrol's crew served weapons, and ensure the patrol

understands the proper weapons posture, per TFE Force Protection Status and ROE to include ammo.

4. Ensure that all vehicles have the proper colored chemlights per the unit SOP.
5. Combat lifesaver bags in at least one vehicle; IV bag up to date; bag fully stocked with qualified combat lifesaver.
6. Every vehicle must have a map with the current TF graphics.
7. All soldiers on the patrol must have all mandated TFE cards on their person.
8. Patrol leader must have a roster with all of the soldiers on the patrol that also lists all of the sensitive items on the patrol and submit to TOC with patrol request.
9. The patrol must have at least one interpreter and must be ethnically correct.

PATROL REHEARSAL

1. Brief the Task and Purpose of the patrol.
2. Brief all members of the patrol on the route, checkpoints, road conditions, rally points, and enroute RPs.
3. Actions at breakdowns.
4. MEDEVAC procedures.
5. Mine strike procedures/locations of known minefields.
7. Actions to take if there is a break in contact.
8. Designate speed, interval, observation plan.
9. Brief the patrol risk assessment/reduction plan.
10. Brief PIR/CCIR.

ACTIONS AT A SHORT HALT

1. Report location and situation.
2. Dismount local security.
3. Consider turret/weapon orientation (360 deg).
4. Remain at prescribed force protection level.
5. During operations PMCS.
6. Update all TCs on the current situation/issues.
7. Clean windows, markers, and lights.

ACTIONS AT A VEHICLE BREAKDOWN

1. Ensure that the vehicle moves to a safe location if possible before dismounting. Employ warning triangles, chemlights, and reflective vests.
2. Establish and maintain security; verify location vs. known minefields.
3. Assess the nature of the breakdown.
4. Report location, situation, your actions.
5. Attempt to fix on site.
6. Attempt self-recovery.
7. Coordinate external recovery; notify maintenance personnel of fault.
8. Maintain force protection guidance (veh #, etc.).

ACTIONS ON CONTACT

1. RETURN FIRE!!

2. Attempt to move out of the kill zone.
3. Those not in contact on the far side of the kill zone move to an identifiable rally point, stop and establish security. If you are on the near side of the kill zone, stop and establish security. Bring fires to bear on the enemy to assist those in the kill zone to break contact.
4. Report to higher. Keep a smart guy on the radio to constantly update your current situation.
5. Treat casualties and call for MEDEVAC as required.
6. When the situation permits, gather everyone at the rally point. Account for your people and sensitive items.

Figure 2. Typical guidance for convoy operations as taken from a brigade SOP book

GATOR CONVOY LEADER CHECKLIST

Four vehicles minimum out of Task Force 2-6 AOR

Three vehicles minimum for patrols inside of Task Force AOR

Two vehicles minimum for administrative patrols inside of TF 2-6 AOR

Communications in front and rear vehicles minimum

Radio checks completed on convoy freq. and Battalion O/I

All vehicles have a TC and drivers have proper licenses

Current PMCS and dispatches valid through expected time of return and logbooks on hand

All vehicles have map of route(s)

All vehicles have copy of all needed reports (9 line MEDEVAC, UXO, MINE STRIKE, FIRE SPT AND CONVOY CDR HAS CONVOY PACKET)

All fuel tanks full

All vehicles have fire extinguisher, first aid kits, and critical BII

All cargo properly secured

All windows, lights, reflectors, and bumper numbers cleaned

All personnel know how to request medical or recovery assistance

All personnel briefed on situation, contact drills, contingency plans, and safety concerns

All personnel in proper uniform according to Force Protection Level

One mounted crew-served weapon with qualified gunner minimum for patrols and any vehicles leaving the TF AOR

One interpreter on hand minimum

Snow chains (mounted if determined necessary)

Risk Assessment completed and briefed by the convoy commander

Figure 3. Battalion-level leader's checklist for convoy operations

GATOR CONVOY/PATROL BATTLE DRILLS

REACT TO SNIPER

1. Return fire with aimed fire if sniper ID'd, send spot report.
2. Continue movement, use smoke if available
3. Protect wounded, begin first aid
4. Report sniper location to higher
5. Evac any wounded, send SALUTE/ACE report to higher, continue mission.

REACT TO DIRECT FIRE

1. Continue movement increase speed if route permits
2. Use smoke to conceal if available, send spot report to higher
3. Evac soldiers from disabled vehicles
4. Consolidate/ Reorganize at least 1 terrain feature from impact
5. Send SALUTE/ ACE report to higher, evac any wounded, continue mission

REACT TO MINEFIELD

1. Patrol /Convoy Commander halts movement
2. Report higher IAW V Corps Minefield Report format
3. Maintain 360 degree local security from vehicles

VEHICLE BREAKDOWN PROCEDURES

1. Patrol /Convoy Commander halts movement
2. Report to higher, stay on roads
3. Self recover vehicle if possible
4. If vehicle cannot be self recovered , wait for recovery assets
5. Maintain 360 degree security from vehicles

REACT TO AMBUSH

1. Vehicles in kill zone return fire with aimed fire, move out of kill zone
2. Soldiers on disabled vehicles in kill zone dismount and assume concealed position, provide base of fire
3. Obscure with smoke if available
4. Vehicles not in kill zone add suppressive fire to enemy position, use fire and maneuver to aid withdrawal/ evac of soldiers in kill zone, send spot report to higher
5. Gain fire superiority destroy or force withdrawal of enemy forces . if unable to gain superiority break contact using fire and maneuver
6. Consolidate / reorganize at earliest opportunity send SALUTE/ACE reports to higher

REACT TO MINESTRIKE

1. Convoy halts, Commander reports higher
2. Vehicles not near strike provide 360 degree security from the vehicle, ID LZ sites
3. If same type of vehicles in convoy, vehicle behind disabled one slowly pulls up behind using same tracks,, evacs soldiers (if wounded) by walking from vehicle to vehicle
4. If vehicles are different, soldiers from behind disabled vehicles dismount, walk in tire tracks and evac casualties, if no wounded soldiers in disabled vehicle dismount, walk in tire tracks to vehicle behind them
5. Report minefield to higher, evac any wounded, request engineer support

TACTICS, TECHNIQUES AND PROCEDURES:

Convoy operations represent a significant daily activity for units involved in stability type operations. Some of the keys to mission success include:

- Clear, easily understood convoy operations procedures incorporated into unit tactical SOPs.
- Implementation of a stringent technical inspection and dispatch process (under task force control).
- Formatted report forms for events such as unexploded ordnance reports, S2 convoy debriefings, minefield and obstacle reports, call for fire, MEDEVAC.
- Convoy commanders conduct standardized briefings at the start of convoys.
- Well-orchestrated tracking procedures at the task force level.

CONVOY DEFENSE
AT THE NATIONAL TRAINING CENTER
by CPT Bill Bardon, SECOPS, NTC
(CALL)

2LT Smith gazed out over the hood of his HMMWV at the desert landscape. Behind him, 20 assorted trucks chugged along the dusty road. The supplies they carried meant the difference between life and death for the soldiers of First Brigade, 52d Infantry Division. This convoy had it all -- food, water, fuel, lubricants, ammunition, and repair parts. Ahead of 2LT Smith was 30 kilometers of main supply route; every dune and wadi a potential hiding place for an attacker. He hoped that his convoy was prepared. . .

