

# FOREWORD

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# PREFACE

#### Purpose

This publication consolidates the Services' best tactics, techniques, and procedures (TTP) used in convoy operations into a single multi-Service TTP (MTTP) with the objective of reducing casualty rates and increasing the probability of mission success during convoy operations. This MTTP focuses on combat support and combat service support forces and provides a quick reference guide for convoy commanders (CC) and subordinates on how to plan, train, and conduct tactical convoy operations in the contemporary operating environment.

#### Scope

This MTTP publication is a comprehensive reference source to assist CCs and subordinates in planning, training, and conducting tactical convoy operations. It addresses troop leading procedures, checklists, terminology, gun truck employment, improvised explosive devices (IED) quick reference information, battle drills, and sample convoy training and live fire programs of instruction. It incorporates the current lessons learned from combat operations, training operations, and bridges gaps in Service convoy doctrine and TTPs.

## Applicability

The TTP in this document are applicable to joint forces of the United States. This publication is intended to be theater non-specific. The target audience is CCs in combat support or combat service support units from any US Service conducting tactical convoys in high threat environments. The intent is that this publication be in every convoy commander's cargo pocket as a quick-reference to ease the planning burden during tactical convoy operations. Services can use this MTTP as a basis for both institutional and operational training as deemed appropriate and feasible. Any use of force detailed in this TTP is governed by the rules of engagement (ROE) applicable to the operation. ROE are directives issued by competent military authority that delineate the circumstances and limitations under which US forces will initiate and/or continue combat engagement with other forces encountered. In addition to the rules for use of force contained in the ROE, units also retain the inherent right of self-defense. A use of force in self-defense must be necessary (that is, responsive to a hostile act or demonstration of hostile intent) and proportional (that is, reasonable in intensity, duration, and magnitude).

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# MULTI-SERVICE TACTICS, TECHNIQUES, AND PROCEDURES FOR TACTICAL CONVOY OPERATIONS

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# **EXECUTIVE SUMMARY**

# Multi-Service Tactics, Techniques, and Procedures for Tactical Convoy Operations

### **Overview**

This publication provides a quick-reference guide for CCs operating in combat support and combat service support units. CCs are faced with many asymmetrical threats as they conduct tactical convoy operations on today's nonlinear, noncontiguous battlefield.

Recent combat operations have evolved by introducing diversified threats that range from vehicle-borne improvised explosive devices (VBIED) to complex ambushes employing improvised explosive devices (IED), rocket-propelled grenades (RPG), and small arms. This challenges our military to adjust tactically to meet the threat and employ new tactics, techniques, and procedures to counter the evolving threat tactics.

This publication provides the most effective tactics, techniques, and procedures to counter these threats and mitigate risks to US forces conducting tactical convoys. This publication offers detailed troop leading procedures, employment methods for gun trucks, battle drills, and updated information on IEDs. The appendices provide many planning tools to assist CCs as they conduct the planning cycle for tactical convoys. A resources appendix (Appendix F) is included that offers websites with additional information on many related topics in order to keep this publication pocket size. The intent is that this publication be in every convoy commander's cargo pocket as a quick-reference to ease the planning burden.

# **Troop Leading Procedures/Planning Considerations**

Chapter I provides an introduction to critical procedures that CCs must perform before, during, and after executing a tactical convoy. This chapter discusses general planning along with additional considerations (route selection, vehicle and convoy configuration, communications, support to convoys, coalition partner, and civilian participation) that will ensure the CCs consider all details associated with tactical convoy operations planning.

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# **Gun Truck and Escort Employment**

Chapter II provides best practices for employing gun trucks and convoy escorts. This chapter provides recommended task organization, C2, and TTPs for the security element.

## **Mounted Tactics**

Chapter III addresses TTPs that enable a convoy to move relatively unimpeded and provides principles of mounted movement for tactical convoys. Recommended movement formations and techniques, dismount procedures, and battle drills are provided for units as a frame of reference.

## Improvised Explosive Device and Vehicle-borne IED

Chapter IV describes planning considerations to mitigate risks posed by IEDs and VBIEDs. This chapter discusses methods to assist with identification of IEDs/VBIEDs as driving considerations and battle drills for actions on IED contact.

## Appendices

The appendices provide details to amplify TTPs discussed throughout the chapters of this publication. Detailed forms and checklists are provided along with examples of products that are developed in the planning phase of tactical convoy operations. Specific topics and products include:

- Convoy Forms and Checklists
- Reports
- Convoy Briefing
- Risk Management Considerations
- Tactical Convoy Training

• Resources—Websites and quick reference for national stock numbers (NSN) of tactical convoy related equipment.

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# Chapter I TROOP LEADING PROCEDURES/PLANNING CONSIDERATIONS

#### Introduction

**a.** THERE IS NO SUCH THING AS AN ADMINISTRATIVE MOVE IN A COMBAT ZONE! A tactical convoy is a deliberately planned combat operation to move personnel and/or cargo via a group of ground transportation assets in a secure manner to or from a target destination under the control of a single commander in a permissive, uncertain, or hostile environment. Tactical convoys should always have access to the common operational picture and be characterized by an aggressive posture, agility, and unpredictability.

**b.** Tactical convoys are combat operations and should be viewed as a tactical road march. Although contact with enemy organized/uniformed ground forces is not anticipated, security against anti-US forces, enemy sympathizers, and IEDs is maintained and the convoy is prepared to take immediate action against an enemy threat. To accomplish this, tactical convoys require additional planning and coordination beyond normal line-haul operations due to the noncontiguous, nonlinear battlefield of today. One of the main enemy tactics of the nonlinear battlefield is to target the convoy's lines of communication, supplies, and other government resources. To defeat this tactic, each tactical convoy must be prepared to take offensive action in the face of ambush and defeat enemy forces once contact is gained thus retaining the initiative and deterring future attacks. c. Training, experience, and unit standard operating procedures (SOP) will accelerate tactical convoy preparation, especially when time is short. While each convoy, regardless of the type or size, may be different, the troop leading procedures (TLP) used in preparing for the movement are the same and must be trained and constantly rehearsed. While TLPs are standardized, they are tailored here to specifically fit tactical convoy operations.

NOTE: The drawings depicted in the following pages are simplified illustrations and should not be taken literally with respect to vehicle interval, type of vehicle, or terrain.

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# **Convoy Troop Leading Procedures**

- Receive the mission.
- Issue the warning order (WARNO).
- Make a tentative plan.
- Initiate movement.
- Reconnoiter.
- Complete the plan.
- Issue the convoy brief.
- Supervise.

## a. Receive the Mission.

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(1) CCs receive the mission in a warning order (WARNO), an operations order (OPORD), fragmentary order (FRAGO), transportation movement request, or verbal order (due to time constraints).

(2) CCs ensure that both the mission and the specified and implied tasks involved are completely understood.

(3) CCs quickly analyze the unit's current capability to accomplish the assigned mission. The CC must make a rapid assessment of any problems (people, supplies, or maintenance) that could jeopardize the mission. If the issues are serious enough to require assistance from higher headquarters, the CC raises them immediately.

**b.** Issue the WARNO. CCs issue WARNOs to ensure that subordinate leaders have key information they need to maximize their preparation time. The initial WARNO should include a manifest and timeline. The manifest provides the detailed organization for combat: formation, personnel, and equipment. The timeline is a schedule of all preparatory tasks from receipt of the mission to start point (SP). CCs may issue multiple WARNOs as additional information or changes from higher headquarters are received. (Appendices A and C) **c.** Make a Tentative Plan. CCs ensure every member in the convoy has enough information needed to complete the mission. A simplified approach to tactical analysis and planning makes use of the following basic considerations of mission, enemy, terrain and weather, time, troops available and civilian (METT-TC).

(1) Mission. CCs plan to execute all specified and implied tasks found in the higher headquarters OPORD and commander's intent. CC determines specified and implied tasks. Restrictions and limitations must be identified, considered, and applied (detours, restricted routes, ROE).

(2) Enemy. CCs coordinate with the unit intelligence officer (S-2), movement control element, engineers, area security forces, and the military

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police (MP) to assist in development of the enemy situation. CCs determine danger areas and possible ambush sites. CCs gather any additional information needed to complete the mission.

(3) Terrain and Weather.

(a) Terrain. Normally leaders focus on the standard military aspects of terrain for combat operations known as OCOKA:

- Observation/fields of fire
- Cover and concealment
- Obstacles
- Key terrain
- Avenues of approach

While this traditional approach is occasionally necessary during convoy operations, the primary focus should be the route. This analysis cannot be accomplished using only a map. Combat imagery base (CIB) products and unmanned aerial vehicle (UAV) imagery available through intelligence (S-2) imagery channels are additional tools, but nothing replaces a thorough ground reconnaissance. CCs take detailed notes pertaining to navigation, trafficability, congestion, and the threat. The primary method for providing information to convoy leaders concerning the route is the strip map. These sketches are easily developed, refined, and produced. Strip maps for long haul routes should be constructed at high levels of command, but maps for local short haul routes are ideally produced at battalion or lower levels. Appendix A provides a detailed example and discussion of information that should be included on a strip map. CCs should issue these maps to every vehicle in the convoy.

(b) Weather. Terrain and weather analysis are inseparable. The effects of weather should be factored in during the review of the terrain. In this substep, weather analysis evaluates the weather's direct effects on a convoy operation. The military aspects of weather include:

- Visibility
- Winds
- Precipitation
- Cloud cover
- Temperature
- Humidity

• Light Data. CCs should collect and review the following information concerning light data prior to each operation. The effects of light could provide advantages to the threat.

• Before morning nautical twilight (BMNT) and end of evening nautical

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twilight (EENT) are defined as the first and last time of the day that an individual can engage a target at the maximum effective range of his/her weapon system, unaided.

•• Percentage of illumination is defined as the percentage of illumination present based on the moon. An example would be ¼ moon is 25 percent, ½ moon is 50 percent, and full moon is 100 percent. In order to analyze illumination, there is also a requirement to understand moon-rise (MR) and moon-set (MS). During the hours of darkness, before MR and after MS, percentage of illumination is zero percent.

(4) Time. CCs complete the plan as quickly as possible to allow for subordinate preparation and implementation. CCs supervise pre-combat checks (PCC). See discussion of PCC and timeline in Appendix A.

(5) Troops Available. CCs should analyze the positive or negative affects of the factors listed below. Any limitations noted result in increased risk to the convoy and should be mitigated during the preparation phase. Also CCs should look at the support available from friendly units along the convoy route.

- Coordinate movement support through adjacent units' area of operations (AO) if required.
- Identify battle hand-off procedures with quick reaction force (QRF).
- Identify logistics and life support along the route.
- Identify availability of materials handling equipment.
- Identify any additional requirements to military forces to safeguard civilian drivers and vehicles within the convoy.

(6) Civilian. The Law of Armed Conflict imposes strict limitations on the use of civilian personnel in the combat environment. DOD, Service, and combatant commander guidance will dictate policy, limitations, and restrictions for civilians supporting military forces. Heavy civilian presence in operational areas will be a major complicating factor along any convoy route. The potential interference may vary when considering the following types of potential civilian activity.

- Active insurgents
- Criminals (pilferage/theft)
- Sympathizers (nonlethal harassment such as children throwing rocks)
- Unwilling accomplices
- Innocent bystanders
- Vehicle traffic
- Legitimate armed police/militia
- Civilian/government property
- d. Initiate Movement. During the preparation period it may be necessary to

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move elements of the convoy for refueling, rearming, or to pickup loads. CCs should schedule these moves in the timeline and delegate execution to subordinate leaders so that convoy planning is not disrupted.
e. Reconnoiter. A reconnaissance of possible convoy routes should precede the actual selection of a route. CCs identify checkpoints (CP), release points (RP), and rally points along the route. As time and conditions permit, CCs should conduct a map recon, ground (physical) recon, or aerial recon. Unit intelligence, military police, area security forces, and engineers responsible for the route or route segments can amplify and update route information. Imagery recons are an excellent method to obtain information regarding specific areas of interest, such as, known enemy "hot spots" or areas that may slow or restrict movement

thereby increasing the threat environment for a convoy. **f.** Complete the Plan. All convoy briefings are verbal orders; however, several planning products should be completed and used during the briefing. Examples of each with preparation guidance are listed below.

- Manifest (Appendix A)
- Timeline (Appendix A)
- Strip map for every vehicle and subordinate leader (Appendix A)
- Convoy Briefing Format (Appendix C)
- Risk Management (Appendix D)

**g.** Issue the Convoy Brief (OPORD). (Appendix C) CCs determine a site conducive to giving an order for a combat operation and properly set up for the convoy brief. This site should support the use of multiple visual aids such as charts, map blow-ups, and a whiteboard or butcher paper board. CCs must prepare carefully and rehearse the presentation. Subordinate leaders should give a back brief or confirmation brief to their CCs at the conclusion of all convoy briefings.

**h.** Supervise. Every aspect of preparation for a convoy should be supervised. CCs designate an assistant convoy commander (ACC). The CC and ACC cannot accomplish the planning requirements without the assistance of all subordinate leaders and noncommissioned officers (NCO). CCs conduct mission planning while their ACCs and subordinate leaders concentrate on staging, inspections, manifesting, and rehearsals. CCs should alert their ACCs to time-consuming tasks that must begin at the outset of preparations including cross-loading, distribution of tow-bars and cables, and vehicle hardening. CCs delegate preparatory tasks in priority order. CCs remain responsible for all preparations.

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## **General Planning**

NOTE: Cover entire operation, enemy activity, any significant activities, route conditions, things to sustain and improve.

a. Additional factors CCs should consider:

(1) Have gun trucks. Gun trucks will provide the convoy with additional firepower to deter and/or destroy an enemy threat. See chapter II for further discussion.

(2) Use a forward security element (FSE). An advance security element should be used in conjunction with a convoy escort. Its purpose is to move ahead of the convoy as a reconnaissance element providing CCs with route information, as well as current enemy and civilian situational awareness. See chapter II for further discussion.

(3) Maintain operations security (OPSEC). Throughout each phase of planning, preparation, and execution, every effort must be made to maintain OPSEC to deny intelligence to the enemy, such as:

- Conceal the reflective parts of the vehicles' windows and headlights.
- Consider conducting convoys at night.
- Use proper radio procedures and authorized communications equipment.

• Cover and protect high-value cargo with armed guards.

• Do not stencil or write names, rank, or information, such as call signs and frequencies, on windshields.

(4) Have a destruction plan to destroy classified documents, radio fill, and in extreme cases be prepared and equipped to destroy some vehicles or loads. Absent of higher headquarters direction, CCs determine priorities of destruction based on items within the convoy that may be used against the convoy or other friendly forces.

- (5) Develop a vehicle recovery plan.
- (6) Have ambulance/medical coverage (ground and/or air).
- (7) Disperse combat life savers (CLS)/medics throughout convoy.
- (8) Designate aid and litter teams throughout convoy.
- (9) Designate assault teams.
- Develop a rest or rotation plan for drivers. (10)
- (11) Have window screens to deflect grenades.
- (12) Have a supply guard to prevent pilferage.
- (13) Have MP, security force, infantry, or other escort.
- (14) Disperse commodities throughout the convoy-cross load!
- (15) Use convoy signals (i.e., flares, hand and arm, use of vehicle
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signals/lights).

(16) Develop a fire support plan along the route (indirect and close air support (CAS)).

(17) Have aviation support.

(18) Develop deception plan considerations.

(19) Complete a closure report at destination and upon return.

(20) Coordinate boundary crossing considerations. Convoys that cross unit or national boundaries must be properly coordinated by movement control organizations—before the convoy moves. CCs must also have the information available and the capability to contact the units along the route in order to facilitate boundary coordination and convoy support if required. CCs should contact stationary units upon entering that unit's battlespace and have call signs/frequencies for the QRF of those units.

**b.** Rehearse. Well planned rehearsals are a critical aspect of preparation for any combat operation. With limited time, rehearsals must concentrate on battle drill reactions to the most likely threat. Rehearsals ensure that everyone in the convoy understands and demonstrates a capability to execute the plan and essential drills. Rehearsals instill confidence in all convoy participants that they (and the entire convoy) are fully prepared.

(1) Routes. Conduct sand table exercise or route walkthrough with focus on immediate action drills.

(2) Medical Evacuation (MEDEVAC). Plan for and rehearse medical evacuation procedures (ground and air) during convoy operations.

(3) Communication. Include audio, visual, and radio. Communication rehearsals and redundant means of communication are a must. There should be redundancy for both long haul and short haul communications. Nonsecure means of communication should not be used.

(4) Escorts. Ensure escort (FSE, gun trucks) roles, responsibilities, and actions are understood.

**(5)** Vehicle Recovery Operations for Disabled Equipment. Ensure PCC included checking for tow bars or cables for each vehicle.

**c.** Conduct convoy operation actions (battle drills). (See detailed discussion in chapters II - IV.)

d. Complete post convoy actions.

(1) Immediately upon convoy closure, report vehicle convoy operation completion to the higher headquarters.

- (2) Conduct thorough mission debrief with key leaders from convoy.
- (3) Conduct debrief with operations and intelligence section. Report any

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suspicious activity, enemy TTPs, or unusual events to intelligence or counter intelligence element.

(4) Record and report actual convoy route taken (as opposed to planned route). These should be used as a historical record to avoid patterns and predictability (sometimes referred to as "Honesty Trace").

**(5)** Vehicles, Weapons, and Equipment: Refuel, clean, inventory, and perform Preventative Maintenance Checks and Services (PMCS).

