

**FOUO
FINAL COORDINATION DRAFT**

FAST TRACK

Tactical Convoy Operations

**Multi-Service Tactics,
Techniques, and
Procedures (MTTP)
Package**

Suspense: 7 Dec 04



**MEETING THE IMMEDIATE
NEEDS OF THE WARFIGHTER**

FAST TRACK

FOUO

FOUO

ARMY, MARINE CORPS, NAVY, AIR FORCE

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24



AIR LAND SEA
APPLICATION
CENTER

TACTICAL CONVOY OPS

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

FM XX-Z.X (FM XX-XX.X)

MCRP x-xx

NTTP x-xx-x

AFTTP(I) x-xx-x

22 OCTOBER 2004

DISTRIBUTION RESTRICTION: Distribution authorized to DOD and DOD contractors only to protect technical or operational information from automatic dissemination under the International Exchange Program or by other means. This determination was made on 4 February 2003. Other requests for this document will be referred to HQ TRADOC, ATTN: AFTC-Ri, Fort Monroe, VA 23651; HQ AFDC/DJ, Langley AFB, VA 23665; HQ MCCDC, C427, Quantico, VA 22134; or NWCD, ATTN: N5, Newport, RI 02841.

DESTRUCTION NOTICE: Destroy by any means that will prevent disclosure of the document.

MULTI-SERVICE TACTICS, TECHNIQUES, AND PROCEDURES

FOUO

FOREWORD

1
2 This publication has been prepared under our direction for use by our
3 respective commands and other commands as appropriate.

4 **ROBERT W. MIXON, JR.**
5 Major General, US Army
6 Deputy Director/Chief of Staff
7 Futures Center
8 US Army Training and Doctrine
9 Command

ROBERT E. SCHMIDLE
Brigadier General, USMC
Director
Expeditionary Force
Development Center

10 **JOHN M. KELLY**
11 Rear Admiral, USN
12 Commander
13 Navy Warfare Development
14 Command

BENTLEY B. RAYBURN
Major General, USAF
Commander, Air Force Doctrine
Center

15 This publication is available through the Army at Army
16 Knowledge Online (www.us.army.mil) and General Dennis J. Reimer
17 Training and Doctrine Digital Library (www.adtl.army.mil) Web sites,
18 through the ALSA Web site (www.alsa.mil), and through the Air Force at the
19 Air Force Publishing Web site (www.e-publishing.af.mil).

1

PREFACE

2

Purpose

3

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 and subordinates on how to plan, train, and conduct tactical convoy operations in the contemporary operating environment.

4

5

6

7

8

9

10

11

Scope

12

This MTTP publication is a comprehensive reference source to assist convoy commanders 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.

13

14

15

16

17

18

19

20

Applicability

21

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 convoy commanders in combat support or combat service support units from any U.S. Service conducting tactical convoys. 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 multi-Service training manual.

22

23

24

25

26

27

28

Implementation Plan

29

Army. Upon approval and authentication, this publication incorporates the procedures contained herein into the US Army Doctrine and Training Literature Program as directed by the Commander, US Army Training and Doctrine Command (TRADOC). Distribution is in accordance with applicable directives and

30

31

32

FOUO
FINAL COORDINATION DRAFT

- 1 the Initial Distribution Number (IDN) listed on the authentication page.
- 2 **Navy.** The Navy will incorporate these procedures in US Navy training and
3 doctrine publications as directed by the Commander, Navy Warfare Development
4 Command (NWDC). Distribution is in accordance with Military Standard
5 Requisition and Issue Procedure Desk Guide (MILSTRIP Desk Guide) and Navy
6 Standing Operating Procedure Publication 409 (NAV SOP Pub 409).
- 7 **Marine Corps.** The Marine Corps will incorporate the procedures in this
8 publication in US Marine Corps training and doctrine publications as directed by
9 the Commanding General, US Marine Corps Combat Development Command
10 (MCCDC). Distribution is in accordance with the Marine Corps Publication
11 Distribution System (MCPDS).
- 12 **Air Force.** The Air Force will incorporate the procedures in this publication in
13 accordance with applicable governing directives. Distribution is in accordance
14 with Air Force Instruction (AFI) 33-360.
- 15 **User Information**
- 16 a. TRADOC, MCCDC, NWDC, Headquarters AFDC, and the Air Land Sea
17 Application (ALSA) Center developed this publication with the joint participation
18 of the approving Service commands. ALSA will review and update this
19 publication as necessary.
- 20 b. This publication reflects current joint and Service doctrine, command and
21 control organizations, facilities, personnel, responsibilities, and procedures.
22 Changes in Service protocol, appropriately reflected in joint and Service
23 publications, will likewise be incorporated in revisions to this document.
- 24 c. We encourage recommended changes for improving this publication. Key
25 your comments to the specific page and paragraph and provide a rationale for
26 each recommendation. Send comments and recommendations directly to—