I. A SUPPLY CONVOY IS A HIGH VALUE TARGET FOR THE ENEMY.

The reason why is obvious:

Taking out a unit's support assets reduces the combat power of the maneuver forces. The supplies carried on convoys are essential to maintaining the combat power of the forward units. Every drop of fuel, every round of ammunition, every repair part represents an increment of combat power. Without a steady flow of fuel and ammunition, a combat brigade can become combat ineffective very quickly. Without replenishment, they will run out of fuel and ammunition in a day or two of heavy fighting. So, a smart enemy might ambush a convoy to deprive the Brigade Combat Team of supplies in anticipation of an upcoming battle, thereby tipping the scales in their favor.

**II. WOULD AN ENEMY CHOOSE TO ATTACK A CONVOY RATHER THAN THE BRIGADE SUPPORT AREA (BSA) OR THE COMBAT TRAINS?
YES!**

a. The BSA and the Combat Trains are fixed locations. Although they move frequently, they still are required to establish defensive perimeters. To penetrate a BSA or a Task Force's Field Trains, the enemy must employ significant amounts of his rear area forces and expose them to risk of capture or destruction.

b. A convoy, on the other hand, must move to accomplish its mission. On the road between the Division Support Area and the BSA, a convoy is open and exposed. Convoys travel relatively slowly and generate significant noise and dust to announce their presence. Convoys tend to follow a limited selection of routes, since their heavy loads do not permit them to go across rough terrain. Convoys are easy to find and can be easy to hurt. The frame of a truck does not offer much protection compared to a foxhole or an armored vehicle. A small, lightly armed force can cause significant damage to a convoy with little risk to themselves.

c. An enemy does not need to **destroy** a convoy to cause a reduction in the BCT's combat power. Even **delaying** the convoy can disrupt a timeline for resupply and render the unit combat ineffective.

III. HOW MIGHT AN ENEMY ATTACK A CONVOY?

a. In a 360-degree nonlinear battlefield, we cannot expect to have complete control of the terrain outside of defensive perimeters. In Bosnia, a major threat to UN aid convoys was **snipers**. A single individual with a long-range rifle can effectively terrorize a main supply route. While very few were actually hit, the constant threat of attack forced drivers to take precautions, which reduced the flow of supplies. Cargo trucks do not offer much protection from any direction, especially overhead. The constant threat adds stress for the drivers as well.

b. If an enemy force has **mortars** or **anti-tank weapons**, the danger is increased.

c. **Mines** or **sabotage** to the road can simply block a convoy or halt it in preparation for an ambush.

d. The situation may vary, but a **guerrilla threat** in the rear area can be devastating to support convoys.

IV. HOW CAN WE BE PREPARED?

a. Preparation for countering this rear area threat must begin with **Home-Station training**. Reaction to a convoy attack is an essential battle drill for all drivers. Drivers include not only the MOS 88Ms, who are dedicated to driving full time, but also to anyone whose duties may require them to take part in convoy operations. This includes fuel and water handlers who drive tankers, ammunition handlers driving PLSs, medics in ambulances, and mechanics in wreckers.

b. The enemy does not discriminate when firing on a convoy. The best reference for convoy reaction training is **ARTEP 55-158-30-DRILL, Battle Drills for the Transportation Motor Transport Company, Supply and Transportation Battalion, Airborne, Air Assault, and Light Divisions**. This is a good reference for all types of units. **Drivers must train reaction drills** over and over, so that they do not require conscious thought.

If drivers have to think about what to do, they will probably die in place.

c. Before each convoy, the Convoy Commander should get a **threat assessment briefing** from the S2. The S2 should have a summary of recent rear area activities by enemy forces, an estimate of enemy strength, equipment, and capabilities, and an analysis of potential danger areas on the MSR. The convoy commander will need this information to formulate a convoy protection plan.

d. Based on the mission and the enemy situation, the convoy commander has several options that can reduce the threat to the convoy:

(1) In general, **night convoys** are safer than daylight convoys. Drivers operating with night-vision devices are almost as effective as drivers in daylight, with the benefit of darkness masking the signature of the convoy. In daylight, convoys are easy to spot from far away, giving enemy forces time to prepare and coordinate snipers, mortars, and anti-tank weapons. With clear vision,

weapons can be employed at their maximum effective ranges, bringing death and destruction on convoys with no warning. At night, engagement ranges are reduced, and a convoy using blackout drive is harder to spot. This forces the enemy to get closer to the kill zone and exposes the enemy to a more aggressive counterattack. However, darkness also gives the enemy cover for indirect attacks such as mines and sabotage of the roadway. Deciding when to conduct a convoy depends on careful analysis of the situation using the factors of METT-T.

(2) Get help in protecting the convoy. This requires planning and coordination before the convoy departs.

(a) While **military police** cannot continuously secure a road network, they can conduct periodic sweeps to discourage enemy activity.

(b) The BSA can provide reaction forces, such as a **Quick Reaction Force (QRF)** or MPs, or the Brigade might send a **Tactical Combat Force (TCF)** to respond to an emergency on the MSR.

(c) Whenever the assets are available, support units should put **guntrucks** into their convoys. Guntrucks can provide suppressive fire to allow the convoy to escape a kill zone, as well as scouting potential ambush sites (e.g., known checkpoints).

(3) Within the convoy, there are several things that can be done to increase the chances for mission success:

(a) **Disperse critical commodities** throughout the convoy. This reduces the chances that if an enemy knocks out a portion of a convoy, the entire shipment of a particular commodity might be eliminated. Fuel tankers, for example, could ignite and explode. With all the fuel tankers kept together, a single tanker exploding could ignite a chain reaction.

(b) **Maintain vehicle spacing, even at the halt.** With vehicles spaced 100 meters apart, a convoy would take up over a kilometer of road space. With the larger spacing, fewer convoy vehicles might get caught in a kill zone. Again, this ensures that the majority of the convoy is outside the kill zone and able to react effectively.

(c) Convoy Commanders need to **establish alternative means of communication** for the convoy. Most cargo vehicles do not have radios. Dispersed over a kilometer or more of road space, most drivers would not be able to see an attack in another portion of the convoy. The convoy commander must be able to tell the drivers the location and type of enemy activity so they can react properly. Signals should be both audible and visual to carry the length of the convoy in both day and night situations.

(d) The convoy commander should **designate rally positions** along the route where separated elements can gather to establish a defensive perimeter and regain accountability before continuing the mission.

e. Once the convoy passes its SP, the time for planning and preparation is over. The convoy must depend on its equipment and training to overcome any potential attack. **ARTEP 55-158-30-DRILL** sets a standard of 10 seconds for the convoy to recognize an attack and to react appropriately.