(6) Conduct PCCs/pre-combat inspections (PCI) to prepare for next mission. e. Summation. The bottom line is that a tactical convoy requires all the preparation requirements of any detached tactical operation. CCs plan, prepare, and rehearse to execute convoys the same way infantry squads conduct a combat patrol.

## **Route Selection**

**a.** Route Reconnaissance and Selection. A reconnaissance of possible convoy routes should precede the actual selection of a route in order to avoid predictability. (Don't be easily timed, approached, or observed.) Higher headquarters may specify the route selected or the determination may be left to the CC. The CC or a designated representative should make a reconnaissance of both the primary and alternate route by ground or air if circumstances will allow it.

NOTE: Route characteristics and other key information required may be requested through higher headquarters. CC should request information in advance to allow for sufficient time for planning.

**b.** Reconnaissance.

(1) A map reconnaissance is made first, followed by a physical (ground or air) reconnaissance, if possible. When making the map reconnaissance, other available information such as engineer intelligence, military police/security force information, civilians supporting military (e.g., security contractors and military contracted vehicle operators), and overhead photos should be used. Since route conditions are susceptible to change in a relatively short time due to enemy action or weather, a physical reconnaissance is highly beneficial if time and the security situation permit.

(2) Ground/physical reconnaissance should be conducted in concert with the supporting engineer element. This is particularly critical when gap crossings and route construction may be required. Aerial reconnaissance may be conducted visually, using overhead photography, or using other intelligence assets to

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identify danger areas and choke points on each proposed route. **c**. Convoy Reconnaissance Considerations.

In general, convoy routes are selected by identifying, evaluating, and comparing those factors which tend to facilitate convoy movement and control.
 Route Characteristics. Considerations related to route characteristics

(2) Note characteristics. Considerations related to route characteristics include:

(a) Road surface and bridge capacity.

(b) Grades.

(c) Height, weight, widths, and turning radius limitations.

(d) Trafficability.

(e) Rural versus urban areas.

(f) Estimated operating speeds over various sections of the route.

(g) Probable traffic conditions.

(h) Probable effect of adverse weather on trafficability.

(i) Convoy control requirements.

(j) Friendly and threat force locations.

(k) Choke points.

(3) Enemy Capability. The enemy's capabilities along a route are fully evaluated based on current intelligence. Other considerations in evaluating the enemy threat include recent experiences by other convoys utilizing the route and the identification of danger areas along the route, which enhance the enemy's ability to interdict the convoy.

(4) Route Classifications. Movement restrictions and highway route control classifications must be considered within the AO. Route classification is assigned to a route using factors of minimum width, worst route type, least bridge, raft, or culvert military load classification, and obstructions to traffic flow. See individual Service publications for more detail on this topic (FM 5-170, MCRP 4-11.3F).

## **Convoy Organization**

**a.** General. Convoys are planned to organize and control road movements. This includes tactical movement of combat forces, tactical movement of logistics units, and the movement of personnel, supplies, and equipment to support forces in combat.

**b.** Key Personnel/Teams and Functions/Locations. There are no passengers in a tactical convoy. Each person has a role/function they must perform for the benefit and safety of the convoy. All of the personnel and team functions described here pertain to any size convoy. Depending on the number of vehicles involved, multiple duties may be performed by a single vehicle crew.

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(1) CC: The leader charged with responsibility for the planning, preparation, execution, and tactical employment of a convoy.

(a) Overall responsibility for conduct of convoy.

(b) Ultimate on-ground decision maker.

(c) Approves task organization and delegates personnel and vehicle responsibilities.

(d) Conducts convoy OPORD/brief (see Appendix C), and debrief.

(e) Responsible for maintaining internal and external communications.

(f) Optimal location for the CC is in the center or just forward of center of the convoy in order to facilitate C2. However, CCs are free to travel or move to any location to enhance their ability to command and control the convoy.

(2) ACC: Prepared to assume the duties of the CC in addition to the following responsibilities:

(a) Normally in charge of the rear convoy element to monitor rear security.

(b) Assists the CC in all duties.

(c) Responsible for logistics and maintenance (vehicles, weapons, communications) and other key equipment support of the convoy.

(d) Prepares and coordinates medical assets to treat and evacuate casualties.

(e) Records changes to route and provides to S-2/Intelligence, postoperation.

(3) Lead Vehicle Commander (LVC). LVC responsibilities are given to mature, experienced subordinate leaders.

(a) Performs convoy navigation duties.

• Ensures vehicle is on correct route via map, global positioning system (GPS) based movement tracking system (Blue Force Tracker, Movement Tracking System (MTS), and/or Qualcomm).

• Communicates checkpoints, turns, danger areas, etc., to CC.

(b) Covers assigned sector with direct fire.

(c) Maintains convoy speed/interval as seen from their location or via radio.

(d) Is familiar with the route.

(4) Vehicle Commander (VC). The VC is part of the convoy chain of command.

(a) Responsible for standard equipment requirements (ammunition, food, water, fuel, etc.) as well as, organizing and rehearsing crew drills of assigned vehicle.

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**(b)** Task organizes all personnel in vehicle based on type of assigned vehicle.

(c) Responsible for PCCs of all individuals and equipment of assigned vehicle.

(d) Supervises rehearsals for individuals of assigned vehicle to include:

Dry shooting practice left and right sides.Exiting the vehicle on the left and right sides.

Security at halts.

• Re-entry of the vehicle from the left and right sides.

(e) Maintains communications with CC and other vehicle commanders.

(f) Provides supervision and guidance to driver as required.

(g) Serves as alternate navigator (if applicable based on type of assigned vehicle).

(h) Designates alternate driver (if applicable based on type of assigned vehicle).

(i) Designates crew-served weapon (CSW) sectors of fire.

(5) Driver.

(a) Primary duty is to drive.

(b) Scans assigned sector of observation.

(c) Is prepared to return fire in extreme situations.

(d) Responsible for fueling and maintaining vehicle.

(e) Can be rotated out when required.

(6) CSW Operator.

(a) Responsible for primary and alternate sectors of fire.

(b) Targets greatest threat along the route.

(c) Can be rotated out.

(7) Designated Marksman.

(a) The purpose of the designated marksman is to facilitate precision fires.

**(b)** Assists the CC to ensure proportionate fire is used for any given

threat. This helps to prevent collateral damage and unnecessary civilian casualties (e.g., a single designated marksman in the convoy engaging a single IED trigger man).

(c) Should be an expert shooter if possible and/or have an advanced optical sight.

(8) Guardian Angels. During short and long security halts, Guardian Angel personnel are emplaced in hidden positions where they can observe and engage the enemy before they can attack the convoy. Guardian Angels must have their

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own communication. There can be multiple Guardian Angels if the situation dictates.

(9) Combat Life Savers (CLS)/Medics. CLS/medics render medical treatment and supervise evacuation of casualties. If possible, multiple CLSs should be assigned throughout the convoy and given responsibility for designated vehicles in order to speed medical attention. If limited capability exists, CLS assets should be positioned in the rear of the formation to better support the convoy.

(10) Aid and Litter (A&L) Team. The A&L teams consist of two personnel each and are responsible for providing buddy aid, preparation of casualties for movement and/or evacuation under supervision of the CLS. If possible, multiple A&L teams should be assigned throughout the convoy and assigned responsibility for designated vehicles to speed medical assistance. If limited capability exists, teams should be positioned in the rear of the convoy to support the CLS. CLS personnel should not be assigned to an A&L team. They should focus on treatment.

(11) Landing Zone (LZ) Team. The LZ team consists of a minimum of two personnel responsible for establishing and marking the LZ for possible MEDEVAC or other required support provided by air. If possible, assign an alternate team. PCC should include inventory of all equipment necessary for LZ establishment.

(12) Assault Team. The CC may designate personnel within the convoy to act as an assault element in the event the convoy encounters heavy enemy action requiring the convoy to halt. If designated, this assault element should travel within the body of the convoy to act as an assault element under the guidance of the CC. The assault team should be spread throughout several vehicles, have a designated assault team leader, and have its own communication capability.

(13) Recovery Team. Maintenance recovery personnel and vehicle(s) should be designated to assist with maintenance and recovery of convoy assets along the route. Wheeled maintenance and recovery vehicles are preferred. If not available, the recovery vehicle should be capable of towing any vehicle in the convoy and be equipped with chains, tow cables, etc., and requisite tools to provide minor repairs and recovery. The personnel assigned to this vehicle rehearse hasty recovery prior to SP. This vehicle is normally the next to last vehicle in the convoy if there is a rear gun truck. If it is the last vehicle, it must have a rear guard with an automatic weapon to provide protection to the rear of the convoy. As an additional recovery capability, all vehicles should carry tow cables or ropes in order to be able to recover a like or smaller size vehicle. (14) Gun Trucks. Gun trucks are assigned or attached hardened vehicles

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with CSWs to provide suppressive fire support to the convoy as well as to serve as a deterrent to potential threat forces. (See chapter II for details.)

**(15)** Security Personnel. All other personnel participating in the convoy. THERE ARE NO PASSENGERS IN A TACTICAL CONVOY!

(a) Observe for potential close threats.

(b) Signal and direct civilian traffic as required by VC.

(c) Rotate as necessary into other positions (except for VC).

(d) Dismount on order.

(e) Under duress, can serve as VC.

(f) Should be formed into tactical elements and rehearse as such.

**c.** Convoy Configuration/Order of March: Convoys operating with escorts are generally organized in three elements: the head, main body, and trail. The head element consists of the lead gun truck (if available) and the LVC. The main body element consists of the majority of the vehicles in the convoy with the CC traveling wherever deemed necessary to best command and control from within the main body. Petroleum or ammunition vehicles should be separated throughout this element. Heavier and slower vehicles should be forward in the main body to assist in gauging/maintaining convoy speeds. The trail element consists of a CLS/A&L team, the recovery vehicle(s), the ACC, and the rear gun truck.

(1) For large convoys (20 or more vehicles), multiple CLS/A&L teams and additional gun trucks should be dispersed throughout the various elements. How key personnel and teams might be configured in an order of march for small and large vehicle convoys is illustrated in Figures I-1 and I-2.

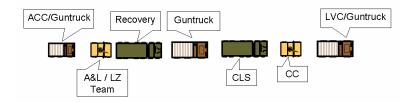
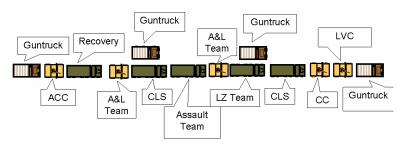


Figure I-1. Notional Small Convoy Configuration

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# Figure I-2. Notional Large Convoy Configuration

(2) Notional Convoy Configuration.

(a) Gun Truck #1 lead vehicle (scouting area to the front).

(b) Experienced senior driver in lead vehicle.

(c) CC locates where best to command and control.

(d) Gun Truck #2 behind CC in order to react to CC directions.

(e) Recovery vehicle (wrecker) in rear element of convoy in order to recover disabled vehicles.

(f) Gun Truck #3 is the last vehicle in the convoy and provides rear security.

(g) ACC with CLS in rear element of convoy.

(h) Spread classes of supplies throughout the convoy.

(i) Avoid isolating a gun truck by itself when scouting ahead of the convoy. When scouting ahead, use two gun trucks to provide mutual supporting fires.

(j) When there are only 2-3 gun trucks in a convoy, it is best to keep the gun trucks with the convoy.

d. Vehicle Interval.

(1) Vehicle interval (distance or gap) should be directed by CC according to terrain and threat. A critical factor affecting intervals should include minimizing the enemy threat while maximizing mutually supportive overlapping fires. Whatever the interval is, it should allow for a safe stopping distance between vehicles. When a halt occurs, all vehicles stop at the interval dictated by the CC in the convoy brief.

(2) Speed and Safety. Convoy commander will dictate normal speed and catch-up speed during the convoy brief. The rate of speed is determined by METT-TC and:

(a) Physical condition and level of training of the vehicle operators. I-14 FM 4-01.45/MCRP 4-11.3H/NTTP 4-01.3/AFTTP(I) 3-2.58 24 March 2005 (b) Types of and mechanical condition of the convoy vehicles.

(c) Speed of the slowest vehicle based on capability, type, or weight of load.

(d) Degree of urgency the convoy requires.

(e) Condition of the roads (dust, mud, snow, and ice).

(f) Physical characteristics of the roadway along the route (grades, sharp turns, congestion).

(g) Weather conditions.

#### Vehicle Configuration

**a.** Hardening Vehicles. Use Kevlar blankets, armor plating, ballistic glass, and other protective devices (i.e., sand bags).

(1) Makes certain vehicle components less vulnerable.

(2) Significantly protects occupants from injury or death in the case of attack.

**b.** Camouflage and Concealment.

(1) Camouflage or cover shiny surfaces.

(2) Paint vehicles in a pattern to blend in with the terrain and break the outline.

(3) Train operators to look for other means of concealment to break the outline of the vehicle.

(4) Don't run lights during a daytime convoy as this can easily identify you as US forces.

(5) Tape over running lights and front lights to reduce profile.

#### Convoy Communication

**a.** Primary means of communication with movement control, air support, and within the convoy is by radio. Radios must be secure-capable communications means.

**b.** There are three types of communications to be considered:

- (1) Vehicle internal.
- (2) Vehicle to vehicle.

(3) External to convoy.

**c.** Alternate communications techniques within the convoy (e.g., hand signals, pyrotechnics, vehicle signals, etc.). Techniques must be covered by the CC during the convoy briefing and rehearsals.

**d.** Strive to have a minimum of two GPS navigation and messaging systems within each convoy.

e. CC and ACC must know theater-level convoy channel to coordinate with

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battalion-level command posts that monitor and can assist with QRF. They must also know the emergency frequencies for MEDEVAC and air support along the route and brief this information to the drivers. Most USAF aircraft are not singlechannel ground and airborne radio system (SINCGARS) capable, with the exception of Joint Surveillance Target Attack Radar System (JSTARS) and some special operations aircraft.

#### **Special Operations Forces Considerations for Convoys**

**a.** Conventional forces must be capable of identifying friendly special operations forces (SOF) so as not to mistakenly confuse them with enemy forces. SOF elements may be operating throughout the AO performing such missions as:

- (1) Critical Intelligence Collection
- (2) Direct Action
- (3) Training Forces
- (4) Civil Military Operations

(5) Personal Security Details

**b.** SOF units may come from US forces, coalition forces, or other government agencies.

c. Conventional forces conducting convoy operations must be aware of when SOF operate in their midst. SOF operates in a discreet manner using non-tactical vehicles (NTV) (e.g., armored sedans/sport utility vehicles (SUV), local-style sedans/vans/trucks, and "technicals" (armored pick-up trucks such as the Toyota Hi-Lux). These operators may not be in conventional uniform or lack a "military appearance." SOF will do their best to forewarn conventional forces either through prior coordination or deconfliction. However, this is not always possible either due to OPSEC, time, or other considerations. During the pre-convoy intelligence brief, the CC should inquire about SOF presence along the intended convoy route and if any challenge and response procedures exist.
d. SOF will also use tactical vehicles in an unconventional manner or

configuration such as having doors removed, outboard faced seating, and limited seatbelt use. SOF will operate in patrols as small as two vehicles, day or night, in any location, and will often ignore local traffic control mechanisms. Tactical vehicles include, but are not limited to: armored high mobility multipurpose wheeled vehicle (HMMWV) (M1114/M1113), ranger special operations vehicle, and foreign tactical trucks.

**e.** Expect SOF, traveling in a discreet manner, to approach the convoy with caution and with some form of friendly marking (near recognition). Examples include, but are not limited to:

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- (1) VS-17 Panels.
- (2) US flags.
- (3) Ball caps.
- (4) ID cards.
- (5) "Wig-Wag Lights"/headlight code.
- (6) Infra red strobe.

(7) Hand/arm signals (with eye contact).

f. In order to prevent fratricide, it is imperative that conventional forces:

(1) Are aware of the presence of SOF units along the convoy route.

(2) Quickly identify discreet friendly forces.

(3) Do not point weapons systems at the discreet friendly forces.

(4) Do not prevent or otherwise hinder the passage of SOF in vicinity of the convoy.

(5) Are briefed regarding SOF during convoy OPORD brief.

#### Support to Convoys

**a.** Aviation: Aviation can be a force multiplier to the CC. The overt presence of aircraft will often prevent an attack or cause the enemy to break contact. Effective employment of close air support (CAS) normally requires a joint terminal attack controller (JTAC) to ensure proper coordination with the ground force. In some cases a convoy will not have a dedicated JTAC. It is the CC's responsibility to become familiar with what joint fires support is available and how to employ it. Aviation support to convoys is not limited to CAS, but can also be an effective tool for route reconnaissance (RECCE) and a show of force.

(1) CAS. The standard format for CAS is spelled out in the ALSA JFIRE MTTP and JP 3-09.3.

(a) CAS is air action by fixed- and rotary-wing aircraft against hostile targets that are in close proximity to friendly forces and which require detailed integration of each air mission with the fire and movement of those forces. The most effective way to stop an enemy attack on a convoy is to kill the attackers. Although terminal attack controllers have very specific procedures for CAS, CC's can still receive effective air support in the event that a JTAC is not available.