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36

Army

Commander
US Army Training and Doctrine Command
ATTN: AFTC-RI
Fort Monroe, VA 23651-5000
DSN 680-3951 COMM (757) 788-3951
E-mail: doctrine@monroe.army.mil

Marine Corps

Commanding General
US Marine Corps Combat Development Command
ATTN: C42
3300 Russell Road, Suite 318A
Quantico, VA 22134-5021
DSN 278-6233/6234 COMM (703) 784-6234
E-mail: deputydirectordctrine@mccdc.usmc.mil

Navy

Commander
Navy Warfare Development Command
ATTN: N5
686 Cushing Road
Newport, RI 02841-1207
DSN 948-1164/4189 COMM (401) 841-1164/4189
E-mail: alsapubs@nwdc.navy.mil

Air Force

HQ AFDC/DJ
155 North Twining Street
Maxwell AFB AL 36112-6112
DSN 493-7442 Comm: (334) 953-7442
E-mail: afdc.di@langley.af.mil

ALSA

ALSA Center
ATTN: Director
114 Andrews Street
Langley AFB, VA 23665-2785
DSN 575-0902 COMM (757) 225-0902
E-mail: alsa.director@langley.af.mil

FOUO
FINAL COORDINATION DRAFT

1 FM XX-X.X(FM NUMBER)
2 (MCRPNUMBER)MCRP XX-X.X
3 (MCRPNUMBER)NTTP X-XX.X
4 (MCRPNUMBER)AFTTP(I) X-X.XX

5 FM X-XX.X US Army Training and Doctrine Command
6 Fort Monroe, Virginia

7 MCRP X-X.X Marine Corps Combat Development Command
8 Quantico, Virginia

9 NTTP X-XX.X Navy Warfare Development Command
10 Newport, Rhode Island

11 AFTTP(I) X-X.XX Headquarters, Air Force Doctrine Center
12 Maxwell Air Force Base, Alabama

22 October 2004

13
14
15 **MULTI-SERVICE TACTICS, TECHNIQUES, AND**
16 **PROCEDURES FOR TACTICAL CONVOY OPERATIONS**

17 **TABLE OF CONTENTS**

	Page
18 EXECUTIVE SUMMARY	VIII
19 CHAPTER I	I-1
20 TROOP LEADING PROCEDURES/PLANNING CONSIDERATIONS.....	I-1
21 Introduction	I-1
22 General Planning	I-1
23 Route Selection.....	I-5
24 Convoy Configuration.....	I-7
25 Vehicle Configuration	I-12

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

1	Convoy Communication	I-12
2	Special Operations Forces Considerations for Convoys.....	I-13
3	Support to Convoys.....	I-14
4	Coalition participation in U.S. convoys	I-16
5	Civilian Contractor participation in U.S. convoys	I-16
6	CHAPTER II	II-1
7	GUN TRUCK AND ESCORT EMPLOYMENT.....	II-1
8	Gun Truck Employment	II-1
9	Convoy Escorts	II-4
10	CHAPTER III	III-1
11	Mounted Tactics	III-1
12	Introduction.....	III-1
13	Movement Formations and Techniques.....	III-4
14	Danger Areas.....	III-7
15	Battle Drills.....	III-17
16	CHAPTER IV.....	IV-1
17	Improvised Explosive Devices & Vehicle Borne IED	IV-1
18	Introduction.....	IV-1
19	Identifying IEDs.....	IV-2
20	Suspicious Activities and Objects.....	IV-5
21	Driving Considerations:	IV-6
22	IED Battle Drills--Actions on IED contact	IV-7
23	Appendices	
24	Convoy Forms And Checklists	A-1
25	The following forms and Checklists are included in this Appendix:.....	A-1
26	Sample Warning Order	A-1
27	Time Schedule	A-5
28	Sample Pre-Combat Checks and Pre-Combat Inspections	A-6
29	Convoy Strip Map Standards.....	A-13
30	Convoy Post-Operations Checklist	A-15
31	Reports.....	B-1
32	Reports Included:	B-1
33	Accident Procedures and Reporting.....	B-1
34	Unexploded Ordnance (UXO)	B-1
35	Spot Report (for any information requiring a report)	B-2