(1) Each type of attack requires a different response and the location of a vehicle relative to the kill zone also affects the reaction. The key to remember is: **A convoy is most vulnerable when it stops.** If a convoy can get past the kill zone or if it can avoid entering the kill zone, then it should be safe.

(2) The convoy commander should direct guntrucks or other escort vehicles to deliver suppressive fires on the ambushing forces while vehicles in the kill zone leave it as quickly as possible.

(3) The convoy commander should notify the BSA and the DSA of the attack and request reinforcements as quickly as possible.

(4) Soldiers trapped in the kill zone should dismount from the side of the vehicle opposite the enemy and take up defensive positions at least 10 meters away from the vehicle. For them, the battle is now a matter of dismounted infantry tactics.

f. If an enemy is determined to destroy a convoy and commits heavy forces to do so, there is not much that a convoy can do to prevent it. This assumes that an enemy is willing to penetrate deep into the rear with a heavily armed force, using a significant investment in combat resources. Only rarely would this be the case. More typically, a convoy is a target of opportunity or a supporting effort for a much larger conventional attack. As such, the enemy will attempt to destroy a few vehicles, force the convoy to turn around, and then eliminate anything left in the kill zone. If a convoy can respond aggressively, then it stands a good chance of evacuating the kill zone, or of holding off the enemy until reinforcements can arrive.

As 2LT Smith approached the Whale Gap, his two guntrucks began moving up to the front of the convoy. Having marked the gap as a possible ambush site, he placed one guntruck in the lead of the convoy and positioned the other on high ground adjacent to the MSR where it had a clear field of fire through the gap. The vehicles of the convoy moved through the gap smoothly, maintaining their hundred-meter spacing. As the third vehicle, a fuel tanker, drove through the gap, an anti-tank rocket struck it, and it burst into flames. The vehicles in front of the tanker continued down the road. The convoy commander immediately sent out three messages -- one informing the trail what had happened, one to the DSA informing them, and one to the BSA informing them and requesting reinforcements and medical evacuation. The guntrucks immediately began placing suppressive fire on the hill mass where the rocket had originated. The vehicle following the fuel tanker, a water tanker, pulled off to the opposite side of the road 100 meters behind the fuel tanker. The driver and assistant jumped out the driver's door, opposite the enemy position, and took up prone positions in the sand 10 meters off the road. The remaining vehicles turned around and headed back to a predetermined rally point three kilometers back. Within 15 minutes, four MP HMMWVs arrived and rapidly assaulted the guerrilla position on the hill mass. The results -- four guerrillas dead or captured, two friendly casualties, and one fuel tanker with 3,800 gallons of fuel lost. Aside from the initial attack, the convoy had suffered no further casualties because of its rapid and correct reaction to the attack. 2LT Smith's convoy was prepared.

TACTICAL CONVOY LESSONS LEARNED

By CPT Dean Dominique

Situation:

A battalion level logistics task force (LTF) deployed to the National Training Center at Fort Irwin, California to provide logistical support to a brigade combat team. The LTF consisted of a headquarters, transportation company, quartermaster company, maintenance company, and an area support ground ambulance company. The transportation company did not deploy pure. The company team consisted of various platoons attached to provide Heavy Equipment Transport (HET), Palletized Load System (PLS), water, and fuel support. For the most part, convoy commanders (CC) were lieutenants.

Convoys were sent from the logistics support area (LSA) to the brigade support area (BSA). The typical convoy traveled two or more hours one-way. Most convoys operated in limited visibility on at least one leg of their journey. The remarks that follow are a synthesis of observations made over the fourteen-day training period. The purpose was to provide honest feedback on convoy operations so future convoy commanders can execute highly effective convoys. It must be noted that convoy operations improved throughout the rotation, especially after after-action reviews.

Pre-Convoy Observations

Issue: Pre-Combat Checks/Inspections (PCC/PCI):

Discussion: Platoon Sergeants and assistant convoy commanders were charged with conducting PCCs and convoy commander would spot check prior to departure

O/C spot checks found invalid licenses, no fills or commo checks, preventative maintenance checks and services (PMCS) not conducted, vehicles not topped off, etc.

Loads were not checked to ensure straps were tight and supplies littered the main supply route as a result.

Recommendation: Have soldiers in vehicles two hours prior to conduct thorough PCC/PCIs with CC, NCOs and mechanics. A standard checklist that is part of the unit's standard operating procedures (SOP) will ensure all units are at the same standard.

Issue: Convoy Brief

Discussion: Convoy briefs were hastily done without all soldiers present.

Escort vehicle, which doubled as gun truck, did not receive the brief. Escort got lost within first mile and had to turn around.

Battle drills and safety elements were not covered. Briefs were limited to route, speed limits and wearing of seatbelts.

Briefs were scheduled within thirty minutes of SP (start point) time, which did not allow for a thorough brief and/or flexibility.

Recommendation: Conduct thorough briefing with all soldiers. Thoroughly brief escort vehicle on roles and responsibilities. Can be done after PCC as mentioned above.

Issue: Escort Vehicle/Gun Truck

Discussion: Every convoy was assigned an escort vehicle, which was a high-mobility, multi-purpose wheeled vehicle (HMMWV) with M249 squad assault weapon (SAW) mounted on turret. The escort vehicle was also considered the convoy gun truck.

Recommendation: Include gun trucks within the convoy, which are separate from the gun truck. FM 55-30 recommends one gun truck for every eight vehicles.

Issue: Risk Management

Discussion: Risk management was well integrated into LSA activities, however, convoy commanders did not conduct convoy specific risk assessment and management.

Convoy SP time was continually pushed back to accommodate last second changes. The result is that soldiers become tired while on “standby” before a long convoy.

Inexperienced solo drivers were not factored into the risk assessment.

Recommendation: Integrate the risk assessment into the operation. Ensure soldiers know the risks. Conduct a separate briefing on risks and how they will be managed. Ensure solo drivers are the most experienced on that equipment.

Convoy Execution Observations

Issue: Convoy Commander roles and responsibilities

Discussion: A majority of convoy commanders were lieutenants. CCs relied too heavily on the NCOs to make it happen. Without guidance, NCOs in the convoy did little while the NCOIC tried his/her best. Often, convoys were treated like administrative moves, instead of the combat operation that they were. Convoy preparations/briefs were weak, and the execution reflected.

CCs did not know how many vehicles and personnel were in the convoy.

CCs led the convoy, which meant they could not properly command and control. Many soldiers in the convoy had driven that route and could have easily led the convoy, which would allow the CC to effectively monitor the convoy.

CCs drove too fast and left the convoy.

CCs did not conduct inspections. See PCI/PCC.

CCs left the vehicles in the BSA.

CCs did not enforce actions at the halt. Convoys were in enemy territory, with a known threat, and did not post security.

CCs did not know or use convoy TACSOP. Remark was made that there were three different units, but none bothered to use higher SOPs as a common ground.

CCs did not post map graphics and could not react to change in routes.

CCs stopped convoys because mobile tracking system (MTS) was down and CCs could not communicate on FM.

CCs did not have comms with escort vehicle.

CCs did not have batteries for global positioning system (GPS). When MTS went down so did the GPS.