(b) To execute CAS with non-JTAC ground personnel, they must clearly state to attacking aircraft that they are "not qualified JTACs." In these instances, qualified JTACs, forward air controllers (airborne) (FAC(A)), and/or CAS aircrew should assist these personnel/units to the greatest extent possible in order to bring fires to bear. Due to the complexity of CAS, the commander

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must consider the increased risk of fratricide when using ground personnel who are not qualified JTACs and accept full responsibility for the results of the attacks. The requester must notify/alert their command element when a JTAC or FAC(A) is unavailable to conduct Type 1, 2, or 3 controls. If the maneuver commander accepts the risk, the maneuver commander forwards the request to the CAS controlling agency. This will alert the CAS controlling agency that the aircrew will be working with non-JTAC qualified personnel. Ground personnel will:

• Identify themselves as "non-JTAC qualified" on aircraft check-in.

• Provide as much of the six element briefing as possible.

• As a minimum, include target elevation, target location, and location of friendlies. Ground personnel should not get frustrated if the pilots cannot see a reference point. When in doubt, they should use plain English. (Appendix B.)

•• Target location: The enemy's position will usually be referenced relative to the convoy's position. For example: 'From the lead vehicle...North 200 meters, from the tallest building.' This is referred to as a 'talk-on' and may take some time. Sometimes things that are obvious from the ground are invisible from the air.

•• Friendlies location: Friendly location can be passed using grid coordinate, latitude/longitude or reference to a distinctive terrain feature (e.g., a bridge or tower). A formation of vehicles is very visible from the air. However, if there are any friendlies away from the convoy, they need to be identified to the pilots before ordnance is delivered.

•• Amplifying remarks: Pilots will do their best to defend the convoy; however, ROE may require them to ask more specific questions like proximity to civilians and enemy actions.

(c) Lastly, the maneuver commander should establish an ABORT code or cue so that an unsafe situation can be stopped. For example, a friendly unit approaching the enemy position as a jet begins a strafing run. If an unsafe situation does develop the ground observer should transmit "Abort, Abort, Abort" to stop the attack. Other options that can be coordinated prior to the attack may include digital messaging, smoke, IR pointer, etc.

(2) Route RECCE.

(a) While on the move, the convoy's route can be examined by fixedwing, rotary-wing, or UAV aircraft.

(b) Most tactical jets can carry sensor pods that enable them to reconnoiter the route both day and night, miles ahead of the convoy position at high altitudes.

(c) Attack helicopters also carry light and heat sensors and can reconnoiter by force ahead of convoy routes and screen the flanks of the convoy.

(d) UAVs can assist in locating road blocks, enemy firing positions on building roofs, and deliberate ambush sites.

(3) Show of Force. Many convoy routes will go through danger areas but will not be permitted to fire unless threatened by the enemy based on ROE. A show of force is a low/fast pass, simulating a strafing run by a tactical jet over a suspected enemy position and serves as a deterrent. The specific aircraft attack profile and theater ROE will dictate how low the aircraft can over-fly. **b.** Electronic Countermeasures. There are several developments in this area to help counter threat IED tactics that are beyond the scope of this document. The CC needs to be familiar with these assets, if they are available in theater. **c.** Fire Support. Higher headquarters provides indirect fire support assets to the CC for planning should they be available and within range of the convoy route. Targets such as choke points, suspected ambush sites, danger areas, and easily identified terrain features should be coordinated prior to the convoy departure. Fires can be shifted from these pre-coordinated target reference points or simply called in with exact grid coordinates of the target. As with air support, the ground observer must be able to stop any unsafe situation that develops. Indirect fire should always be controlled with "eyes on target" in order to ensure the desired target is hit. "Cease Fire, Cease Fire, Cease Fire" over the radio will stop the supporting firing unit from continuing with the indirect fire mission. d. Mobile Security Force (MSF)/QRF. CC should know if this is available, coordinate beforehand for possible support, and ensure the convoy briefing includes standard call sign and frequency for any dedicated ground units available to support their convoy along the intended route.

### **Coalition Participation in US Convoys**

**a.** CCs fully integrate coalition vehicles into convoy, but maintain organizational integrity.

b. Coalition convoys present a command and control challenge. US Forces will always be under the command and control of US leadership. It is important to determine and communicate who is in charge of the convoy during planning.
c. CCs are aware of cultural sensitivities and brief all members of the convoy.

**d.** CCs verify ROE specifics between forces.

**e.** CCs rehearse all battle drills, focusing on actions on contact that may require an aggressive posture and how coalition forces will participate.

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**f.** CCs consider language barriers and use of interpreters; they consider challenges to communications due to differences in language/dialects. Are interpreters required, and if so, how many? (See Appendix F for Interpreter Ops Handbook website address.)

**g.** CCs consider communication systems compatibility. CCs coordinate how communications will work for the command and control of all assets in the convoy.

#### **Civilian Contractor Participation in US Convoys**

**a.** The Law of Armed Conflict imposes strict limitations on the use of civilian personnel in the combat environment. DOD, Service, and combatant commander guidance will dictate policy, limitations, and restrictions for civilians supporting military forces.

**b.** CCs consider that contracted drivers will be unarmed. Specific force protection measures (mission dependent) could include: military shotgun guard (i.e., 1 to every 3 contractor vehicles).

**c.** CCs realize that contractors may not speak English and proportionally increase C2 interpreter training and rehearsal requirements.

**d.** CCs disperse civilian vehicles throughout the convoy due to limited communications capabilities.

e. CCs consider cultural and discipline differences among civilian drivers and possible implications on the convoy. This will impact vehicle crew mix.
f. CCs consider different capabilities of civilian vehicles to tactical vehicles due to terrain conditions.

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# Chapter II GUN TRUCK AND ESCORT EMPLOYMENT

## **Gun Truck Employment**

**a.** Definition. A gun truck, like those pictured in Figures II-1 and II-2, is a vehicle where the primary weapon system is a CSW with a 360 degree field of fire capability and usually hardened for protection of vehicle and crew. An example is a hardback/or up-armored high mobility multipurpose wheeled vehicle (HMMWV) (M1114/M1113) with a CSW. Gun trucks are essential direct fire support vehicles for convoys manned by a trained crew consisting of VC, gunner, and driver. Gun trucks have the capability to suppress targets and maneuver within unprotected convoy areas.



Figure II-1. Examples of HMMWV Gun Trucks Used in Iraq



Figure II-2. Examples of Trucks Used as Gun Trucks

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**b.** Gun Truck Missions.

(1) Protect the convoy.

- (2) Route security.
- (3) Stationary (halt) security.
- (4) Traffic control points (TCP).
- (5) FSE and lead or rear security for main body of convoy.

(6) Counter assault element (CAE).

c. Possible Gun Truck Design Considerations.

(1) M-2, MK-19, M-240, M-60, and M-249 with a stable adapter pintle. (See Appendix F for NSNs.)

(2) Use support/cargo carrying vehicles with organic or attached weapon system.

(3) Use ballistic blankets and fiber sheets as an alternative protective material to steel. Protective material must be able to protect gunner(s) from IEDs, direct fire, and vehicle motion. Design protection so that vehicle is not top heavy. Take into consideration weight of armor on performance of vehicle.

(4) Must give 360 degree area of visibility and firing.

(5) Must have communications between crew members and with the CC/ACC.

**d.** Responsibility.

(1) Gun truck crews should be trained on the following: (Appendix E)

(a) All weapons systems carried or used in vehicle.

(b) TLPs, SOPs, reporting requirements, and the importance of cross training.

(c) All battle drills.

(d) How to identify, discriminate, and quickly engage to suppress threat targets.

(e) Convoy control and movement techniques.

(f) Maintenance of vehicle and all assigned equipment.

(g) Communications procedures.

(h) Safety and risk assessment to increase survivability.

(i) ROE.

(2) Gun trucks maintain communication and visual contact with the convoy. At halts, gun trucks provide 360 degree security at positions on flanks that provide clear fields of fire.

(3) Upon attack, gun truck gunners scan for enemy who initiated attack. Gunners return well aimed suppressive fire on attacks from small arms and RPG attacks. Gunners scan and identify enemy RPG gunners and search for telltale

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puff of bluish-gray smoke from RPG launch. Gunners use appropriate level of force as allowed by theater ROE and unit specified TTPs.

(4) During the convoy execution phase, the VC:

(a) Arrives at SP on time and maintains position in convoy, to include interval and speed.

(b) Controls the gun truck based on orders from the CC.

(c) Positions truck, normally at the front, center, or rear of the convoy.

(d) Is prepared to aggressively respond to threats.

(e) Identifies the threat and directs return fire as soon as feasible, engaging the most dangerous threat first. Target prioritization will be covered in direct fire planning in the OPORD and specify target precedence for each weapon system.

(f) If under indirect fire, identifies and directs gunner's fire on the enemy. (g) Ensures drivers follow convoy procedures for contact alerts, signaling,

and reporting.

(h) Quickly assesses the situation and reports to the CC.

(i) If the CC cannot be contacted, reacts in accordance with the convoy briefing and SOPs.

(j) Maintains convoy security throughout movement.

(k) Orients weapons as directed to provide 360 degree coverage.

(I) Reports contact and develops situation to provide situational update.

(m) When convoy is halted:

- Selects positions that ensure convoy security.
- Conducts consolidation and reorganization operations.
- Checks condition of troops and equipment and reports.

• Submits situation report (SITREP), spot report (SPOTREP), or ammunition, casualties, equipment (ACE) reports.

(5) In crowded areas, gun trucks can be used to disperse crowds and to block intersections to allow convoys through.

(6) Do not isolate a gun truck by itself to recon ahead of the convoy outside of mutual support. When conducting recon ahead of convoy, no less than two gun trucks should cover each other.

(7) Gun trucks maneuver to block and contain vehicles driving erratically in and around convoy. Show of force posture from gun truck is usually enough to ward off civilian vehicles that challenge convoy with aggressive driving. (See chapter III.)

(8) The CC is responsible for gun trucks operating in direct support of the convoy. The CC should either disperse gun trucks throughout the order of march or permit them to move freely among the convoy to maintain security. (See

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Figures I-1 and I-2.)

(9) Gun truck crews will be present for the convoy brief and final rehearsals to ensure synchronization of effort. While gun truck battle drills may be used to react quickly to various types of enemy contact, their movement, maneuver, and engagements must be coordinated and monitored by the CC or other designated subordinate convoy leaders.

(a) In the event of sustained enemy contact, gun trucks maneuver to a position, behind cover with stand-off distance, and if possible on the flanks of the threat to deliver accurate and sustained fires.

(b) Gun truck weapon systems must be displayed in an offensive posture to deter aggression.

(c) Gunners will scan their surroundings and remain alert, observing civilians actions (paying attention to hands) to view suspicious behavior and also ensure enemies are aware of alert convoy posture. Gunners should maintain a defilade position for protection from possible enemy engagement.

### **Convoy Escorts**

**a.** Definition. Any security element/augmentation that has an independent task organization that will be supporting a convoy—to include air support, MP detachment, or security element from a maneuver battalion.

**b.** Task Organization. METT-TC will determine the size of the security element supporting the convoy. Mechanized/light armored vehicle units are better suited to this mission than HMMWV units because of their firepower and armor protection from direct fire, indirect fire, and mines. Careful evaluation of the threat must be undertaken prior to assigning convoy escort to HMMWV-equipped security elements.

**c.** Mission. The convoy escort mission requires that the security element/convoy escort provide a convoy with close-in protection from direct fire/complex ambushes.

(1) Command and Control. Command and control during convoy escort is especially critical due to the inherent challenges of working with units that may not have habitual/organic relationships. When the security element/escort leader is executing the escort mission, the convoy escort operates under the control of the CC, regardless of rank. The relationship between the convoy escort (security element leader) and the CC must provide for unity of command.

NOTE: No matter how experienced the security element is, all battle drills should be covered (and then rehearsed) to ensure all attached units understand the escort's SOPs.

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(2) Tactical Disposition. The convoy escort is broken down into an FSE and a CAE (dismount force). The FSE is responsible for forward security. It should have a portion of the dismounted force capable of dealing with danger areas (overpasses, bridges, and likely IED/ambush sites). The remainder of the security element can be located throughout the convoy to serve as a reaction force and does not need to be collocated (e.g., two gun trucks in the rear of the formation (trail)) and part of the CAE (dismount force) centrally located in the convoy (see Figure II-3). Engineer assets, if available, should be located toward the front to respond to obstacles and the fire support team (FIST), if available, should be located near the CC and/or security element leader. The convoy escort will normally use the column formation due to their inherent speed and ease of movement.

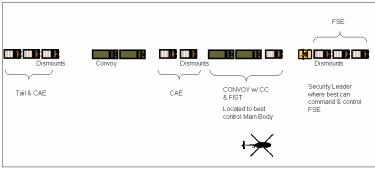


Figure II-3. Mechanized Security Element Escorting Convoy

d. TTPs for the Convoy Escort.

(1) Decision Making Relationship Between CC and Convoy Escort. The CC, more than likely, will want to rely on the expert advice of the escort leader for decision making on battle drill execution, traveling TTPs, and task organization within the formation. However, the overall responsibility to break contact or "remain and fight" always remains with the CC.

(2) TTPs for Dispersing a Crowd. Close-up vehicle intervals and continue to push through the blocked area, and/or use a bypass around the crowd. The entire convoy, specifically designated members of the convoy, and/or weapons systems within the convoy may increase weapons conditions to show an escalation of force. For this technique to work effectively, a small number of 24 March 2005 FM 4-01.45/MCRP 4-11.3H/NTTP 4-01.3/AFTTP(I) 3-2.58

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personnel are designated to be at a lesser weapons condition during execution in order to show escalation of force.

(3) Designated Marksman. The escort leader should coordinate with the CC and assign a designated marksman in each vehicle throughout the escort element if the vehicle manning and configuration allow for this technique.

e. TTPs for the FSE.

(1) Forward reconnaissance.

(a) Danger areas. Certain areas may attract continuous enemy attacks due to advantageous terrain. These danger areas should be avoided if possible. The following is a list of recommended TTPs if a convoy is required to pass through a danger area:

• Provide an overwatch unit.

• Use advanced optics to scan the area for IEDs or enemy positions prior to crossing.

• Use UAVs or air support to observe.

• Have preplanned fire support.

• If available, use dismounts to conduct a sweep of the area for IEDs and/or IED initiators.

(b) For specific battle drills at overpasses, on/off-ramps, chokepoints, and traffic control. (See chapter III.)

(2) In the event of significant enemy contact against the FSE while ahead of the convoy, the FSE leader will recommend a course of action to the CC (i.e., bypass, hold current position, send up reinforcements, etc.). FSEs should establish SOPs that facilitate the basic principles of establishing a support by fire position and having the dismounts attached to the FSE conduct fire and maneuver to close with and destroy the enemy threat.

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# Chapter III MOUNTED TACTICS

### Introduction

**a.** Mounted tactics comprise the TTPs that enable a convoy to move relatively unimpeded and respond quickly to enemy contact. This chapter is meant to provide minimum recommended movement techniques, dismount procedures, and battle drills that individual units can use as a frame of reference. The four principles of mounted movement for tactical convoys are:

**(1)** 360 Degree Security—Combining maximum all-around visibility for situational awareness, interlocking sectors of fire, and mutual support. 360 degree security is necessary to prevent vehicles from approaching from any direction.

(2) Deterrence—Presenting a menacing and aggressive posture demonstrating the readiness and willingness to engage. Maintain an aggressive posture in order to keep vehicles from approaching too close. The convoy owns the road.

(3) Agility—Adapting to conditions whether they are environmental or enemy.

(4) Unpredictability—Minimizing the enemy's ability to accurately observe, time, or otherwise predict the movement of tactical convoys.

**b.** CCs must take into account road conditions, drivers' abilities, vehicle capabilities, vehicles intervals, and safety considerations along with the potential threat when determining convoy speeds.

(1) Control convoy speeds to prevent spreading out or rear vehicle from falling behind.

(2) Convoy speed is determined by the slowest vehicle or the rear vehicle's ability to catch up.

(3) Recommend 75-100m between vehicles on the open road based on mission analysis. Tighten intervals in urban areas, but maintain sufficient interval to maintain maneuverability.

(4) Vehicles should maintain visual contact with the vehicles to their front and rear.

(5) Convoys with no escort or internal gun trucks must ensure that the lead and trail vehicles are able to observe forward and to the rear of the convoy for approaching threats. Personnel manning these vehicles should be armed with automatic weapons, if available.

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c. Sectors of observation and fire:

(1) Sector of observation is comprised of the entire area visible to the crew member. Not all areas that can be observed can be affected by direct fire. Observers scan both in depth and width without excessive focus on any object, activity, or person. Their eyes do not depart from their sector of observation regardless of what others within their vehicle are doing.

(a) Driver's sector of observation is from 9 o'clock to 1 o'clock.

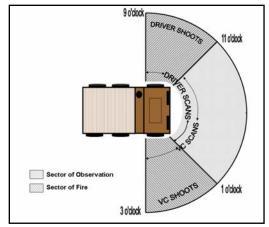
(b) VC's sector of observation is from 11 o'clock to 3 o'clock.(2) Sector of fire is the area that can be covered with direct fire. Consider

designating primary and alternate sectors of fire for both crew compartment as well as CSW personnel. Drivers must be trained to fire their weapon while continuing to operate the vehicle. The driver's primary mission is to operate the vehicle and should only engage targets if the vehicle is halted unless there is no one else who can neutralize the threat from that side.

(a) Driver's sector of fire is from 9 o'clock to 11 o'clock.

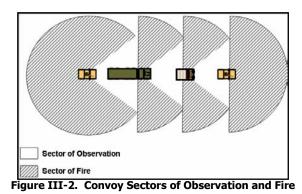
**(b)** VC's sector of fire is from 1 o'clock to 3 o'clock.