CCs did not enforce intervals, and convoy spacing was between five to a thousand meters.

CCs did not have situational awareness. Enemy threat was known along route and BSA. CCs remained or stopped in areas that were potential ambush sites.

CCs did not brief convoys before departing the BSA, even after an overnight stay. CCs over-relied on MTS. They did not see the necessity to get frequencies and call signs. CCs stopped convoys in enemy territory to try and find an MTS that was operational. FM radios lacked a fill to communicate with anyone. CCs did not have call signs.

CCs allowed the convoy to maneuver in the BSA at night without ground guides. A CC departed without graphics, comms with escort vehicle, and GPS. CC got lost and could not locate position. Escort vehicle had to run back and forth to convoy commander. CC stated he thought he was just going to run to the BSA and come right back – a six hour convoy lasted over twelve hours.

CCs did not brief or rehearse battle drills.

CCs did not do any type of rehearsals.

CCs did not ensure drivers had strip maps.

CCs did not disperse commodities throughout the convoy. Fuelers and like vehicles were continually bunched together.

Positive notes:

Uniform discipline was rarely an issue. CCs and their soldiers were always in the right uniform with only few exceptions.

Sensitive items were checked continuously.

CCs checked soldiers rest. CCs made positive decisions to hold convoys in the BSA to get a few hours of rest when needed.

Some CCs progressively learned from their mistakes, although we did see the same deficiencies in smaller quantities as the rotation progressed.

Recommendation: Convoy commanders need to understand their roles and responsibilities in convoy operations; they are responsible for everything that convoy does, or fails to do. When moving convoys through the combat zone, they need to treat convoys like a combat operation. If CCs would treat convoys like the infantry treats a mounted patrol, many of these problems would be eliminated.

Issue: Communication

Discussion: FM communication skills were weak. Convoys relied on MTS and were inoperable when it was down. Convoys could not communicate internally without PRC 127s.

Recommendation: Convoys need to know call signs and frequencies both internal and external. FM comms checks should be part of the PCCs.

Issue: Load Plans

Discussion: Convoys routinely lost supplies while driving through the rough terrain of the desert. Loads were not properly secured. Mines, pickets, trash, and critical repair parts were scattered the entire length of the main supply route (MSR).

Recommendation: With the PLS, the strap tension should be checked while the flatrack is on the ground, and then again when the load is on the truck. At every halt, either the driver or the truck commander should re-check the load while the other pulls security.

Issue: Home Station Training

Discussion: Soldiers were not properly trained on the equipment they were driving, although they were licensed. Soldiers had trouble operating the PLS.

Soldiers did not know how to lock the PLS into ten wheel drive. Soldiers claimed they were stuck in the PLS when only two tires were spinning. If all ten wheels are not spinning, then the PLS is not properly engaged and the vehicle is not stuck.

PLS drivers were severely hampered by night operations in the BSA.

Some soldiers were not well trained with NVGs and did not use them.

Recommendation: Ensure soldiers are trained in accordance with TC 21-305-10, Training Program for the Palletized Load System, and are able to operate their equipment under difficult conditions. Train soldiers on proper use of NVG.

Issue: NCO Involvement

Discussion: NCOs not designated as the convoy NCOIC did little to improve convoy operations.

One NCO had over ten rotations and let the convoy wander through the desert for hours. NCOs continually stayed in the vehicles, sleeping at times, and not enforcing standards. Soldiers smoked at the halt.

Recommendation: Convoy Commanders need to issue guidance and ensure NCO involvement. NCOs need to participate, enforce standards, and assist in convoy operations.

Additional feedback provided by:

SSG Patrick D. Ford 32d TC

SSG Jannie M. Woodall 32d TC

SSG Timothy J. Larsen, 2d TC

SSG Franklin B. Lewis, 32d TC

CHAPTER 5 – GUNTRUCKS

The purpose of this chapter is to provide information about guntrucks. Asymmetrical Warfare dictates that our enemies will try to attack us in our most vulnerable areas, which, in most cases, are convoys moving from one secure location to the other. Guntrucks allow convoys internal protection against an unpredictable enemy. Guntrucks were heavily used in Vietnam, which was a non-linear battlefield, and most of the following information is taken from those sources.

EXTRACT FROM FM 55-30, ANNEX O

O-6. **GUN TRUCKS.** Logistical convoys cannot always depend on military police support or added firepower. To provide more firepower for a convoy, units developed the gun truck. The purposes of a hardened gun truck are to--

- Provide a base of fire.
- Help counter enemy attacks.
- Increase survivability of the convoy.

The gun truck is equipped with a crew-served weapons system, preferably in a protective position. In Vietnam this principle worked well and provided convoys a means of self-defense. ***Deploy the gun truck in the convoy where it can best provide the needed firepower.*** If adequate communications assets are available, they should be located with the gun truck and the convoy commander. This enables the convoy commander to call the gun truck forward when needed. (A predesignated signal is required to bring the gun truck forward and inform the crew-served weapon system personnel of the enemy location.) If communications assets are not adequate, pyrotechnics may be used to signal the gun truck to move forward.

The gun truck should not be pulled up right on top of the enemy location. The crew-served weapons on the gun truck can cover a significant distance. Therefore, the vehicle should be situated where it has a clear field of fire to engage the enemy with the maximum effective range of the weapon. If necessary and if available, multiple gun trucks can be used. When using multiple gun trucks in a convoy, overlapping fields of fire greatly increases the convoy's chance of survival.

NOTES:

1. Based on availability, types of weapon systems, and size of the convoy, the placement and number of gun trucks may vary. With company-size and larger convoys, a minimum of two gun trucks should be used to provide overlapping fire. One gun truck for every eight vehicles in the convoy is recommended.
2. Consider using the MK19 or M203 to penetrate prepared defensive positions since small arms fire may not be capable of destroying enemy positions

GUNTRUCKS OF AMBUSH ALLEY

Reproduced from the *Army Logistician*, July-August 1986

Written by: Larry A. Ballard now Historian at the Army Center of Military History, Washington, D.C., and a historian with the Virginia Army National Guard. Having served in Vietnam with the 8th Transportation Group, he bases his account of armored convoy escort vehicles on personal experience as well as research.

Displayed on the grounds of the Army Transportation Museum at Fort Eustis, Virginia, is the Vietnam guntruck Eve of Destruction. This unusual vehicle is the lone surviving example of the converted cargo trucks that once provided highway security for Army convoys in Southeast Asia. The little-known story of these armored hybrids is one of GI ingenuity, extraordinary courage, and noble sacrifice.

Eve of Destruction began her combat career with the 523d Transportation Company, 8th Transportation Group. Although the group was not the only unit in Vietnam to employ cargo trucks as security vehicles, it was the first to use them on a large scale. Between 1967 and 1971, the 2 1/2-ton and 5-ton guntrucks were used to great advantage by 8th Group, first in the highlands and coastal areas of northern II Corps and later at Hue and Da Nang in I Corps.