(c) Figure III-1 depicts driver and VC fields of observation and fire for a single vehicle and Figure III-2 for a convoy.





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## **Movement Formations and Techniques**

The following are techniques that can be used based on the situation, road conditions, and the judgment of the CC.

- a. File Formation (Figure 111-3).
  - Best used with inexperienced or foreign drivers.
     Advantages:

    - (a) Simplicity.
    - (b) Usable at night but interval will have to be compressed.
  - (c) Minimizes IED blast effects (when driving on centerline of road).
     (3) Disadvantages:
  - - (a) Weak left flank security.
    - (b) Reduced field of view.
    - (c) Reduced headlight coverage at night.

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- **b.** Staggered Formation (figures III-4 and III-5).
  - (1) Used only on multilane roads.

  - (2) Advantages:(a) Allows for all around security.
    - (b) Greater flexibility.
    - (c) Permits ease of maneuver during contact.
    - (d) Limits third party vehicle interference.
    - (e) Greater headlight coverage at night.
  - (3) Disadvantages:
    - (a) Requires more command and control and driver experience.
    - (b) More vulnerable to IED blast effects.

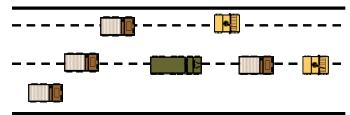


Figure III-4. Formation: Stagger

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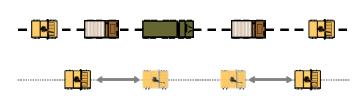


Figure III-5. Formation: Stagger with Gun Trucks

- c. Offset Formation (Figure III-6).
  - (1) Used to block third party traffic and assists in changing lanes.(2) Advantages:
  - (a) Combines flexibility of stagger with the ease of file Formation.(b) Allows CC to control third party traffic.
  - (D) Allows CC to control third party the
  - (3) Disadvantages:(a) Vulnerable to IED blast effects.
    - (b) Difficult to command and control.

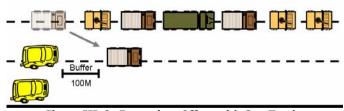


Figure III-6. Formation: Offset with Gun Trucks

**d.** Inverted "T" Formation (Figure III-7).

- (1) Used on multilane roads, convoy runs the centerline of their lanes.
- (2) Advantage: Limits third party vehicle infiltration.
- (3) Disadvantages:
  - (a) Requires experienced drivers.
  - (b) Difficult to command and control without sufficient communications.

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(c) Weak left flank security.

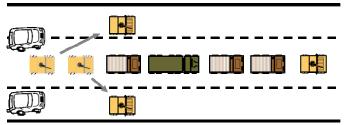


Figure III-7. Formation: Inverted "T" with Gun Trucks

- e. Diamond Formation (Figure III-8).
  - (1) Used on multilane roads.
  - (2) Advantage: Limits third party vehicle infiltration.
  - (3) Disadvantages:
  - (a) Requires experienced drivers.
  - (b) Difficult to command and control without sufficient communications.

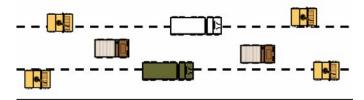


Figure III-8. Formation: Diamond with Gun Trucks

f. Changing Lanes (Figure III-9).

(1) Used to prevent third party traffic interference with the convoy's ability to change lanes.

(2) A pre-designated blocking vehicle in the rear is ordered to block left or right.

(3) Blocking vehicle moves into appropriate lane to block third party traffic.(4) Once in position the convoy changes lanes in front of the blocking vehicle.

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(5) The offset formation (Figure III-6, above) also allows for easy lane changes.

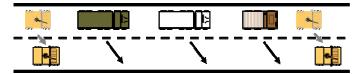


Figure III-9. Movement Technique: Changing Lanes with Gun Trucks

### **Danger Areas**

**a.** Danger areas are a specified area above, below, or within which there may be potential danger. Danger areas require additional awareness and control to allow a convoy to move through a point while both controlling third party traffic and remaining alert to potential threats. Examples are intersections, traffic circles, overpasses, and on/off ramps. The following techniques are used based on the CC's mission analysis.

**b.** Blocking and Bumping Techniques. Blocking is an advanced technique used to physically block the road with a vehicle to prevent traffic from feeder roads, traffic circles, and on/off-ramps from intermingling with the convoy.

(1) These techniques are battle drills that require extensive rehearsals.

(2) Route reconnaissance/analysis is critical to determine ahead of time where these techniques will be used.

(3) Blocking vehicles are designated during mission preparation.

(4) Blocking vehicles should not be the front or rear escort vehicles.

(5) "Block Left" or "Block Right" commands indicate a particular side of the road.

(6) In large convoys, blocking trucks can be relieved in place by subsequent blocking trucks from within the convoy to maintain order of march.

(7) Blocking requires extensive command and control and experienced teams.

(8) Command is given by designated VC or CC for designated vehicles to bump up to a location to block.

(9) Road Intersections (Figure III-10).

(a) Convoy reduces speed as it approaches the intersection.

(b) Convoy reduces interval but maintains sufficient room for maneuver.

(c) Blocking vehicle(s) move up the side of the convoy where they are to

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set the block.

(d) Blocking vehicles set before the convoy enters the intersection.(e) Once the convoy passes, blocking vehicle(s) move forward and resume position in order of march.

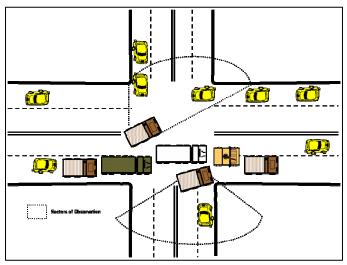
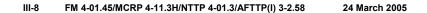
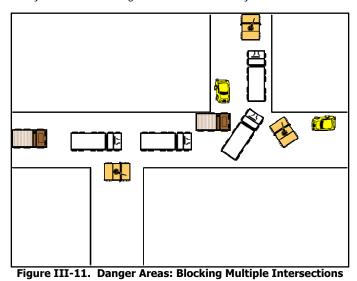


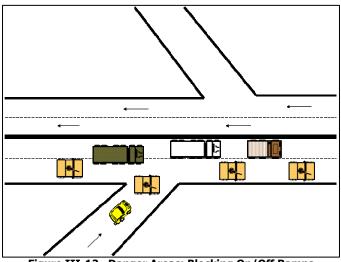
Figure III-10. Danger Areas: Blocking Intersection



**(10)** Multiple Intersections (Figure III-11). Each additional intersection is handled by a different blocking vehicle from the convoy.



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(11) On/Off Ramps (Figure III-12). The same concept for intersections is used for on/off ramps.

Figure III-12. Danger Areas: Blocking On/Off Ramps

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**(12)** Bumping (Figure III-13) is the replacement of one blocking vehicle with another. This technique is similar to "road guards" during a unit physical training run. Blocking vehicles "bump" ahead and act as barriers to third party interference. Blocking vehicles move from the rear to "bump" out" or "bump through" the initial blocking vehicle. This enables both vehicles to return to their former position in the convoy or prepare for the next danger area.

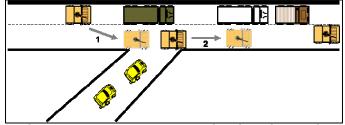


Figure III-13. Danger Areas: Bumping Through Example



(13) Traffic Circles (Figure III-14).

(a) Allows the convoy to control the circle and move rapidly through without interference from third party traffic.

(b) Convoy reduces speed as it approaches the circle.

(c) Convoy reduces interval but maintains sufficient room for maneuver.

(d) Blocking vehicle(s) move up the side of the convoy where they are to set the block.

(e) Blocking vehicles need to be set before the convoy enters the circle.

(f) Once the convoy passes, blocking vehicle(s) move forward and resume position in order of march.

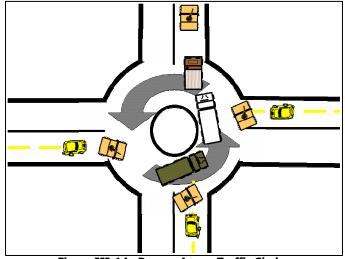


Figure III-14. Danger Areas: Traffic Circles

(14) Alternate Traffic Circle Technique (Figure III-15).

(a) Variation of the same drill to take more direct route.(b) Allows the convoy to control the circle and move rapidly through without interference from third party traffic.

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 (c) Convoy reduces speed as it approaches the circle.
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(d) Convoy reduces interval but maintains sufficient room for maneuver.

(e) Blocking vehicle(s) move up the side of the convoy where they are to set the block.

(f) Blocking vehicles need to be set before the convoy enters the circle.

(g) Once the convoy passes blocking vehicle(s) move forward and resume position in order of march.

(h) Higher risk due to traveling against the flow of traffic.

(i) This requires significant training to execute.

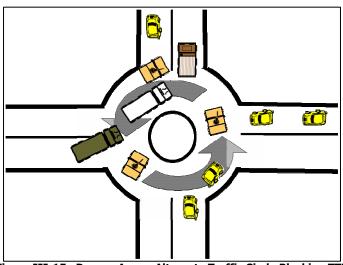


Figure III-15. Danger Areas: Alternate Traffic Circle Blocking TTP

**(15)** Overpass (Figures III-16, III-17, and III-18). Overpasses present a unique hazard in that there is dead space on the top that can not be observed. There are three techniques for clearing an overpass. Mission analysis will dictate which to use.

(a) Deliberate High Clear (Figure III-16).

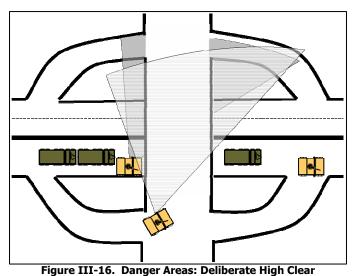
Clearing vehicles, designated during the mission preparation phase, accelerate to the overpass.

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· Lead vehicle stops short of the overpass and elevates its weapons systems to cover the overpass.

· Second vehicle takes the off-ramp and moves up to observe the top of the overpass.

• Once the convoy passes the overpass, high security vehicle comes down the ramp while low vehicle continues to cover.



• Low vehicle moves behind high vehicle and rejoins the convoy.

(b) Deliberate Low Clear (Figure III-17).

· Clearing vehicles, designated during the mission preparation phase, accelerate to the overpass.

• Lead vehicle stops short of the overpass (near-side) and elevates weapon systems to cover the overpass.

· Second vehicle passes under the overpass, takes up a position (farside) and elevates its weapon systems to cover the overpass from the opposite side.

• Once the convoy passes the overpass, the near-side security vehicle III-14 24 March 2005

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moves out while the far-side vehicle continues to cover.

• The far-side security vehicle then moves out behind the near-side vehicle and they assume their prior positions in the convoy.

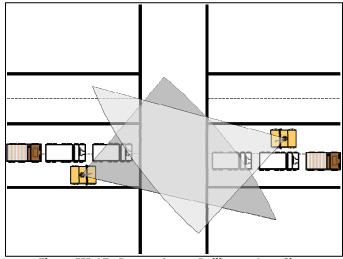


Figure III-17. Danger Areas: Deliberate Low Clear

(c) Hasty Clearing (Figure III-18).

• Technique used when the situation does not permit a deliberate clearing such as in an urban area.

• Lead vehicle elevates weapon system and observes the top of the overpass.

• Each vehicle in the convoy has one crew member elevate a weapon and observe the top of the overpass.

• As each vehicle passes under the overpass, they face to the rear and continue to cover the overpass from the far side.

NOTE: If required to engage, personnel and leaders need to be careful not to fire into the convoy line.

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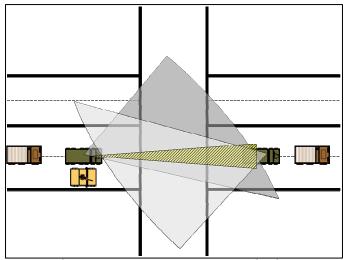


Figure III-18. Danger Areas: Hasty Clearing

### **Battle Drills**

a. Individual Drills.

(1) Downed Driver.

(a) VC gains control of steering wheel.

**(b)** If possible, third person pulls driver out of driver's compartment and VC moves into driver's seat.

(2) Bailout. Used when vehicle is inoperative or when occupants are required to use the vehicle as cover.

(a) Crew on the cold side dismounts, assumes hasty position to the rear of the vehicle and returns fire.

(b) Hot side returns fire until clear to dismount on the cold side and moves to the front of the vehicle.

(c) Assume firing positions using the vehicle as cover.

(d) Establish 360 degree security. Look for indications of enemy presence.

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b. Collective Drills.

(1) Hasty Vehicle Recovery.

(a) Use a strap, cable, or chain. Preposition the straps, cable, or chain ahead of time.

(b) After fire superiority is obtained, recovery vehicle moves forward.

(c) Driver stays in vehicle while VC ties onto disabled vehicle.

(d) VC gets into disabled vehicle to steer/work brakes.

(e) Recovery vehicle moves out pulling disabled vehicle behind it.

(f) Recovery vehicle moves to a rally point and reconfigures to a more stable means of towing.

(g) If unable to get in front of disabled vehicle, push-through is an option.(h) Pre-mounting a used tire on the front of the vehicle assists with push-through.

(2) In-stride Hasty Vehicle Recovery (Figure III-19):

(a) For small to medium vehicles and not a heavy or tractor trailer configuration.

(b) Minimum of two 10,000 lb (HMMWV/NTV) or 25,000 lb straps (LMTV, 5ton, 7-ton, or HEMTT) with a connecting device (clevis or 10,000 lb carabineer).

(c) Straps are mounted on the left front and right rear of the vehicles.(d) Straps are s-rolled and held in place by a break-away method (retainer

bands, Velcro, ¼" 80 lb test cotton webbing or 100 mile-per-hour tape).

(e) Front strap runs into the driver's compartment.

(f) Rear strap runs into VC compartment.

(g) If vehicle is disabled, the driver and VC extend the strap from both the disabled and recovery vehicle.

(h) Recovery vehicle moves alongside disabled vehicle.

(i) VC and driver attach connecting device and release straps.

(j) Recovery vehicle continues to move forward slowly taking up the slack and pulling the vehicle out.

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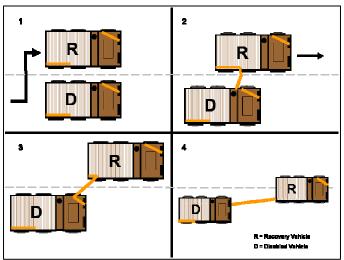


Figure III-19. In-stride Hasty Vehicle Recovery

(3) Dismount and Remount Procedures. These procedures can be used to dismount when not in contact but in proximity of persons who may pose a threat.

(a) Dismount/Mount.

• Dismount call is made by the VC.

• Dismounts do not get in between any vehicles but protect space between vehicles.

• Dismounts use buddy teams to overwatch each other. They always maintain line of sight with buddy.

• Rear security is the only one behind a vehicle, but should stay off to the side.

• If necessary, dismounts use hand motions and verbal commands to motion civilians back. If that fails, they use weapon at port arms to motion civilians back.

• If more force is required, dismounts ensure actions taken are in accordance with current ROE. III-18

FM 4-01.45/MCRP 4-11.3H/NTTP 4-01.3/AFTTP(I) 3-2.58 24 March 2005 • If fired upon, dismounts move to cover, suppress with fire, or mount and extract (situation dependent).

• Vehicles moving forward can signal the mounting call.

(b) Dismount: Short Halt (Figure III-20). Used for slow traffic, market places, or for quick rests:

• Rear of convoy is protected by vehicles and 360 degree security.

• Dismounts act as a buffer between third party personnel and vehicles.

• Dismounts maintain situational awareness. They continually scan sectors and act as a deterrent. They begin by scanning the area within 5 meters and increase the scan out to 25 meters (5/25 meter scan technique).

Have more than one egress route at all times.

• Dismounts should be prepared to use the vehicle as a lethal weapon if necessary.

• CSWs remain manned and have interlocking sectors of fire.

• Drivers remain in vehicles and ready to drive.

• If vehicles are slowly moving with dismounts, VCs make sure that

dismounts can keep pace. If dismounts are running, then either slow down or remount.

• Dismounts ensure no third party personnel/vehicles get between or near vehicles.

• Remount call given by CC through VCs. Dismounts collapse the perimeter back into vehicles.

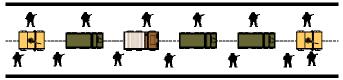


Figure III-20. Dismount: Short Halt

(c) Dismount: Long Halt (Figure III-21).

• Used for longer durations, i.e., vehicle breakdowns, dropping off cargo,

• Dismounts seek out and use hard cover, i.e., vehicle hard points, buildings, etc.

• Dismounts clear blind spots and cover adjacent alleys and streets.

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etc.

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III-19

• CSWs remain manned.

• Drivers only dismount at a long halt when absolutely necessary.

• Dismounts push security out to establish a secure perimeter and maintain mutual support.

 $\bullet$  Dismounts protect the vehicles from third party personnel/vehicle approach.

• Remount call given by CC through VCs. Dismounts collapse the perimeter back into vehicles.

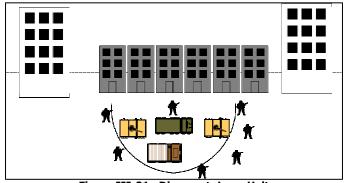


Figure III-21. Dismount: Long Halt

(4) React to Contact. Figure III-22 depicts the decision matrix a CC must address when faced with enemy contact and the subsequent battle drills that flow from those decisions.

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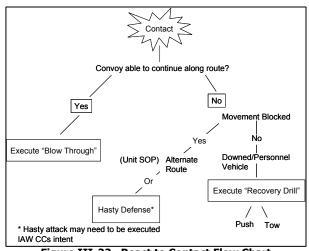


Figure III-22. React to Contact Flow Chart

(a) React to Contact Drill: Blow Through (Figures III-23 and III-24).Speed up.

• Signal. Visual signal to indicate general direction of enemy.

• Return fire. Proportional and accurate fires within the ROE.

- Send a report.
- Move to a rally point away from site based on SOP and METT-TC.
- Establish 360 degree security.
- Send ACE report (Appendix B).
- Continue the mission.

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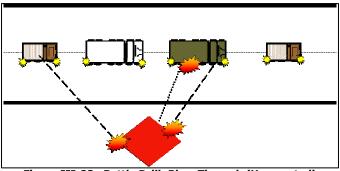
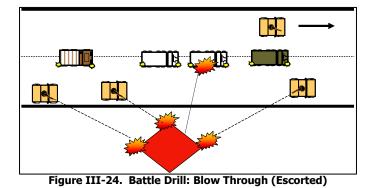


Figure III-23. Battle Drill: Blow Through (Unescorted)



(b) Battle Drill (Recovery). No Obstacle to Movement (Figures III-25 and III-26).

- Convoy is forced to stop; no obstacle to movement.
- Convoy stops.
- Dismount.

• Dismounts establish 360 degree security. Maintain sector of scan/fire. Look for indications of enemy presence.

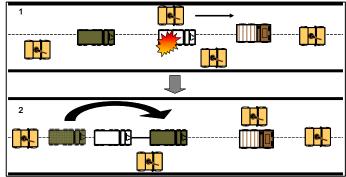
Achieve fire superiority by maneuvering gun trucks (escorts if available) to
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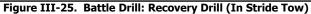
support by fire positions.

- Report to higher headquarters and request assistance if needed.
- Dismounts recover casualties from cold side of vehicle.
- Recovery vehicle executes hasty recovery with strap, chain, or cable, or have a rear vehicle push disabled vehicle out of kill zone.

Convoy continues movement. Gun trucks/escort vehicles cover movement out of area.

- Convoy moves to rally point.
- It establishes 360 degree security.
- CC sends ACE report.
- Convoy continues the mission.





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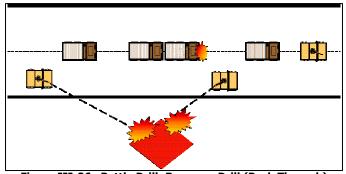


Figure III-26. Battle Drill: Recovery Drill (Push Through)

(c) Battle Drill (Recovery). Obstacle to Movement (Figures III-27, III-28, and III-29).

• Crowd or other impediment prevents movement and convoy is forced to stop.

Convoy stops.

• VCs and other personnel on vehicles dismount. Drivers and CSW

operators remain on vehicle and remain ready to react.

• Establish 360 degree security. Maintain sector of scan/fire. Look for indications of enemy presence.

Achieve fire superiority by maneuvering gun trucks/escorts to support by fire positions.

• Dismounts recover casualties from cold side of vehicle.

• CC assesses situation and establishes a hasty defense (Figure III-27) and awaits QRF, or directs escort force to assault through ambush using fire and maneuver (Figure III-28).

(d) Hasty Attack (Suppress) (Figure 111-28).

• Gun trucks, designated marksmen, assault force suppress identified threat with accurate fires.

• Gun trucks maneuver to suitable position to protect convoy and cutoff enemy egress route by fire.

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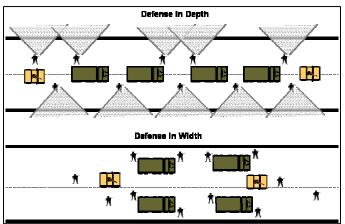
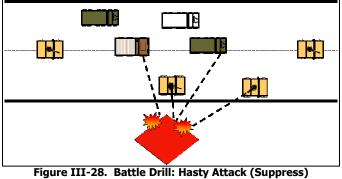
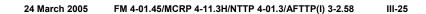
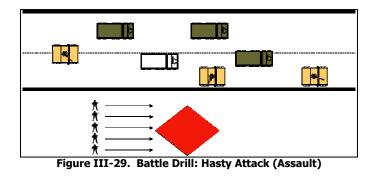


Figure III-27. Battle Drill: Hasty Defense







NOTE: Battle Drill: Hasty Attack (Assault) should be conducted by a trained escort or assault force in accordance with unit SOP and Service doctrine.

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# Chapter IV IMPROVISED EXPLOSIVE DEVICES (IED) AND VEHICLE-BORNE IED (VBIED)

### Introduction

**a.** IEDs are one of the greatest threats to convoys and are often used to initiate an ambush. Convoy personnel should always expect an ambush immediately following an IED detonation. CCs should brief convoy personnel on the latest IED threat: what types of IEDs are being used and where they have previously been emplaced along the route.

**b.** The bottom line is to protect the convoy. All personnel must maintain situational awareness looking for actual IEDs and likely IED hiding places. Varying routes and times, switching lanes at random, entering overpasses on one side of the road and exiting on the other, training weapons on overpasses as the convoy passes under them, and avoiding chokepoints will reduce the risk from these devices.

c. When to expect an IED attack.

(1) Anytime. IEDs present reduced exposure time for the enemy compared to a traditional ambush.

(2) Mornings are especially dangerous. Many IEDs are emplaced under cover of darkness.

(3) Periods of reduced visibility.

**d.** Suspicion categories. The following categories enable leaders to better prioritize responses and minimize wasting time or resources:

(1) Level 1: Large amounts of debris on road that has a history of recent IED attacks.

(2) Level 2: Evidence of on-going emplacement: prepared holes (no device visible), removed curbstone, suspicious activity or total lack of activity when there would be otherwise. Report immediately.

(3) Level 3: Suspicious object, activity, or condition on road. Rucksacks, mail bags, dead animals, meals ready to eat (MRE) bags, roadside mounds, rock piles, etc. could conceal IED. There are no obvious IED indicators (wires, det cord, antennas). Report immediately. Requires explosive ordnance disposal (EOD) response.

(4) Level 4: Clear indicators of imminent IED activity: protruding wires, an individual with a command detonating device, etc. Verifiable and easily identified. Report immediately. Requires direct action or EOD response.

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IV-1

## **Identifying IEDs**



Figure IV-1. Typical Improvised Explosive Device Configurations

(a) IEDs may be constructed using mortar shells, artillery projectiles, antitank mines, diesel fuel, rockets, black powder, fertilizer, chemical explosives, etc. Construction is only limited by the enemy's imagination.

(b) IEDs can be hidden in potholes, abandoned vehicles, in dead animal carcasses, and secured to telephone poles and guardrails.

(c) IEDs may be disguised as loose trash/debris, trash bags, soda cans, milk cans, buckets, burlap bags, MRE bags, etc. (Figure IV-1).

(d) IEDs can be command detonated, victim activated, or timed. Car alarms, battery-powered remote doorbell devices, remote controlled light switches, and cordless and cellular telephones are common means of detonation.

(e) Insulated wire or det cord is used to connect the detonator to the explosive.

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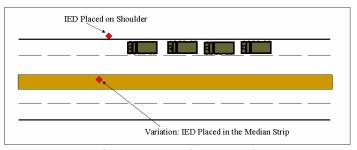


Figure IV-2. Basic IED Attack

(f) IEDs can be dropped from or attached to the underside of overpasses. Drivers should watch for suspicious activity on overpasses and never stop under one.

(g) Enemy hide positions will usually have line of sight to the kill zone and an easy escape route. IEDs are commonly placed along the side of the road on the shoulder or placed on the median strip (Figure IV-2).

(h) IEDs can be daisy chained in a decoy attack. A daisy chain is two or more explosive devices wired together so that a single signal will detonate all the munitions at once (Figure IV-3).

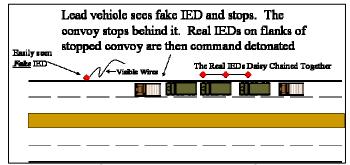
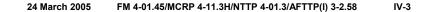


Figure IV-3. Decoy IED Attack



(i) VBIEDs, as illustrated in Figures IV-4 and IV-5, can be initiated by either the driver, an occupant, or remotely. SUVs, pickup trucks, and delivery trucks can carry a large payload. Watch for abandoned vehicles, vehicles parked where they do not belong, vehicles sitting low on suspension system (due to weight of explosives), and vehicles with loose wires hanging off of them. Mobile VBIEDs may ignore warnings or wave-offs when approaching checkpoints, TCPs or convoys.

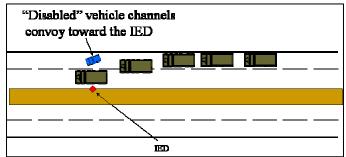


Figure IV-4. Disabled Vehicle IED Attack



Figure IV-5. VBIED Example

### **Suspicious Activities and Objects**

a. Abandoned or disabled vehicles parked on or near the roadway.b. Animal-drawn carts or wagons moving near or on the roadway.

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**c.** Signs of tampering, exposed wires, or objects taped or otherwise attached to the backsides of guardrails.

d. Fresh concrete or asphalt work on or around the road surface.

**e.** Suspicious packages, containers, or any other foreign objects on or near the roadway.

**f.** Markings warning the local population of IEDs (e.g., a blue "X" painted on a rock). Obtain latest techniques from Intel/S-2 during pre-convoy brief.

 ${\boldsymbol{\mathsf{g}}}.$  Third party vehicles attempting to pass or enter convoy formation.

**h.** Third party personnel, including children, approaching convoy vehicles (may be wearing explosive vests).

i. Possible indicators of an IED or impending ambush:

(1) Absence of women and children where normally present.

(2) Dramatic changes in population from one block to the next.

(3) No activity where there are normally large crowds.

(4) Sudden activity within crowds as convoy approaches (small IEDs can be thrown).

(5) Third party personnel dispersing or disappearing as convoy approaches.

(6) Sudden reduction or absence of civilian traffic.

(7) Signals with flares/city lights (turned off/on) as convoy approaches.

(8) Suspicious movement in upper floor windows of buildings.

(9) Presence of vehicles or personnel on overpasses.

(10) Third party personnel with video cameras or presence of a media crew.

(11) Vehicle following convoy for long distances and then pulling off to the side.

(12) Freshly dug holes along the roadway. (Possible future IED site. Report it.)

(13) Obstacles in roadway in order to channel the convoy.

(14) Personnel inside traffic circles.

# **Driving Considerations**

a. Be unpredictable: vary SP times and convoy routes.

 $\boldsymbol{b}.$  Attach signs to convoy vehicles in common languages of the indigenous

population warning civilians to stay clear of military vehicles.

**c.** Configure vehicle to eliminate blind spots (i.e., move mirrors, fording kits, and avoid obscuring vision during vehicle hardening).

**d.** Use available optics to facilitate scanning (binoculars, tube-launched optically tracked wire-guided missile sight optics, other weapons sights, handheld forward looking infrared devices, etc.).

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**e.** If available, use two designated "spotter personnel" to scan (using optics) in the forward convoy element.

f. Use available electronic countermeasure systems.

 ${\bf g}.$  Wear helmets, ballistic vests (with collars attached), seat belts, and ballistic eye protection.

h. Maintain the minimum designated convoy speed when possible.

i. If conditions permit, periodically change your rate of speed and vary convoy formations to avoid predictability.

j. Maintain vehicle interval; avoid accordion effect.

**k.** Watch for visible ordinance on the road. Convoys may be channeled into the kill zone after the lead vehicle discovers a suspected IED in the open.

I. Follow the tracks of preceding vehicles on unpaved roads.

**m.** Stay on the pavement. Avoid driving on the shoulder of the road.

**n.** Travel in the lane best suited to allow rapid travel.

**o.** If conditions permit, travel down the middle of the road, changing lanes often, to stay as far away as possible from IEDs on the median and breakdown lane.

**p.** If convoy must stop, watch the flanks for IEDs, dismount and establish 360 degree security.

**q.** Use "rolling stop" when halting; slow vehicle and scan using 5/25 scan pattern for IEDs before coming to a complete stop.

**r.** Exercise caution at choke points; watch for vehicle breakdowns, bridges, one-way roads, traffic jams, and sharp turns.

s. Once dismounted, initially conduct 5/25 scan for IEDs.

### IED Battle Drills—Actions on IED contact

**a.** To increase odds of survivability, rehearse actions for IED contact based upon unit SOP and METT-TC. Convoy commanders must rapidly assess type of attack: IED, IED initiated ambush, VBIED, etc.

**b.** The "Five Cs":

(1) CONFIRM the suspected IED sighting and report the finding to higher headquarters using IED/unexploded ordnance (UXO) format (Appendix B). (Do not approach or tamper with it).

(2) CLEAR the area surrounding the IED (minimum 300 meters unless otherwise specified by unit SOP). The convoy assumes a box formation on each side of the IED. Vary distance from IED to remain unpredictable.

(3) CORDON off and secure the area. Post guards to prevent risk to military personnel and vehicles.

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(4) CONTROL entry and exit to area around the IED. Establish an entry point. If mission permits, do not let third party personnel or military traffic transit the area. Do not allow anyone to enter the area unless authorized to do so (i.e., EOD personnel).

(5) CHECK for secondary devices. Always assume there is at least one secondary device. Scan the side of the road out to 25 meters from the shoulder of the road. Use gun trucks or dismounted personnel for this mission. c. Upon detecting a suspected IED:

(1) Determine the IED location (grid coordinates) and report the situation to higher headquarters and follow-on convoy elements.

(2) Mark IED location according to unit SOP.

(3) Do not approach a suspected IED.

(4) Possible courses of action depending on METT-TC and unit SOP:

(a) "Blow by it." Move as far as possible to the opposite side of the road while staying on the pavement, accelerate, and keep moving.

• Mark IED site as you pass.

• CC forwards IED report as convoy passes.

· Stay alert to decoy IEDs used to channel traffic into ambush or daisy chained IED.

Look for indications of enemy presence.

(b) "Stop and secure" the site. Remain alert for a possible ambush (360 degree security). Block all traffic in vicinity of the IED until cleared by EOD or relieved by MPs.

· Vehicles that cannot stop before reaching the IED site should continue a safe distance beyond the site. Vehicles that have not yet reached the IED site stop a safe distance before the site.

• If convoy must continue, hand off to nearest friendly unit to block traffic.

 Time/distance permitting, maintain a standoff distance of at least 300 meters unless otherwise specified by unit SOP. Vary standoff distance to avoid a decoy IED attack. Radio or cell phone transmissions within 300 meters may cause detonation.

· Look for potential secondary devices in what may seem like the best possible location to occupy or along an alternate route.

- · Look for indications of enemy presence.
- Submit IED/UXO report. (Appendix B)

**d.** Static VBIED, follow procedures listed above.

e. Suspected mobile VBIED actions:

Avoid vehicle if possible.

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(2) Gain distance from vehicle.

(3) Ascertain intent. Is vehicle attacking convoy or moving to predetermined target location? If convoy is under attack, place heavy volume of fire upon the vehicle.

(4) Attempt to warn off a suspicious vehicle using show of force by bringing individual weapons and CSW to the ready. Use flash-bang pyrotechnics to warn further. If the driver's intent to attack becomes clear, concentrate fire on the vehicle.

(5) Note current position and report to higher headquarters. Use SALUTE report (Appendix B). Specify direction of travel, make/model of car, description of driver/passengers, and VBIED indicator(s).

f. Stationary Vehicle-Borne IED (SVBIED) Countermeasures:

(1) Emplace pre-made signs (in native language) on all sides of vehicle (at safe stand-off distance) warning third party personnel to stay away.

(2) Utilize phraselator with bullhorns.

(3) Utilize high intensity spotlights.

(4) Utilize the inverted T formation.

(5) Position CSW in rear of formation. Mk19 not recommended due to arming distance.

(6) Ensure proper escalation of force is used and use deadly force when required.

(7) Emplace an expedient barrier plan to protect stationary convoy. g. React to IED Detonation:

(1) Drive through kill zone if all vehicles are still operable.

(2) Determine if the IED initiated an ambush. If convoy is ambushed, follow procedures in chapter III.

(3) If any vehicle is disabled, stop entire convoy—consistent with unit SOP.

(4) Dismount vehicles and establish 360 degree security; look for additional devices.

(5) Coordinate casualty evacuation (CASEVAC or MEDEVAC) if required.

(6) Determine extent of damage and initiate vehicle recovery operations per SOP.

(7) Mark position; report to higher headquarters.

(8) Proceed to the next rally point.

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# Appendix A CONVOY FORMS AND CHECKLISTS

The following forms and checklists are included in this appendix:

- a. Warning Order Outline
- **b.** Sample Convoy Manifest
- c. Time Schedule
- d. Individual Checklists
- e. Vehicle Operator Checklist
- f. Landing Zone Kit
- g. Combat Life Saver Kit Packing List
- h. Leader Checklis
- i. Convoy Strip Map Standards.
- j. Convoy Post-Operations Checklist.

#### WARNING ORDER OUTLINE

1. SITUATION: (A brief statement of the enemy and friendly situation in the area of operations. Include all friendly units which could offer support along the route.)