The 8th Transportation Group arrived in Viet-nam in October 1966 and immediately began daily operations out of the coastal city of Qui Nhon to support tactical units in northern II Corps (see map, page 30). Each month the truckers delivered over 90,000 tons of ammunition, building materials, fuel, and other supplies. Convoys sometimes contained more than 200 vehicles, occupying almost 10 miles of highway. Trips were made north to Bong Son and south to Tuy Hoa on Route 1, and west on Route 19 to An Khe and Pleiku. The latter journey was the longest line-haul route in Vietnam, more than 200 miles roundtrip.

Route 19 was also one of the more difficult and dangerous roads traveled by 8th Group truckers. The highway began near Qui Nhon and wound its way westward through two treacherous mountain passes. It was only partially paved, had little or no shoulder, and was filled with potholes. Sniping and mining incidents were frequent. The enemy made a determined effort to destroy the route's many bridges—an average of one every 3 miles.

By the end of Summer 1967, the enemy activity along Route 19 had increased dramatically. Colonel Joe Bellino, then commander of 8th Group, commented that in World War II and Korea transportation units had operated over mined roads, received sniper fire, and been attacked. "But," he said, "our convoys get one form or another of it damn near every day." The graveled section of road between An Khe and the base of the Mang Giang Pass became the site of so many attacks that the truckers nicknamed the area "Ambush Alley."

The degree of convoy protection on Route 19 left much to be desired. Although military police units were usually able to provide route security in other areas of Vietnam, they had insufficient troops and equipment to cope with the ferocity of enemy attacks on 8th Group convoys. Further-more, tactical units operating near the highway could provide escort protection only where the road passed through their area of control.

Despite the increasing number of enemy attacks, the truckers of 8th Group continued to remain roadbound, 17 to 20 hours a day, 7 days a week. Sniping and mining incidents took their toll, but it was the highway ambush that presented the most danger. Enemy detonated mines would suddenly disable the machine guns, grenades, and small arms to destroy vehicles in the "kill zone." These zones could stretch from 100 yards to almost a mile in length, depending on the number of enemy troops involved. The attacks lasted only 15 to 20 minutes, giving the enemy time to hit and run before tactical reinforcements arrived.

September 2, 1967, marked the beginning of an all-out effort by the enemy to close Route 19. On that day, the 8th Group convoy was savagely attacked in "Ambush Alley" as the column was re-turning from Pleiku with empty trucks. Seven drivers were killed, 17 were wounded, and over 30 vehicles were damaged or destroyed. This was the worst attack on an 8th Group convoy since its arrival in Vietnam a year earlier. It was painfully obvious that the convoys had to have better defense.

As a result of the September ambush, 8th Group instituted what became known as the "hardened-convoy" concept. This was simply an order of march incorporating task vehicles, communications jeeps, and "guntrucks." The guntrucks were 2 1/2-ton cargo vehicles that had been removed from line-haul operations and outfitted with sand-bags on the floors, beds, and sides for protection.

A crew consisting of a driver, two M-60 machine gunners, and a noncommissioned officer in charge was assigned to each hardened security truck. The new concept called for the guntrucks to provide a rapid, retaliatory saturation fire within the critical first 3 minutes of an enemy attack.

During ambushes, drivers of supply vehicles tried to get out of the kill zone as quickly as possible. For the crew of the guntrucks, however, the opposite was true. As soon as the enemy launched his attack against a convoy, the guntrucks were to drive immediately into the kill zone to protect disabled vehicles by providing them fire support.

Because of the growing enemy activity in the highlands, the number of trucks in an individual convoy had been reduced. Columns contained fewer than 100 vehicles in march units of 10 to 20 trucks each. More and more guntrucks were out-fitted until there was an average of one security vehicle for every 10 task vehicles.

After a few weeks of experimentation, it became apparent that the sandbags on a guntruck absorbed too much water from the frequent rains, increasing the weight of the vehicle and making it sluggish and difficult to maneuver. The problem was alleviated when a young warrant officer of the 8th Group discovered several sheets of steel plate in a local salvage yard and had them welded to a 2 1/2-ton cargo truck-giving 8th Group its first armor-plated guntruck. Armor soon replaced sandbags on the security vehicles, and by October the unique battlewagons were a common sight along Route 19.

The typical guntruck was armor-plated on the front, rear, and sides. The cab floor and bed were also armored for protection against mines. Pedestal mounts for the M60 machine guns were

in-installed in the bed, and sections of the side plate directly in front of each gun were cut down several inches to provide a field of fire. In addition, a grenadier, armed with the M79 grenade launcher, was added to the crew.

Another change within the hardened convoy concept was that 8th Group did not confine the guntrucks to one location in the convoy but allowed them to vary their positions daily to prevent the enemy from detecting a pattern. On the morning of November 24, 1967, the guntrucks got their first real chance to prove their effectiveness. As the daily convoy was approaching "Ambush Alley," the column was suddenly attacked by a North Vietnamese-Viet Cong rifle company. Rockets struck the first vehicle in the (kill zone, igniting loads of artillery ammunition and blocking the road. As the enemy soldiers attempted to overrun the stalled vehicles, the gun trucks entered the ambush area to do battle.

After about 20 minutes, the immense firepower of the guntrucks prevailed and the enemy began to withdraw. Amidst the twisted and smoking wreckage of cargo vehicles lay the bodies of 41 enemy soldiers. Four others had been wounded and captured. In the 300-meter kill-zone of the convoy, 41 were killed, 17 were wounded, and 10 vehicles had been damaged or destroyed (including 4 of the guntrucks engaged). In an after-action report, the 8th Group commander reported that "the quick reaction and firepower of this convoy were the only factors that prevented this ambush from being a success."

As the ambushes continued, so did the evolutionary process of guntruck design and employment. Design and armament were restricted on by the materials available and the imagination transportation unit personnel. One major change in the guntruck concept was that the 2 1/2 ton truck was phased out as the mainstay of route security because it was too light to maneuver with the added weight of armor and weapons. Instead, the 5-ton cargo truck began to replace the "deuce-and-a-half" as a convoy escort vehicle.

Another change was the modification of the armor on some guntrucks into "box" structures in the beds. Within this box were kept weapons, tools, extra wheels and tires, water and oil, and a fire extinguisher. Thus, the guntrucks served not only as security vehicles but also as maintenance trucks, capable of protecting and restarting disabled vehicles on potentially dangerous sections of highway.

As a protection against enemy rockets, double walls of steel plate were attached to some gun-trucks. The theory was that incoming rockets would be detonated on contact with the outer wall. Shrapnel would then bounce harmlessly off the inner wall, never reaching the crew. Many of the guntrucks replaced the M60 machine gun with .50-caliber machine guns, either alone or in multiple mounts. One innovation was the "quad-fifty." This weapon consisted of four electronically synchronized .50-caliber machine guns mounted in the bed of a 2 1/2-ton truck. At one time, 8th Group was employing seven of these weapons.