2. MISSION: (The mission is a clear, concise statement of the mission to be achieved. Mission statement includes *who, what* (the task), *when* (start point time), *where* (route and destination), and *why* (purpose).)

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3. TASK ORGA	NIZATION: (Convoy	/ Manifest)	
4 INITIAL TIM	ME SCHEDULE:		
When	What	Where	Who
uniform requir	ements, pre-combat	t checks (PCCs)/pre-c ional tasks to be acco	
	ND SUPPORT: (Base	d on SOPs)	
Class I: (Ratio	ns/Water)		
Class III: (POL	)		
	_/		

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Weapon System	Rounds	Туре
Pyrotechnic Device	Number	Location
Class VIII: (Medical/CLS/	Supplies)	
Maintenance of vehicles	and equipment.	
7. UNIFORM AND EQUI	PMENT COMMON TO	ALL:

Figure A-1. Warning Order Outline

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### **Convoy Manifest**

The Convoy Manifest is a tool for the CC and ACC to assist with identifying critical convoy information. It is maintained by the CC with copies to the ACC and to the parent HQs.

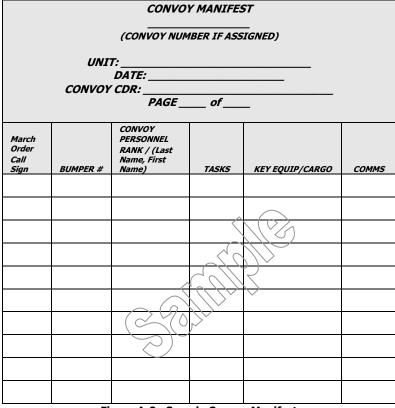


Figure A-2. Sample Convoy Manifest

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### **Time Schedule**

A realistic schedule that uses all of the time available from publishing of the WARNO to SP time is key to proper convoy planning and preparation. All preparatory tasks are listed with the responsible individual(s) assigned. It begins with PCCs and individual/vehicle rehearsals supervised by subordinate convoy leaders. PCIs are scheduled to insure that all individuals, vehicles, weapons, and communications are inspected by the convoy chain of command. Logistic preparations are scheduled around these essential tasks. A rehearsal of all elements of the convoy follows the convoy brief with sufficient time scheduled to practice designated drills collectively. The convoy brief is scheduled to be completed leaving a minimum 2/3 of the preparation time remaining to subordinates (1/3s - 2/3s Rule).

Time Schedule			
When	What	Where	Who
		na Cahadula	

Figure A-3. Time Schedule

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#### Sample Pre-Combat Checks and Pre-Combat Inspections

PCCs determine if equipment required for a mission is available and serviceable. PCCs are effective only if they are organized and conducted using an up-to-date checklist. This section provides suggested checklists for leaders, specialty teams, and individuals. Units should use these example checklists as guidelines. The type of unit, equipment, operational area, and mission will dictate additions, substitutions, and deletions. Follow-through is essential; missing or unserviceable equipment must be rapidly reported, repaired, or exchanged. These checks should be scheduled soon after the WARNO is issued and after individuals are released from other duties. Individual truck commanders are part of the convoy chain of command and must be held responsible for PCC on their vehicles if time schedules are to be met.

PCIs are a series of inspections scheduled early in the preparation sequence to ensure that all PCCs have been performed properly and that all vehicles, weapons, communications, and special and individual equipment are available and functional. PCIs are most effective when organized and conducted to exacting standards by first line supervisors, with systematic spot checks made by the convoy's senior leadership. An effective technique is to conduct these PCCs/PCIs in the convoy recovery period to ensure that individual and unit equipment is immediately ready for the next convoy.

	Individual Checklist	
Item	Inspection	Remarks
Weapon	Cleaned, Function Check, Lubricated, Ejection Port Cover Closed	
Magazines / Ammunition	Cleaned, Serviceable, Tracer Mix Correct	
Kevlar	Serviceable, NVG Ready	
Fragment Vest / Body Armor	Cleaned, Serviceable, Plates Installed	
Notebook / Writing Device		
Eye Protection Device	Cleaned, Serviceable, Worn per SOP	
LBE / LBV / FLC	Cleaned, Serviceable, Configured per SOP	

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	Individual Checklist	
Item	Inspection	Remarks
Canteens	Serviceable, full of water	
First Aid Pouch	Equipped with 2 First Aid Dressings	
Military / Required IDs	Worn / Stored per SOP	
Flashlight	Tested, Extra Bulb	
ID Tags (Dog Tags)	Worn per SOP	
Driver Licenses (Required)	Current, Stored per SOP	
NVGs w/ batteries	Cleaned, Operational, Configured per SOP	
OVM / Vehicle Keys	Serviceable, Checked, Stored per SOP	
Sleeping Bag / Roll	Serviceable, Stored per SOP	
Sets of Uniforms Complete	Cleaned, Serviceable, Stored per SOP	
Brown T- Shirts	Cleaned, Serviceable, Stored per SOP	
Under Garments	Cleaned, Serviceable, Stored per SOP	
Socks (pair)	Cleaned, Serviceable, Stored per SOP	
Towel & Wash Cloth	Cleaned, Serviceable, Stored per SOP	
Personal Hygiene Kit	Inventory, Stored per SOP	
JLIST / NBC Complete	Cleaned, Serviceable, Stored per SOP	
Wet Weather Gear	Cleaned, Serviceable, Stored per SOP	
MREs	Stored per SOP	

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Individual Checklist			
Item	Inspection	Remarks	
Weapon Cleaning Kit / Lube	Serviceable, Stored per SOP		
Gortex Complete	Cleaned, Serviceable, Stored per SOP		
Polypro Complete	Cleaned, Serviceable, Stored per SOP		
Work / Cold Weather Gloves	Cleaned, Serviceable, Stored per SOP		
Combat Life Saver Bag	Inventory, Stored per Unit SOP		
Binoculars	Cleaned, Serviceable		
Litter (Body Bags / Cots)	1 per 10 personnel, Cots fully set-up & stored		

Figure A-4. Individual Checklist

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Vehicle Operator Checklist			
Item	Inspection	Remarks	
Preventative Maintenance Checks and Services Complete	Are there any issues?		
Vehicle Dispatch	Expiration Date		
Fuel/Fluids	Topped Off / Any unusually low?		
Additional POL Products	Inventory, Stored per SOP		
BII (Basic Issue Items)	Inventory, Serviceable, Stored per SOP		
Fire Extinguisher	Correct Model / Size, Serviceable		
Tow Bar/Chains/Straps	Serviceable, Stored per SOP		
Pyrotechnics	Cleaned, Serviceable, Stored per SOP		
Road Guard Vest/Belt	Cleaned, Serviceable, Stored per SOP		
Vehicle Flashlight	Tested, extra bulb		
MEDEVAC Format	Updated, Stored per SOP		
Convoy Strip Map(s)	Current Mission, Stored per SOP		
Convoy Execution Matrix(s)	Current Mission, Stored per SOP		
Vehicle Window(s)/Mirror(s)/Turn Signals, Lights	Cleaned, Serviceable		

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Cargo Strap(s)/Load(s)	Serviceable, Secure, Stored per SOP	
Warning Triangles	Cleaned, Serviceable, Stored per SOP	
Litter(s)/Body Bag(s)	Cleaned, Serviceable, Stored per SOP	
Hasty Recover System(s)	Cleaned, Serviceable, Stored per SOP	
Case Intravenous Solution	Expiration Date?, Stored per SOP	
Ammunition	Cleaned, Serviceable, Stored per SOP, Unit Basic Load	
Communication checks/ Spare Batteries for Radios/Smart Cards/Destruction Plan	Cleaned, Check(s), Correct Frequency, Emergency Call Signs / Freqs / MEDEVAC 9-Line Posted.	
MRE Cases	Serviceable, Stored per SOP	
Water Cases	Serviceable, Stored per SOP	
Crew Served Weapons and Weapon Mounts	Serviceable, Mounted per SOP	
Spare Tire/Jack	Present and Stored per SOP	
Vehicle Load Plans	All similar vehicles loaded according to load plans.	

Figure A-5. Vehicle Operator Checklist

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Landing Zone Kit			
Item	Inspection	Remarks	
2 – Smoke Grenades	Cleaned, Serviceable, Stored per SOP	Day Far Recognition Marker	
1 – VS-17 Panel w/ Stakes	Cleaned, Serviceable, Stored per SOP	Day Near Recognition Marker	
2 – Star Clusters	Cleaned, Serviceable, Stored per SOP	Night Far Recognition Marker	
Swinging Chem- light Set-Up	Cleaned, Serviceable, Stored per SOP	Night Near Recognition Marker	
Gloves	Cleaned, Serviceable, Stored per SOP	Each Team Member	
Goggles	Cleaned, Serviceable, Stored per SOP	Each Team Member	
Strobe light	Cleaned, Serviceable, Stored per SOP	Night Far Recognition Marker	
Kit Bag/Box	Cleaned, Serviceable, Stored per SOP		
NOTE: Landing Zone Kits should be stored in each key leader's and LZ team's vehicle.			

Figure A-6. Landing Zone Kit

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Combat Life Saver Kit		
Item	Quantity	
2x2 Gauze Surgical Sterile	4	
Scissors Bandage	1	
Kurlex Gauze		
Glove Exam Large	3	
Intravenous Inj Set	2	
Catheter and Needle 18 Gauge	1	
Splint Universal 36x4.5in	1	
Ringers Inj 500ml	2	
Pad Prov-lod Impregnated	12	
Alcohol Prep Pad	12	
Tourniquet Adult	1	
Adhesive Tape Surg 1in	1	
Bandage 37x37x52in	4	
Dressing First Aid	6	
Airway 100mm (LG)	1	
Airway 80mm (SM)	1	
Bandage Gauze Elastic	4	
NOTE: Check expiration date of applicable items.		

Figure A-7. Combat Life Saver Kit Packing List

Item	Leader Checklist Inspection	Remarks
Binoculars	Cleaned, Serviceable	
GPS / MTS / FBCB2	Cleaned, Serviceable, Checked	
Convoy Brief / OPORD /Smart Cards	Complete convoy brief to include intelligence and support plan, CASEVAC plan.	

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Strip Map /	Additional Copies	
Execution Matrix		
Leaderbook /		
Writing Device		
Mission	Updated, All Phases of	
Coordination	Mission	
Checklist		
Map (Area of	Current Graphics (Units /	
Operation)	Intel)	
Units /	Updated – All Phases of	
Frequencies	Mission	
Current	Updated – Focus First	
Intelligence Brief	Phase of Mission	
Risk Analysis	Reviewed / Approved by	
-	Higher Headquarters	
SOI / ANCD /	Current / Checked	
CEOI		
Communication	Internal / Higher HQ / Air	
Check	Support	
ROE	Does everyone have /	
	understand current ROE	
	card?	
Combat Life	Aid bags complete, enough	
Savers	CLS certified personnel for	
	convoy	
UXO Marking Kit	Kit Complete / Checked	
Weapons Test Fire	Ensure all weapons	
/Function Check	serviceable	
Conduct	Thorough and complete	
Rehearsals	rehearsals of all battle drills	
=	ure A-9 Londor Checklict	

Figure A-8. Leader Checklist

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#### **Convoy Strip Map Standards**

**a.** A strip map is a valuable tool for all personnel in a convoy. It provides an easily used navigational aid, route control and battle tracking information, operational and logistical support points, major terrain features, key built up areas, highway infrastructure, and danger areas. Although a strip map may be generated at a higher command level, units should improve these products with information obtained locally to maximize their utility. This is particularly important for depicting current enemy intelligence along the route. It is a unit level responsibility to coordinate with the appropriate agency/organization the reproduction of these strip maps and to ensure that one is issued to each vehicle in a convoy.

**b.** Essential Elements of a Strip Map:

- (1) Start Point.
- (2) Release Point.
- (3) Halts.
- (4) Critical Point with Grid Coordinates.
- (5) Distance Between CPs.
- (6) Friendly Forces.
- (7) Arrival and Departure Times at SP, CP, RP.
- (8) Convoy Routes, Route Data: Include route numbers, major supply

route(s) (MSR) designator, major intersections (controlled, uncontrolled), mileage between points, number of lanes, route material composition designation (hard or loose surface), obstacles (canalizing characteristics such as bridges, tunnels, cuts, fills, etc.), and complex features (off/on-ramps, roundabouts/circles, etc.).

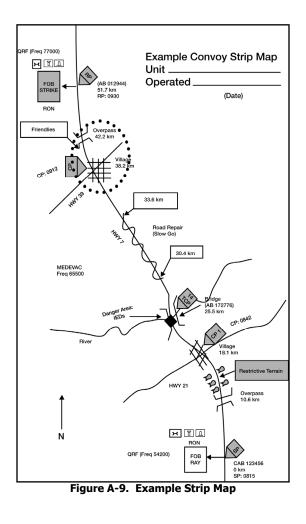
(9) Major Cities and Towns.

- (10) North Orientation.
- (11) Duress Frequency (911 or "Sheriff" Freq).

(12) Logistical Support Data: Include the location of all logistical support facilities.

(13) Danger Areas and Type of Threat.

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### **Convoy Post-Operations Checklist**

Immediately upon convoy closure, CC will:

a. Report vehicle convoy operation completion to the higher headquarters.

b. Conduct thorough mission debrief with key leaders from convoy.
c. Conduct debrief with operations and intelligence section. Report any suspicious activity, enemy TTPs, or unusual events to intelligence or counter-

intelligence element.

NOTE: Cover entire operation, enemy activity, any significant activities, route conditions, things to sustain and improve.

**d.** Record and report actual convoy route taken (as opposed to planned route). These should be used as a historical record to avoid patterns and predictability (sometimes referred to as "Honesty Trace").

**e.** Refuel, clean, inventory, and perform preventative maintenance checks and services (PMCS) on vehicles, weapons, and equipment.

**f.** Conduct PCCs/PCIs to prepare for next mission.

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## Appendix B REPORTS

- a. Accident Procedures and Reporting.
- **b.** Unexploded Ordnance (UXO).
- **c.** Spot Report.
- d. Enemy Contact Report (Internal to the convoy.)
- e. SALUTE Report.
- f. ACE Report.
- g. MEDEVAC.
- h. Call for Fire.

#### Accident Procedures and Reporting

- a. Establish local security/traffic control.
- **b.** Assess damage to personnel, vehicles, and load.
- c. Determine location (8-digit grid).
- d. Report any information to higher headquarters.
- e. Contact the nearest base camp, and provide:

  - Status of personnel.
     MEDEVAC request (if needed).
  - (3) Status of vehicles.
  - (4) Location.
  - (5) Current situation.

(6) Recovery assistance (if needed), state type of equipment and type of damage.

f. Complete accident form in duplicate/use cameras to record accident if available.

g. Follow instructions from higher headquarters.

#### **Unexploded Ordnance (UXO)**

a. When mines, explosives, or other UXO are found, report them immediately to the unit's tactical operations center (TOC) using the following format:

LINE 1. Date/time/group discovered.

LINE 2. Reporting unit and grid location and area of operation of UXO.

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- LINE 3. Method of contacting over watching unit (radio freq/call sign/telephone number).
- LINE 4. Type of munitions (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). (Immediate: stops a unit's maneuver and mission capability or threatens critical assets vital to the mission. Indirect: stops the unit's maneuver and mission capability or threatens critical assets important to the mission. Minor: reduces the unit's maneuver and mission capability or threatens nonmission critical assets of value. No Threat: has little or no effect on the unit's capabilities or assets.)
- b. Marking UXO.

(1) If safe to do so, mark area using marking tape, engineer tape, candy striped tape, mine signs, or whatever means are available to keep third party personnel out of the area.

(2) Protective Measures: Build a barricade far enough away from the UXO so that it cannot fall on it.

NOTE: Do not enter an uncleared area to mark a mine or UXO. Place marking in the closest cleared area (i.e., if mine or UXO is off the side of the road, place marking on the edge of the road).

#### Spot Report (For Any Information Requiring a Report)

WHO (Unit or Personnel Involved in the Incidents).WHAT (Detailed Description of the Incident).WHERE (Grid and Location Where the Incident Took Place).WHEN (Date and Time).ACTIONS ALREADY TAKEN BY UNIT.

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### Enemy Contact Report (Internal to the Convoy)

CALL SIGN:	"Convoy commander, this is truck six, CONTACT."
DIRECTION:	"3 o'clock."
DISTANCE:	"200 meters."
TYPE OF THREAT:	"RPG and small arms."

### SALUTE Report (For Enemy Contact)

Size	What is the size of the element?
Activity	What are they doing?
Location	Grid coordinates of element?
Unit/Uniform	What unit/element it is: Describe the element involved.
Time	Date/time group of observation.
Equipment	What equipment do they possess?

NOTE: Provide any other information that may be beneficial for the development of the situation.

### ACE Report (Used for Reorganization and Consolidation After Enemy Contact)

Ammunition:	How much ammunition remains by weapon type, reallocate if required. (Ammunition is best counted by full magazine, drum, or belt.)
Casualties:	How many/priority. Begin CASEVAC or MEDEVAC if possible.
Equipment:	Type of damage/severity/recoverability.

#### Medical Evacuation (MEDEVAC)

- Line 1: 6-digit UTM grid location of pick-up site.
- Line 2: Radio frequency, call sign and suffix of requesting personnel.
- Line 3: Number of patients by precedence:
  - A = Urgent—Loss of life or limb within 2 hours.
  - B = Urgent—Surgical.
  - C = Priority—Loss of life or limb with 4 hours.
  - D = Routine—Evacuation within 24 hours.
  - E = Convenience.