A few escort vehicles were equipped with the 7.62-millimeter "minicannon," a modern version of the Gatling gun. This "smoker" was capable of delivering 6,000 rounds per minute. The guntrucks became such fortresses that after a day of convoy duty many were put to work during the night, patrolling transportation unit compound perimeters. Civilian contract convoys,

some traveling the same routes as 8th Group, often "borrowed" gun-trucks for escort duty, in which the armored vehicles continued to prove their ability to make the enemy pay dearly for his attacks.

The availability of armor plate was an ongoing problem for 8th Group. Truck companies obtained the material from a variety of sources, including the local salvage yard. As the guntruck program continued, armor-plating "kits" became available, some from a nearby South Vietnamese Army depot. However, as the armored vehicles "washed out" through hostile action or heavy usage, the armor became increasingly difficult to obtain. Several times its unavailability threatened to jeopardize the guntruck program.

One alternative to outfitting guntrucks with armor plate was to strip an armored personnel carrier and to mount its hull on the bed of a 5-ton truck. These modified vehicles afforded firepower comparable to that of plated trucks, while offering additional protection to the crews. The guntruck crews were, for the most part, truckers and maintenance personnel who had been assigned or had volunteered for convoy security duty. Even as casualties among the crews mounted, morale remained high, the men being bound by wartime esprit de corps. Many of the men donned shoulder insignia and pocket tabs indicating their roles as drivers and gunners. The men painted colorful names on their vehicles, reminiscent of the American bombers of World War II. Names such as Bounty Hunter, Ho Chi's Hearse, VC Undertaker, Highland Raiders, and Old Ironsides became familiar sights to the truckers of 8th Group.

The personal bravery and fighting spirit of the guntruck crews, along with their quick reaction to ambush situations, were no doubt responsible for saving the lives of many truckers. This courage was exemplified by Specialists Dallas Mullins, of the 444th Transportation Company, and Larry A. Dahl, of the 359th Transportation Company. When the driver of Mullins' guntruck was wounded during a highway ambush, the vehicle became stalled in the center of the enemy kill-zone and subjected to intense small-arms fire. Even though Mullins was also wounded, twice in the arm and once in the leg, he came to the aid of the wounded driver and maneuvered the truck out of the line of fire. During an ambush on Route 19, Dahl jumped on an enemy grenade that had been tossed into the back of his guntruck, saving the lives of the rest of the crew with the sacrifice of his own. For their unselfish acts, Mullins was awarded the Silver Star Medal, and Dahl, posthumously, the Medal of Honor.

In addition to the unusually large number of Bronze Star and Purple Heart Medals awarded within the transportation companies-especially for a noncombat unit-the 8th Group was awarded the Presidential Unit Citation. It was also the only transportation group in Vietnam to receive the Vietnamese Cross of Gallantry.

The guntrucks of 8th Group were always considered an interim measure until the unit could obtain standard escort vehicles, specifically the VIOO armored car. However, the VIOO was never provided to transportation units in sufficient numbers; consequently, the converted cargo vehicles bore the brunt of convoy security until the end of the American involvement in Vietnam.

Although highly successful, the guntrucks did have their disadvantages. The most important of these was that their continued use diverted driver personnel and vehicles from their primary mission and thereby degraded the lift capability of the unit. In some companies, as many as 15 percent of as-signed drivers were used for security.

In addition, the "hardening" of the 2 1/2-ton and 5-ton cargo trucks created stresses for which the vehicles were not designed. The extra weight of the armor accelerated vehicle deterioration and created new maintenance problems.

Despite these problems, the guntrucks patrolled Vietnam's highways from late 1967 until the American pullout in 1973, playing a major role in keeping supply lifelines open to U.S. Forces. During this period, more than 50 cargo trucks were converted into armored combat vehicles for route security.

Today, the last vestige of these warwagons, Eve of Destruction, rests quietly among the static displays at Fort Eustis. Converted in late 1967, Eve provided daily route security in the central high-lands and along the coast for 3 years before participating in the Cambodian incursion. During that operation, the vehicle escorted convoys from Qui Nhon to the Cambodian border; the entire crew was awarded the Bronze Star Medal for outstanding performance in protecting supply columns from enemy attacks.

In January 1971, Eve led elements of 8th Group north into I Corps to participate in operation LAMSON 719, the South Vietnamese invasion of Laos. Day and night convoys of Khe Sanh and to the Laotian border exposed Eve to numerous enemy attacks during the operation, but the gun-truck never failed in its mission.

Eve of Destruction made its final run on June 8, 1971. Since then, it has been retired to the Transportation Museum at Fort Eustis. Now, far from sounds of battle, the armored truck silently re-minds those that view it of the courage and sacrifice of transportation personnel who fought and sometimes died in "Ambush Alley."

VIETNAM CONVOY SOP

By James Rose (www.atav.us)

We had a set of rules we followed in Vietnam for combat convoy operations. I will try to spell some of them out here.

1. The convoy commander is responsible for the convoy start to finish. We got a list of the vehicles in our convoys from S-3 and were responsible to see that they got to the marshalling area on time and ready to go to include Maintenance and driver dependability. Loads were checked for accountability and safety.

2. Convoys were lined up per cargo types. such as Reefers, dry goods, POL, Ammo. Slower vehicles to rear such as 10 Tons and heavy loads. Security was located within the convoy. Rule of thumb Guntruck every 10 Vehicles. Did not always work out that way.

3. Radios were checked and call signs affirmed. Drivers briefed and Chaplain usually offered a prayer for those drivers that wanted to participate.

4. Briefing:

A. No stopping for anything.

B. Clear the Kill Zone.

C. Pedal to the Medal at all times

D. Interference from civilian vehicles, Hookem with your bumper and push them out of the way.(Favorite VC tactic, slow a convoy up and snipe or sap them)

E. Mechanical failure. Drivers stay with vehicles and security will be provided.

F. Guntrucks and drivers Lock and load upon leaving secured area.

G. Constant communications at all times.

H. Maintain distance from the vehicle ahead. Rule of thumb 5 truck lengths

I. Attention to surroundings

J. Guntrucks. See anything suspicious on the passes- Shoot it. Use judgement. (Ankhe and Mangyang Passes not a good area to be in. Mangyang pass is site of worst VC ambush of the French in Nam).

5. When in an ambush, Contact, Contact, Contact was called on the radios. After that anything in the Nam was at our disposal Air, Ships, and support from our allies such as they were. Some of our convoys went to Bon-Son in the area of the 173rd AB and could be reached by the guns of the New Jersey, or the Cruisers Saint Paul or Las Vegas which were off shore. But mostly it was help from the Air. and the Koreans would come in to mop up after the Kill Zone was cleared.

6. Night traveling was discouraged. RON (Remain over night) areas were provided in most places. The 173rd liked for us to RON at their LZ's because of our guntrucks and would try to delay us from leaving on time to get back. Convoy Commanders really had to push them to get the trucks offloaded.

7. Convoy operations summery turned into S-3 by the Convoy after convoy completed.

8. Most important rule. No stopping in a kill Zone even if wounded but not incapacitated. Prevention of ambushes start with S-2. Intelligence should be the first thing looked at when planning a convoy. Knowing the route and possible pressure points, Knowing what enemy units are possible in the area and their strengths are things to be assessed. In Nam our intelligence was either a day late or a dollar short most of the time. Experience by the convoy commanders was the most valuable tool. Most of us knew the routes and hot spots.