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- Line 4: Special equipment required. As applicable, express either none, hoist, or stokes litter (basket).
  - A = None.
  - B = Hoist.
  - C = Extraction Equipment.
  - D = Ventilator.
- Line 5: # of patients by type. (Litter/Ambulatory)
- Line 6: Security of pick-up site. (What possible/known threat is in the area?)
- Line 7: Method of marking pick-up site. (Near/Far Recognition Devices)
  - A = Panel.
  - B = Pyro.
  - C = Smoke.
  - D = None.
  - $\mathsf{E} = \mathsf{Other}.$
- Line 8: Patient nationality and status (Coalition Military, US Contractor, Non-US Contractor, Enemy Prisoner of War)
  - A = US Military.
  - B = US Civilian.
  - C = Non-US Military.
  - D = EPW.

Line 9: NBC Contamination.

- N = Nuclear.
- B = Biological.
- C = Chemical.

#### Call for Fire

NOTE: A call for fire is a concise message prepared by the observer. It is a request for fire, not an order. There are six elements of the call for fire sent to the fire direction center (FDC) in three transmissions. (See ALSA JFIRE MTTP.)

- a. Observer Identification.
- **b.** Warning Order. (Type of mission—adjust fire, fire for effect, immediate suppression.)
- c. Target Location.
- d. Target Description.

e. Method of Engagement. (Danger close, high angle, ammo type requested.)
 f. Method of Control. (At my command, request time of flight, request splash, request time on target.)

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#### SAMPLE Call for Fire

First Transmission—Observer ID (call sign) and WARNO:

"H24 this is N24, adjust fire" (or "request close air support") Second Transmission—Target location:

"Grid WF111222" or "At intersection of MSR Drum and highway 12"

Third Transmission—Target description, method of engagement and control: "Enemy gun truck in open, fire when ready, over"

#### SAMPLE Call for Close Air Support with Non-JTAC Personnel

NOTE: This is an example of how to protect a convoy using air support. This technique allows a non-JTAC qualified person to provide essential information to aircrews with plain English. The doctrinal example of a CAS briefing (9-line) can be found in JP 3-09.3 or the ALSA JFIRE MTTP.

a. At a minimum, CAS requester will:

- (1) Identify themselves as "non-JTAC qualified" on aircraft check-in.
- (2) Make every effort to involve a qualified JTAC/FAC(A) in the situation.
- (3) Provide as much of the six element call for fire briefing as possible.
- (4) As a minimum, pass target elevation, target location, and restrictions.

**b.** Aircrew in this situation will:

- (1) Make every effort to involve a qualified JTAC/FAC(A) in the situation.
- (2) Be prepared to "pull" information to complete the CAS briefing.

(3) Exercise vigilance with target identification, weapons effects, and friendly location.

**c.** The following is an example of how a non-JTAC qualified person would request CAS. In this example, the lead vehicle of the "Crash" convoy has been hit with an IED. The convoy is stopped and the wounded are being transferred to other vehicles. After air support has been requested over the Convoy Control Net, Anvil 41 is headed toward the site.

"Crash" is the call sign of a non-JTAC person in a 20 vehicle tactical convoy. "Anvil 41" is a section of AV-8Bs.

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Anvil 41: "Crash, this is Anvil 41, What's your location?"

- Crash: "Anvil 41, Crash is west-bound on MSR; Mobile, just short of the Thar Thar Bridge. Be advised I am not JTAC qualified."
- Anvil 41: "I've got a burning vehicle with about 20 vehicles stacked up behind him to the east."
- Crash: "That's us. Our lead vehicle hit an IED or a mine. The convoy is stopped and we're taking fire from the north. Requesting immediate suppression."
- Anvil 41: "Roger, we're looking north. Describe the fire."
- Crash: "Anvil, we just had a RPG from ground level shot at us about 100 meters north of the lead vehicle."
- Anvil 41: "Tally that shot. Do you have any friendlies away from the vehicles in that direction?"
- Crash: "Negative, everyone is either still inside their vehicles or to the south."
- Anvil 41: "Roger, we're going to make a gun run from east to west into that enemy firing position."
- Crash: "Roger."
- Anvil 41: "Anvil 41, In from the east...Off to the west."
- Crash: "Those hits were right where the shots were coming from. We need to get out of here. We're going to proceed west across the bridge."
- Anvil 41: "Roger. We'll watch your right flank and the bridge. Cobras are ten minutes out."

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## Appendix C CONVOY BRIEFING

### Sample Convoy Commander's Brief (OPORD) Format

ADMINISTRATIVE Personnel (roll call) a. Responsibilities CC Driver/NAV ACC VCS Drivers (primary/alternate) **CSW** Operator Counter-Assault Element Leader Designated Marksman Medics/Combat Life Saver Guide/Interpreter Higher HQ Rep **b.** Sectors of fire (by priority, weapon system, vehicle, and phase) c. Task Organization: (internal organization for convoy-manifest) Para 1. SITUATION a. Enemy Forces: Discuss enemy. Identification of enemy (if known). Composition/capabilities/strength/equipment. Location (danger areas highlighted on map). Most likely/most dangerous COA (defend, reinforce, attack, withdraw, and delay [DRAW-D]). **b.** Weather. General forecast. c. Light Data (EENT, % Illumination, MR, MS, BMNT).

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d. Friendly Forces: Units along the route. Operational support provided by higher headquarters. Aviation support: ASOC Call Sign\_ \_Frequency\_ DASC Call Sign\_ \_Frequency\_ \_\_\_\_\_\_ \_\_Frequency\_\_ **JSTARS** Call Sign\_ Mobile Security Forces/Quick reaction forces (QRFs). MP escorts/FSE. EOD. SOF. Fire support elements: Element Location Frequency/Call Sign Attachments: (From outside the organization)

### Para 2. MISSION: (WHO, WHAT, WHEN, WHERE, WHY)

Example: Unit X conducts tactical convoy to FOB YY and returns to FOB XX NLT 231000ZDEC03 in order to provide resupply of CL V (ammo). Para 3. EXECUTION: a. Concept of Operations: Convoy execution and task(s) of elements, teams, and individuals at the objective(s). (Broad general description from beginning to end.) C-2 FM 4-01.45/MCRP 4-11.3H/NTTP 4-01.3/AFTTP(I) 3-2.58 24 March 2005

**b.** Tasks to subordinate units: (Includes attached or OPCON elements.)

-	
Co	ordinating Instructions: (Instructions for ALL units.)
	SAFETY. (See Appendix E, Risk Assessment)
(	Overall Risk to Force:
	Low. Medium. High.
(	Overall Risk to Mission Accomplishment:
	Low. Medium. High.
	Fratricide Reduction Measures:
	(1) Order of march (spacing of serials/location of support elements)
	(2) Routes (ensure strip map is attached)
	(3) Additional Movement Issues (speed, intervals, lane, parking,
	accidents, etc.)

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- (4) Convoy Execution.
- (5) Timeline:
  - (a) Vehicle/personal gear preparation; preventive maintenance checks and services (PMCS) completed.
  - (b) Briefing.
  - (c) Put on equipment.
  - (d) Load vehicles.
  - (e) Rehearsals/test fires.
  - (f) Brief back/confirmation brief from key leaders.
  - (g) Start point (SP)/departure.
  - (h) Return to base (RTB).
  - (i) Debrief.
  - (j) Recovery: Maintain vehicles/personal gear.
- (6) Sectors-of-fire: Cover assigned sectors while

mounted/dismounted; cover up/down bridges, rooftops, balconies, storefronts, multi-story structures, and cross streets.

- (7) Scanning: Scan crowds, vehicles, and roadsides for attack
- indicators. (NOTE: Communicate indicators throughout the convoy).
   (a) Beware of motorcycles, vans with side doors, and dump trucks.
  - (b) Beware of objects in the road (cars, potholes, objects, fresh asphalt/concrete, and trash).
- (8) Convoy Speed. \_\_\_\_min/max\_
  - (a) Speed is dictated by either the rear vehicle's ability to keep up or placing slower vehicles in the lead.
  - (b) Highways/open roads: Example: 50+ mph.
  - (c) Urban/channeled areas: As fast as traffic will allow. (Brief evasive maneuvers, bumping and blocking technique, and use of ramming techniques to allow for continuous movement of convoy.)
- (9) Vehicle Interval

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- (a) Highways/open roads/clover leafs/bridges/ramps: Open spacing, but do not allow vehicles to enter convoy.
- (b) Urban/channeled areas: Close interval, but must have visual of tires on vehicle in front of your vehicle. Drive on wrong side as necessary.

**(10)**Headlight Status (on/off, blackout, use of night observation devices)

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(11)ROE for Convoy Operations. (Theater Specific)(12)Battle drills will be rehearsed—no need to cover in brief.

#### Para 4. ADMIN and LOGISTICS: (Equipment) a. Individual Equipment (pre-combat inspections [PCIs] see checklist) b. Vehicles (see PCI checklist). Para 5. COMMAND and CONTROL: a. Chain of Command. (Positioning in Convoy) **b.** Convoy Call Sign(s):\_\_\_ c. Area of Operations Communications/MEDEVAC and CASEVAC Plan. d. Convoy Primary/Alternate/Contingency/Emergency (PACE) Communications (extra batteries) e. Vehicle internal (Back to:\_\_\_\_ \_\_) f. Hand and arm/visual signals (per unit SOP). Radio: \_\_\_\_\_ primary/alternate \_\_\_\_\_/ Radio: \_\_\_\_\_ primary/alternate \_\_\_ g. Vehicle to vehicle Radio: \_\_\_\_\_ primary/alternate \_\_\_\_/\_\_ Radio: \_\_\_\_\_ primary/alternate \_\_\_\_/\_ Hand and arm/visual signals (as per unit SOPs). h. Convoy to Higher HQ Radio: \_\_\_\_\_ primary/alternate \_\_\_ Radio: \_\_\_\_\_ primary/alternate \_\_\_\_\_ i. Other Support (External to convoy) MSF/QRF: freq: \_\_\_\_\_ call sign: (NOTE: HOPSETS changes with ORs). Air Support: freq: \_\_\_\_\_call sign: \_\_ CASEVAC: freq: \_\_\_\_\_call sign: \_\_\_\_\_ Supporting arms: freq: \_\_\_\_\_call sign: \_\_\_\_\_ j. Crew commands/Pro-words/Brevity Codes: **k.** Blue Force Trackers SN #s. I. Pyrotechnics. m. Special instructions (SPINS). n. Reports (individual and higher HQ). o. Give time hack and ask for questions.

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# Appendix D RISK MANAGEMENT

Table D-1.	Risk Management Card

PLANNING			
	F	Preparation Tin	ne
Guidance	Optimum	Adequate	Minimal
Verbal	3	4	5
FRAGO	2	3	4
OPORD	1	2	3
Score			

INTELLIGENCE				
	Curr	ent Route Inte	lligence	
	>12 Hours	>24 Hours	Historical	None
Level 2	3	4	5	
Level 1	2	3	4	
Random	1	2	3	
Score				

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COMMUNICATION			
		Type of Systems	•
Overall Threat	MTS / DTRAK 2-10 SINCGAR	2-10 SINCGAR	>2-10 SINCGAR
Level 2	3	4	5
Level 1	2	3	4
Random	1	2	3
Score			

TRAINING			
		Current Status	
	<b>75%</b>	<b>75%</b>	>75%
Overall Threat	CQM/CSS LFX	Weapon Qual	Not Trained
Level 2	3	4	5
Level 1	2	3	4
Random	1	2	3
Score			

SOLDIER ENDURANCE				
		Length of	Operation	1
Amount of rest in last 24 hours	1-2 hr	3-5 hr	6-8 hr	9+ hr
>6 hours	2	3	4	5
6+ hours	1	2	3	4
Score				

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	Se	ecurity (WPN) Supp	ort Provided	
Overall Threat	External	1-8 Gun Truck		M16 Only
Level 2	3	4	5	5
Level 1	2	3	4	5
Random	1	2	3	4

DEDCOMMEN	. PROTECTION
PERSUNNEL	PRUIFULIUN

	Hardening / Equipment				
Overall Threat	S / B Hardening FRAG Vest	B Hardening FRAG Vest	FRAG Vest	None	
Level 2	3	4	5	5	
Level 1	2	3	4	5	
Random	1	2	3	4	
Score					

VISIBILITY						
		Weather/Light				
Location	Clear/Day	Dusty/Day	Sand- storm/Day	Night		
Desert/Iraq	2	3	4	5		
Score						

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		Preparation			
Overall Threat	SOP/Rehearsed Key Actions	SOPs No Rehearsals	No SOP No Rehearsals		
Level 2	3	4	5		
Level 1	2	3	4		
Random	1	2	3		
Score	_				
		1			
0-19	20-30	31-39	40+		
Low Risk	Medium	High Risk	Very High		
Total Score		-			
NOTE: IF 2 OR MO OR MORE, THE OVE POINTS TO THE TO CARGO.	RALL RISK IS CO	NSIDERED "HIG	GH." ADD 3		
Commander Signatu Date	ire				
This card is prepare to the convoy comm commander will bac established control	hander at receipt on k brief the compa	of mission. The ny commander	convoy if any		

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Check all that apply	II that Risk Lev		Control Measures	Residual Risk L/M/H
	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, PCIs, Class II, (strip map)	
	Exhaust Fumes		Enforce no sleep rule PMCS, PCIs	
	Cargo (HAZMAT)		Training, PCts	
	Civilians		Commo, convoy briefs, training	
	Cold Weather	<	Cold weather training, PCIs	
	Communication		Training, commo personnel, PMCS, PCIs	
	Desert Environment		Training, convoy briefs	
	Disorientation		Convoy briefs, strip map (SOPs), training (PLGR, 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		NVGs, chemlight markings, training	
	Long Hauls		Drivers training, SOPs, rest halts, convoy briefs	
	Minefield		Rehearsals, battle drills	
	Mud		Recovery training, drivers training (all wheel drive)	

Table D-2. Sample Tactical Convoy Risk Reduction Worksheet

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Check all that apply	Hazard	Risk Level L/M /H	Control Measures	Residual Risk L/M/H
	NBC Attack		Rehearsals, PCIs, recons, commo, training (NBC teams)	
	Recovery Operations		Training (with maintenance, self recovery- winch, toe-bar	
	Reduced Visibility		Intervals, chemlight markings, training	
	Roll Over	$\langle$	Drivers training, recovery, SOPs (seatbelts, Kevlars)	
	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	$\mathcal{D}$	Reduce speed, drivers training, convoy briefs	
	Sudden halt		Intervals, training, battle drills (SOPs)	
	Sunlight		Clean windows, sunglasses	
	Fire		Fire extinguishers, evacuation drills	

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### Appendix E TRAINING

### Individual Skill Sets Required Before Collective Training for Convoy Specific Tasks

**a.** Weapons familiarity/qualification. Close quarters marksmanship (CQM) individual and CSWs/individual movement techniques.

**b.** First aid or combat life saver training.

**c.** Driver's training, including limited visibility/NBC driving and vehicle

configuration/load plan/maintenance training.

d. Basic navigation training, mounted and dismounted, urban if possible.

**d.** Basic communications/radio operators training/visual communications training (train to call for fire, CAS, MEDEVAC).

**e.** Special teams training (aid and litter teams, CASEVAC teams, recovery teams, landing zone teams for MEDEVAC).

f. IED awareness.

g. ROE training.

### **Recommended Collective Training Program**

a. Battle Drills (See chapter III.)

b. Situational Training Exercises (Contact Joint Readiness Training Center [JRTC]

BDE C2 cell, ref: Convoy STX Lane Training & Evaluation Outlines).

c. Convoy Live Fire (See Appendix F for Training Resources).