In Vietnam we had no front and everyone was a potential enemy so my observations about convoy operations may not be exactly what is in effect today but some points are pertinent in every time frame. We had two types of enemy. The VC and NVA. The VC were the most common, They sniped or hit and run. The NVA were there for the long haul and if you got in a fire fight with them it was good to the last drop. I always looked at the intelligence reports from S-2 carefully for any word of NVA in the areas where I was going.

If you are unlucky enough to be caught in an ambush, clear the kill zone as quickly as possible and if not possible the first few seconds is the most important. You have to put all the firepower you have on the enemy in the shortest amount of time. No hesitation. Turn it around on him. Once you have the situation stabilized then you can force him to make choices.

Like I said our situation was probably a lot different from today. We had children walking in front of our trucks with grenades tied to them. People riding up beside us on motorscoters tossing grenades. And the sniping incidents got so common place that our Bn S-3 did not even require an after action report for them unless someone was wounded or some equipment was damaged.

CHAPTER 6 – QUICK REFERENCE

PLATOON LEVEL OPORD FORMAT

Copy ___ of ___ copies
Issuing headquarters
Place of issue (coordinates)
Date-time group of signature
Message reference number

References: **List all references used.**

Time Zone Used Throughout the Order: **Use ZULU time for multiple time zones.**

OPORD _____ - _____ (Place this information at the top of subsequent pages OPORD)
(Number) (issuing headquarters)

Task Organization: **How unit is organized to accomplish the mission. May be shown in one of two places: preceding paragraph one, or in an annex, if the task organization is long and complicated.**

1. SITUATION

- a. Enemy forces. **Express in terms of two enemy echelons below**
 - (1) Disposition, composition, and strength.
 - (2) Capabilities
 - (3) Most Probable Course of Action
 - (4) Most Dangerous Course of Action
 - (5) Weather and light data.
 - a. Sunrise Sunset
 - b. Moonrise Moonset
 - c. BMNT EENT
 - d. Illumination
 - e. Temperatures, High and Low
 - f. Forecast 24, 48, and 72 hours
 - (6) Terrain
 - a. Obstacles
 - b. Cover and Concealment
 - c. Observation and fields of fire
 - d. Key Terrain
 - e. Avenues of Approach
- b. Friendly forces. **Found in paragraphs 1b, 2 and 3 in higher OPORD**
 - (1) Battalion
 - a. Mission
 - b. Intent
 - c. Concept of operation

- (2) Company
 - a. Mission
 - b. Intent
 - c. Concept of operations
- (3) Left Unit's Mission
- (4) Right Unit's Mission
- (5) Forward Unit's Mission
- (6) Rear Unit's Mission
- (7) Units Providing Fire Support
 - a. Fire support available. **Mortar, CAS, etc.**
 - b. Type of rounds available
 - c. Means of requesting support

c. Attachments and detachments. **Do not repeat information already listed under Task Organization or in Annex A. State when attachment or detachment is to be effective.**

2. MISSION. Clear and concise statement that covers who, what (task), when, where, and why (purpose). Always state twice. There are no subparagraphs in a mission statement. The mission statement will cover on-order (O/O) missions but not be prepared to (BPT) missions.

3. EXECUTION

Intent: **State your intent. May mirror the company commander's intent.**

a. Concept of operations. **Talk in generic terms about what each squad will do in order to accomplish the mission. Example. "The purpose of this operation is ...(your purpose from mission statement). We will accomplish this by ... (how will you accomplish the mission). One SQD will...(generic SQD, do not name SQDs yet). One SQD will... The decisive point ... (what is decisive to this operation?). Critical to the success of this operation ..."**

(1) Maneuver. **State the scheme of maneuver by addressing the mechanics of the operation. Specifically address each of your SQDs and give them their task (what) and purpose (why). Use a sketch when briefing.**

(2) Fires. **Use to address how targets and indirect fire supports the mission**

b. Tasks to subordinate units. **Clearly state the missions and/or tasks for each subordinate. Place tasks that affect two or more units in subparagraph 3d.**

(1) 1SQD

- a. List all tasks that apply specifically to 1SQD
- b. If it applies to more than one SQD, place in coordinating instructions

(2) 2SQD

- a. List all tasks that apply specifically to 2SQD
- b. If it applies to more than one SQD, place in coordinating instructions

c. Coordinating instructions. **List only instructions applicable to two or more units and not routinely covered in unit SOPs. This is always the last subparagraph in paragraph 3. Complex instructions should be referred to in an annex.**

(1) Movement Instructions. **Route, order of movement, etc. Consider as annex.**

- a. Routes
- b. Order of March

- c. Timing (may include in timeline)
 - d. Actions at halts (long, short, scheduled, and unscheduled)
 - e. Actions on enemy contact
 - f. Actions at objective
 - g. Speed (include catch-up)
 - h. SP, CP, RP, and other critical points
 - i. Harbor areas
 - j. Traffic control
 - k. Recovery
- (2) Time line. **Include only times that apply to PLT.**
- (3) Occupation Instructions. **For occupying a new site.**
- (4) Commander's critical information requirements (CCIR). **What the commander needs to know to make decisions.**
- a. Priority intelligence requirements (PIR). **Information about the enemy.**
 - b. Essential elements of friendly information (EEFI). **Information needed to protect friendly forces from the enemy's information-gathering systems**
 - c. Friendly forces information requirements (FFIR). **Information about the capabilities of friendly units that affect the mission.**
- (5) Risk reduction control measures.
- (6) Rules of engagement (ROE).
- (7) MOPP level.
- (8) Environmental considerations.
- (9) Priorities of work.
- (10) Reporting requirements
- (11) Fire control measures. **TRPs, range cards, etc. for direct fire weapons.**
- (12) Force protection.
- (13) Any additional coordinating instructions.
4. SERVICE SUPPORT. **Provide logistical information required to sustain the operation.**
- a. General
 - (1) SOPs that cover sustainment
 - (2) Location of company trains
 - (3) Location of PLT and CO casualty collection point
 - (4) Special instructions to medical personnel/combat lifesavers
 - b. Material and Services
 - (1) Supply. **Cover the classes of supply.**
 - a. CL I. Food and water.
 - b. CL II. Clothing, individual equipment, NBC equipment, tents.
 - c. CL III. Fuel and POL.
 - d. CL IV. Construction and barrier material.
 - e. CL V. Ammunition.
 - f. CL VI. Personal Items.
 - g. CL VII. Major items.
 - h. CL VIII. Medical supplies.
 - i. CL IX. Repair parts.
 - j. CLX. Agriculture and nonmilitary material

- (2) Transportation. **Address movement of supplies and troops if different from movement instructions in annex or coordinating instructions.**
- (3) Services. **Laundry, bath, clothing repairs etc.**
- (4) Maintenance. **Weapons and equipment.**
- (5) Medical Evacuation. **Address priorities/procedures for emergency to sick call.**
- (6) Personnel. **ID EPW collection point**
- (7) Miscellaneous. **Address special and captured equipment.**

5. COMMAND AND SIGNAL **List signal instructions not specified in unit SOPs; identify the specific signal operating instructions (SOI) addition in effect, required reports and formats, and times the reports are submitted.**

a. Command.

- (1) Location of Company Commander and CP.
- (2) Location of PL, PSG and PLT CP
- (3) Location of alternate CPs.
- (4) Succession of command. If different from SOP.

b. Signal.

- (1) SOI index in effect
- (2) Priority of communication methods
- (3) Emergency and visual signals
- (4) Code/brevity words
- (5) Challenge and password
- (6) Near and far recognition signals.
- (7) Special instructions to RTOs

ACKNOWLEDGE: Include instructions for the acknowledgment. Acknowledgment of a plan or order means that it has been received and understood.

NAME (Commander's last name)

RANK (Commander's rank)

ANNEXES: (Can be deviated for PLT orders)

Annex A Task Organization

Annex B Intelligence

Appendix 1 Initial IPB

Tab A Modified Combined Obstacle Overlay (MCOO)

Tab B Enemy Situation Template

Tab C Analysis of AO

Appendix 2 Collection Management

Annex C Operation Overlay

Annex D Fire Support

Appendix 1 Air Support

Appendix 2 Field Artillery Support

Appendix 3 Naval Gunfire Support

Annex E Rules of Engagement (ROE)

Annex F Engineer

Appendix 1 Engineer Overlay
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9 LINE MEDEVAC REQUEST

LINE INFORMATION

1 GRID LOCATION OF PICKUP SITE

2 RADIO FREQUENCY AND CALL SIGN

3 NUMBER OF PATIENTS BY PRECEDENCE
 A=URGENT, B=URGENT-SURGICAL, C=PRIORITY, D=ROUTINE,
 E=CONVENIENCE

4 SPECIAL EQUIPMENT NEEDED
 A=NONE, B=HOIST, C=EXTRACTION EQUIPMENT, D=VENTILATOR

5 NUMBER OF PATIENTS BY TYPE; LITTER OR AMBULATORY

6 NUMBER AND TYPE OF WOUND, INJURY, OR ILLNESS

7 METHOD OF MARKING PICKUP SITE
 A=PANEL, B=PYRO, C=SMOKE, D=NONE, E=OTHER

8 PATIENT NATIONALITY AND STATUS
 A=US MILITARY, B=US CIVILIAN, C=NON-US MILITARY, D=EPW

9 NBC CONTAMINATION (WARTIME)
 N=NUCLEAR, B=BIOLOGICAL, C=CHEMICAL

OR TERRAIN DESCRIPTION (PEACETIME)

WEAPONS DATA

TYPE MAX EFF RANGE (m)

M16A2..... 580 (pt) 800 (area) 200 (mov)

M203..... 150(pt) 350 (area)

M249..... 600 (pt) 800 (area)

M136 (AT4)..... 300

M47 (Dragon)..... 1,000 (sta) 100 (mov)

MK19..... 1500 (pt) 2,212 (area)

M60 MG..... 1,100 (600 grazing)

.50 Caliber MG..... 1,800 (1,000 grazing)

105-mm..... 11,500

105-mm Tank..... *2 to 2.5 km

120-mm Tank..... *2 to 2.5 km

25-mm BFV..... 2,200

155-mm M109A3..18,100

8-in Howitzer22,900

MORTAR HE ONLY

MIN MAX

60-mm 70m 3,500m

81-mm (M252) 80m 5,800m

81-mm (M29A1) 73m 4,790m

4.2-inch 770m 6,840m

120-mm 200m 7,200m

UXO REPORT

Line 1 Date/time discovered

Line 2 Reporting Activity (UIC) Location (verified w GPS)

Line 3 Contact method: radio freq/call sign telephone #

Line 4 Type of munition (dropped, projected, placed, or thrown)

Line 5 NBC contamination

Line 6 Resources threatened

Line 7 Impact on mission

Line 8 Protective measures taken

Line 9 Recommended priority (Immediate, indirect, minor, or no threat)

MINE SENSE

Identify possibly mined areas and avoid them:

1. Out of place items.
2. Freshly dug mounds of earth.
3. Mounds and depressions.
4. Improvised marking systems:
 - a. Two sticks laid in an X.
 - b. Red and white or red and yellow construction tape.
 - c. Yellow tape tied to poles, sticks, and trees.
 - d. Residue from mine craters.
 - e. Minefield signs and barbed wire.
5. Areas avoided by adult civilian populace.
6. Blast craters.
7. Navigation. If on an unknown route:
 1. Stop and report.
 2. Determine where you are at.
 3. Return the way you came.

CALL FOR FIRE

MAKING THE CALL

1st Transmission	<u>EXAMPLE</u>
Observer ID	Y1D THIS IS R3H
Warning Order	FIRE MISSION, OVER
2nd Transmission	
Target Location	GRID TT12345678, OVER
3rd Transmission	
Target Description	TROOPS IN OPEN
Method of Engagement	HE
Method of Fire & Cntrl	AT MY COMMAND, FIRE,
OVER	

WARNING ORDER

- Adjust Fire
- Fire for Effect
- Suppression
- Immediate Suppression
- Immediate Smoke

TARGET LOCATION

- Grid
 - Direction (OT)
- Polar Plot
 - Observer's Location, Direction (OT) and Range
- Shift from a Known Point
 - RALS, ADD OR DROP

TARGET DESCRIPTION

- Something Brief
 - Tank, PC, Troops

METHOD OF ENGAGEMENT

- Type of ammo, fuze, distance from friendly troops
- FDC may change
- DANGER CLOSE if friendlies less than 600m

METHOD OF FIRE

- AT MY COMMAND
- FIRE

NBC 1 OBSERVER'S INITIAL OR FOLLOW-UP REPORT

Instructions

1. Line items D and H are mandatory for NBC 1 reports.
2. Line items A, E, G, I, K, L, M, S, Y, and ZA are optional for NBC 1 reports.
3. Line Items B, C, F, PAR, and PBR are reported if data is available.

Section I. Chemical or Biological Only

- A. Strike serial number, if known (assigned by NBCE).
- B. Position of observer.
- C. Azimuth of attack from observer (state degrees or mils).
- D. Date and time attack started (Zulu, local, or letter zone).
- E. Time attack ended, if known.
- F. Location of attack (UTM or place) (state actual or estimated).
- G. Means of delivery, if known.
- H. Type of agent and height of burst, if known.
- I. Type and number of munitions or aircraft (state which).
- K. Description of terrain (bare, scrubby vegetation, wooded, urban, or unknown).
- S. Date and time contamination detected (Zulu, local, or letter zone).
- Y. Representative downwind direction—4 digits (state degrees or mils), wind speed—3 digits (data kmph or knots).
- ZA. Temperature (centigrade)—2 digits, cloud cover— 1 digit, significant weather phenomena—1 digit, air stability—1 digit.
- ZB. Remarks