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### Appendix F RESOURCES

#### **IED Resources**

(SIPRNET site) https://iedtaskforce.army.smil.mil

### **General Websites**

a. Air Land Sea Application (ALSA) Center website: <u>www.alsa.mil</u>
b. ALSA/Center for Army Lessons Learned (CALL) Interpreter Ops handbook, <u>https://wwwmil.alsa.mil/interpreterops.htm</u>
c. Army Training Library(Reimer): <u>www.train.army.mil</u>

**d.** CALL Handbook 03-33 Convoy Leader Training:

https://call2.army.mil/products/Handbook.asp

e. Center for Army Lessons Learned (CALL): <u>http://call.army.mil/</u>

f. Combat Convoy Simulation Exercise Training:

http://www.commandoperationscenter.com

g. Combined Arms Support Command website: http://www.cascom.army.mil

h. Logistics Tool and National Stock Number Lookup tool:

http://logtool.net/html/02USA\_1identify.php

### Training

a. Convoy LFX training support package:

https://www.cascom.army.mil/private/TD/Transportation/training\_products/Conv ov\_Live\_Fire/conv\_live\_fire.htm

b. Combat Life Saver (CLS/Medics): http://www.cs.amedd.army.mil/clsp/

c. Joint Readiness Training Center (JRTC) Website: www.irtc-polk.army.mil

**d.** Reimer Digital Library: <u>http://www.train.army.mil/</u>

e. Training Support Package for Convoy Survivability:

http://www.cascom.army.mil/private/TD/Transportation/training\_products/Convo y%20Survivability/convoy\_surv.htm

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Nomenclature	NSN
Ring Mount for vehicles /	See Note Below
weapon system	
M6 Pedestal Mount	1005-01-411-6341
Cargo Straps 10K lbs,	1670-00-937-0271
Kevlar Blanket, Ballistic	
Tow Cables	
Combat Life Saver Bag,	6545 01 254 9551
plus supplies	
VS-17 Panel	8345-00-174-6865
Strobe Light	6230-01-411-8535
Strobe, Infrared	5855-01-438-4588
Ballistic Eye Protection	4240-01-504-5326
Light, Marker, Distress	6230-01-411-8535
Compass, Lensatic	6605-01-196-6971
Fire Extinguisher, C Type (for Personnel)	
Vehicle First Aid Kit	6545-00-922-1200
	0545-00-922-1200
Swing Arm Mount	(000 00 705 4045
Spot Light	6220-00-735-4815
Ratchet Straps	
Steel Carabineers 10K lbs	
Sling Set, 25K lbs	1670-01-027-2900
Gloves, Nomex	8415-01-074-9432
Gloves, Kevlar Impact II	SMALL- 8415MP-CT05-08
СТ	MEDIUM- 8415MP-CT05-09
	LARGE- 8415MP-CT05-10
	XL- 8415MP-CT05-11
	XXL- 8415MP-CT05-12
Run Flat Tires	6650-01-108-6629
Binoculars	
GPS	
Mirror, Emergency Signaling, Type II	6350-00-105-1252

Table F-1. Convoy Equipment National Stock Numbers

Nomenclature	NSN
Kit bag, flyers	8460-00-606-8366
MOUT / Mechanical	
breacher's kit	
Smoke Grenade Launchers	

NOTE: Vehicle/Weapon System Ring Mounts (from TB 43-PS-621, PS Preventative Maintenance Monthly, dtd Aug 2004):

#### MK19 Vehicle Ring Mount

MK 93 Mod 1 NSN: 1005013832757 or MK Mod 9 NSN: 1010014123159 M1025/M1026/M1114 HMMWV pintle adapter NSN: 3120011885082 M66 machinegun mount ring NSN: 1005007012810 800 series 5 ton mounting kit NSN: 1005012264589 Cab reinforcement kit NSN: 2590013222694 LMTV and FMTV mounting kit NSN: 1005013815431 HEMTT mounting kit NSN: 2590012206377 (incl M66 mount ring) PLS mounting kit NSN: 1005013632502 Lightweight ring mounting kit for 900 series 5 ton NSN: 1005014323339 Cab reinforcement kit 2590014369144

#### M240B/M249 Vehicle Ring Mount

Ammo adapter bracket assembly NSN: 1005014318324 Deflector kit NSN: 1005014680552 M197 machinegun mount NSN: 1005014134098 M1025/M1026/M1114 HMMWV pintle adapter NSN: 3120011885082 M66 machinegun mount ring NSN: 1005007012810 800 series 5 ton mounting kit NSN: 1005012264589 Cab reinforcement kit NSN: 2590013222694 LMTV and FMTV mounting kit NSN: 1005013815431 HEMTT mounting kit NSN: 2590012206377 (incl. M66 mount ring) PLS mounting kit NSN: 1005013632502 Lightweight ring mounting kit for 900 series 5 ton NSN: 1005014323339 Cab reinforcement kit NSN: 2590014369144

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### M2 Vehicle Ring Mount

MK 93 Mod 1 NSN: 1005013832757 or MK Mod 9 NSN: 1010014123159 or 6650 Machinegun mount NSN: 1005007046650 M1025/M1026/M1114 HMMWV pintle adapter NSN: 3120011885082 M66 machinegun mount ring NSN: 1005007012810 800 series 5 ton mounting kit NSN: 1005012264589 Cab reinforcement kit NSN: 2590013222694 LMTV and FMTV mounting kit NSN: 1005013815431 HEMTT mounting kit NSN: 2590012206377 (incl M66 mount ring) PLS mounting kit NSN: 1005013632502 Lightweight ring mounting kit for 900 series 5 ton NSN: 1005014323339 Cab reinforcement kit NSN: 2590014369144

Nomenclature	National Stock Number		
2x2 Gauze Surgical Sterile	6510-00-559-3163		
Scissors Bandage	6515-00935-7138		
Kurlex Gauze			
Glove Exam Large	6515-00-226-7692		
Intravenous Inj Set	6515-00-115-0032		
Catheter And Needle 18	6515-01-282-4878		
Gauge			
Splint Universal 36x4.5in	6515-01-225-4681		
Ringers INJ 500ml	6505-01-312-7873		
Pad Prov-Iod Impregnated	6510-01-010-0307		
Alcohol Prep Pad	6510-01-425-0026		
Tourniquet Adult	6515-01-146-7794		
Adhesive Tape Surg 1in	6510-00-926-8882		
Bandage 37x37x52in	6510-00-201-1755		
Dressing First Aid	6510-00-159-4883		
Airway 100mm (LG)	6515-00-687-8052		
Airway 80mm (SM)	6515-00-958-2232		
Bandage Gauze Elastic	6510-01-164-2694		

Table F-2. Combat Life Saver Kit

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### Appendix G TACTICAL CONVOY OPERATIONS SOP GUIDELINES

**a.** There are important planning considerations that should be included in unit SOPs for tactical convoy operations.

**b.** The advantage to a well written, easily understood SOP is that it saves time in planning, briefing, and rehearsing. It is up to the leadership that SOP guidelines are followed by all members of the unit and updated as appropriate.

**c.** SOPs should conform to the next higher headquarters. At a minimum, the SOP should cover the following subjects:

- (1) Duties of the CC and other convoy control personnel.
- (2) Convoy organization.
- (3) Weapons and ammunition to be carried.
- (4) Hardening of vehicles.
- (5) Protective equipment to be worn.
- (6) Preparation of convoy vehicles; for example, information on tarpaulins,
- tailgates, and windshields.
  - (7) Counter-ambush actions.
  - (8) Operations security (OPSEC) measures.
  - (9) Immediate action drills/battle drills.
  - (10) Actions during scheduled halts.
  - (11) Maintenance and recovery of disabled vehicles.
  - (12) Refueling and rest halts.
  - (13) Communications.
  - (14) Actions at the release point.
  - (15) Reporting.
  - (16) Specialty Teams (roles, equipment, and operating procedures).
    - (a) Aid and Litter Team
    - (b) Combat Life Saver
    - (c) Landing Zone Team
    - (d) Recovery Team

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### REFERENCES

#### **Joint Publications**

JP 0-2, Unified Action Armed Forces (UNAAF). July 2001 JP 3-09.3, JTTP for Close Air Support, September 2003

#### **Multi-Service**

FM 3-09.32, MCRP 3-16.6A, NTTP 3-09.2, AFTTP(I) 3-2.6, Multi-Service Procedures for the Joint Application of Firepower (JFIRE), October 2004
ALSA and CALL Handbook No. 04-7, Interpreter Operations, March 2004
MPRI Convoy Leader Handbook, Revision VI, November 2004
CJTF-7 OIF Smart Card 2, Version 1.A., December 2003
CALL Handbook No. 04-5, USSOCOM Combat Convoy Handbook, April 2004

#### Army

CALL Handbook No. 03-6, Tactical Convoy Operations, March 2003 CALL Handbook No. 3-33, Convoy Leader Training, November 2003 CALL handbook No. 04-27, Convoy Leader Training, November 2004 Graphic Training Aid (GTA) 90-01-004 Logistics Convoy Operations GTA 90-01-001 Improvised Explosive Device (IED) and Vehicle Borne Improvised Explosive Device (VBIED) Smart Card

ARTEP 7-90-MTP; Mission Training Plan for the Infantry Mortar Platoon, Section, and Squad, August 1989

ARTEP 55–406-MTP, Mission Training Plan for the Transportation Movement Control Battalion, August 2002

ARTEP 55-406-30-MTP, Transportation Movement Control, March 2000

ARTEP 55–506–10-MTP, Mission Training Plan for Movement Control Team, June 2002

FM 3-21.71(FM 7-7J); Mechanized Infantry Platoon and Squad (Bradley). August 2002

FM 3-90; Tactics, July 2001

FM 5-170, Engineer Reconnaissance, May 1998

FM 7-7; The Mechanized Infantry Platoon and Squad (APC), March 1985

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FM 17-97; Cavalry Troop, October 1995 FM 17-98; Scout Platoon, April 1999 FM 21-60, Visual Signals, September 1987 FM 55–30; Army Motor Transport Units and Operations, June 1997 JRTC Convoy Leader Handbook, March 2002

### Marine Corps

MCRP 4-11.3F, Convoy Operations Handbook, September 2001

References-2 FM 4-01.45/MCRP 4-11.3H/NTTP 4-01.3/AFTTP(I) 3-2.58 24 March 2005

## GLOSSARY PART I – ABBREVIATIONS AND ACRONYMS A

A	
A&L	aid and litter
ACC	assistant convoy commander
ACE	ammunition, casualties, equipment
ALSA	Air Land Sea Application
AO	area of operations
AOR	area of responsibility
ASOC	air support operations center
В	
BMNT	before morning nautical twilight
С	
C2	command and control
CAE	counter-assault element
CAS	close air support
CASEVAC	casualty evacuation
CC	convoy commander
CDR	commander
CIB	combat imagery base
CLS	combat lifesaver
COA	course of action
CP	checkpoint
CQM	close quarters marksmanship
CS	combat support
CSS	combat service support
CSW	crew-served weapon
D	
DASC	direct air support center
DRAW-D	defend, reinforce, attack, withdraw, and delay
E	
EENT	end of evening nautical twilight
EOD	explosive ordnance disposal
EPW	enemy prisoner of war
F	
FAC(A)	forward air controller (airborne)
FBCB2	force battle command, brigade and below
	(see also, blue force tracker)
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FDC		fire direction center	
FIST		fire support team	
FOB		forward operating base	
FRAG	0	fragmentary order	
FSE	0	forward security element	
1 JL	G	forward security element	
GPS	J	global positioning system	
	н	global positioning system	
HQ		headquarters	
	I		
IED		improvised explosive device	
	J		
JSTAF	RS	Joint Surveillance Target Attack Radar Sy	stem
JTAC		Joint terminal attack controller	
	L		
LOC		Lines of communication	
LVC		lead vehicle commander	
LZ		landing zone	
	М		
MEDE		medical evacuation	
METT	-TC	mission, enemy, terrain and weather, tim	ie,
		troops available, and civilian	
MILS	TRIP	Military Standard Requisition and Issue	
		Procedure	
MP		military police	
MR		moonrise	
MRE		meals ready to eat	
MS		moonset	
MSF		mobile security force	
MSR		major supply route	
MTS		Movement Tracking System	
MTTP		multi-Service tactics, techniques, and	
	N	procedures	
NAV		navigator	
NBC		nuclear, biological, chemical	
NCO		noncommissioned officer	
NSN		national stock number	
Glossary-2	FM 4-01.45	/MCRP 4-11.3H/NTTP 4-01.3/AFTTP(I) 3-2.58	24 March 2005

NTV NVG	non-tactical vehicle night vision goggles
ОСОКА	observation/fields of fire, cover and concealment, obstacles, key terrain, avenues
OGA OPCON OPORD OPR OPSEC OVM	of approach other governmental agency operational control operations order office of primary responsibility operations security on-vehicle material
PACE	primary/alternate/contingency/emergency
PCC	pre-combat check
PCI	pre-combat inspection
PLGR	precise lightweight global positioning system
	(GPS) receiver
PMCS	preventative maintenance checks and services
PSD	personal security detail
Q QRF R	quick reaction force
RECCE	reconnaissance
ROE	rules of engagement
RP	release point
RPG	rocket propelled grenade
S	
SALUTE	size, activity, location, unit, time, equipment
SINCGARS	single-channel ground and airborne radio system
SITREP	situation report
SOF	special operations forces
SOP	standard operating procedure; standing
CD	operating procedure
SP SPOTREP	start point sport report
SUV	sport report sport utility vehicle
30 V	sport utility vehicle
24 March 2005	FM 4-01.45/MCRP 4-11.3H/NTTP 4-01.3/AFTTP(I) 3-2.58 Glossary-3

SVBIED	stationary vehicle-borne improvised explosive device
Т	
ТСР	traffic control point
TLP	troop leading procedures
TOC	tactical operations center
TTP	tactics, techniques, and procedures
U	
UAV	unmanned aerial vehicle
UTM	universal transverse mercator
UXO	unexploded ordnance
V	
VBIED	vehicle borne improvised explosive device
VC	vehicle commander
W	
WARNO	warning order

### **PART II – TERMS AND DEFINITIONS**

**360 Degree Security**—Combining maximum all-around visibility for situational awareness, interlocking sectors of fire and mutual support.

- **Blocking**—An advanced technique used to physically block the road with a vehicle to prevent traffic from feeder roads, traffic circles and on/off-ramps from intermingling with the convoy.
- **Blow Through**—A technique used to move through a threat or area. Usually applies to intersections, IED detonation, or enemy fire.
- **Bumping**—The replacement of one blocking vehicle with another. This technique is similar to "road guards" during a unit physical training run. Blocking vehicles "bump" ahead and act as barriers to third party interference.
- **Casualty Evacuation (CASEVAC)**—FM 8-10-6 defines as a term used by nonmedical units to refer to the movement of casualties aboard non-medical vehicles or aircraft. En route medical care is not provided.
- **Close Air Support (CAS)**—Air action by fixed- and rotary-wing aircraft against hostile targets that are in close proximity to friendly forces and which require detailed integration of each air mission with the fire and movement of those forces.

Cold Side—Side of vehicle opposite that taking fire.

#### Glossary-4 FM 4-01.45/MCRP 4-11.3H/NTTP 4-01.3/AFTTP(I) 3-2.58 24 March 2005

- **Convoy Escort**—Any security element/augmentation that has an independent task organization that will be supporting a convoy—to include air support (e.g., MP detachment, rotary wing escort, or security element from a maneuver battalion).
- **Daisy Chain**—Two or more explosive devices wired together so that a single signal will detonate all the munitions at once.
- **Danger Area-(DOD Only)**—A specified area above, below, or within which there may be potential danger.
- Five/twenty-five (5/25) Meter Scan—From position, begin scanning out 5 meters and increase out to 25 meters.
- **Green Convoy**—For purpose of this publication, convoys that consist of military vehicles and personnel.
- **Guardian Angel**—During short and long security halts, Guardian Angel personnel are emplaced in hidden positions where they can observe and engage the enemy before they can attack the convoy.
- **Gun Truck**—A gun truck is a vehicle where the primary weapon system is a CSW with a 360 degree field of fire capability and usually hardened for protection of vehicle and crew. An example is a hardback/or up-armored HMMWV (M1114/M1113) with a CSW. Gun trucks are essential direct fire support vehicles for convoys. Gun trucks are manned by a trained crew consisting of VC, gunner, and driver. Gun trucks have the capability to suppress targets and maneuver within unprotected convoy areas.
- **Honesty Trace**—Route actually traveled versus route planned. Normally tracked by intelligence section (S-2) to identify friendly trends that could be predictable by enemy over time.
- Hot Side—Side of vehicle that is taking fire.
- Improvised Explosive Device (IED)—Device placed or fabricated in an improvised manner incorporating destructive, lethal, noxious, pyrotechnic, or incendiary chemicals, designed to destroy, disfigure, distract, or harass. It may incorporate non-military or military components; it could be static or vehicle-borne. IEDs may have an NBC capability. Vehicle-borne IEDs (VBIEDs) may be the most dangerous due to increased explosive payload.
- Medical Evacuation (MEDEVAC)—FM 8-10-6 defines as the timely, efficient movement and en route care by medical personnel of the wounded, injured, and ill persons from the battlefield and other locations to MTFs. The term MEDEVAC refers to both ground and air assets. Divisions are equipped with both ground and air MEDEVAC assets.

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- Pre-Combat Checks (PCCs)—PCCs are procedures for all individuals assigned to a convoy to determine if equipment required for a mission is available and serviceable. PCCs are effective only if they are organized and conducted using an up-to-date checklist. Appendix A provides suggested checklists for leaders, specialty teams, and individuals. Use these checklists as a guideline. The type of unit, equipment, operational area, and mission will dictate additions, substitutions, and deletions. Follow through is essential, missing or unserviceable equipment must be rapidly reported, repaired, or exchanged. These checks should be scheduled soon after the warning order is issued at a time when individuals are released from other duties.
- **Pre-Combat Inspections (PCIs)**—PCIs are the series of inspections scheduled early in the preparation sequence to insure that all PCCs have been performed properly and that all vehicles, weapons, communications, special, and individual equipment are available and functional. PCIs are most effective when organized and conducted to exacting standards by first line supervisors with systematic spot checks made by the senior convoy leadership.
- **Rolling Stop**—The procedure to slow vehicle and scan the road starting at 5 meters and moving out to 25 meters around vehicle for IEDs before coming to a complete stop.
- **Route Classifications**—Classification assigned to a route using factors of minimum width, worst route type, least bridge, raft, or culvert military load classification, and obstructions to traffic flow.

Sector of Fire—The area that can be covered with direct fire.

Sector of Observation—The entire area visible to the crew member.

- **Spotter Personnel**—Personnel designated to look for specific threats to the convoy.
- **Tactical Convoy**—A deliberately planned combat operation to move personnel and or cargo via a group of ground transportation assets in a secure manner to or from a target destination under the control of a single commander in a permissive, uncertain, or hostile environment.
- **Third Party Personnel/Vehicle**—Personnel and/or civilian vehicles operated by civilians that are not part of the convoy operation.
- White Convoy—For purpose of this publication, convoys that consist of civilian/contractor vehicles and personnel.

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