FOUO
FINAL COORDINATION DRAFT

1	SALUTE Report (for enemy contact)	B-3
2	ACE Report (used for reorganization and consolidation after enemy contact).....	B-3
3	Medical Evacuation (MEDEVAC)	B-3
4	Call for Fire	B-4
5	Convoy Briefing	C-1
6	Sample Convoy Commander's Brief (OPORD format)	C-1
7	Risk Management	D-1
8	Training	E-1
9	Individual skill sets required before collective training convoy specific tasks.....	E-1
10	Recommended collective training program	E-1
11	Resources	F-1
12	IED Resources	F-1
13	General Websites	F-1
14	Training	F-1
15	Tactical Convoy Operations Standard Operating Procedures	G-1
16	SOP Guidelines	G-1
17	References	1
18	GLOSSARY	3
19		
20	FIGURES	
21	Figure I-1 Small Convoy Configuration	I-11
22	Figure I-2 Large Convoy Configuration	I-11
23	Figure II-1 Examples of Gun trucks used in Iraq	II-1
24	Figure II-2 Mechanized Security Element Escorting Convoy	II-5
25	Figure III-1 Single Vehicle Sectors of Observation and Fire.....	III-2
26	Figure III-2 Convoy Sectors of Observation and Fire	III-3
27	Figure III-3 Formation: File	III-4
28	Figure III-4 Formation: Stagger	III-5
29	Figure III-5 Formation: Stagger with Gun Trucks	III-5
30	Figure III-6 Formation: Offset	III-6
31	Figure III-7 Formation: Inverted "T"	III-6
32	Figure III-8 Formation: Diamond	III-7
33	Figure III-9 Movement Technique: Changing Lanes	III-7
34	Figure III-10 Blocking Intersection.....	III-9

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

1	Figure III-11 Blocking Multiple Intersections.....	III-10
2	Figure III-12 Danger Areas: Blocking On/Off Ramps	III-11
3	Figure III-13 Danger Areas: Bumping Through Example.....	III-12
4	Figure III-14 Danger Areas: Traffic Circles.....	III-13
5	Figure III-15 Danger Areas: Alternate Traffic Circle Blocking TTP.....	III-14
6	Figure III-16 Danger Area: Deliberate High Clear.....	III-15
7	Figure III-17 Danger Area: Deliberate Low Clear.....	III-16
8	Figure III-18 Danger Areas: Hasty Clearing	III-17
9	Figure III-19 In stride Hasty Vehicle Recovery	III-19
10	Figure III-20 Dismount: Short Halt.....	III-20
11	Figure III-21 Dismount: Long Halt	III-21
12	Figure III-22 React to Contact Flow Chart	III-22
13	Figure III-23 Battle Drill: Blow Through (Unescorted).....	III-23
14	Figure III-24 Battle Drill: Blow Through (Escorted).....	III-23
15	Figure III-25 Battle Drill: Recovery Drill (In Stride Tow)	III-24
16	Figure III-26 Battle Drill: Recovery Drill (Push Through).....	III-25
17	Figure III-27 Battle Drill: Hasty Defense	III-26
18	Figure III-28 Battle Drill: Hasty Attack (Suppress).....	III-26
19	Figure III-29 Battle Drill: Hasty Attack (Assault).....	III-27
20	Figure IV-1 Typical Improvised Explosive Device Configurations.....	IV-2
21	Figure IV-2 Basic IED Attack.....	IV-3
22	Figure IV-3 Decoy IED Attack	IV-4
23	Figure IV-4 Disabled Vehicle IED Attack	IV-4
24	Figure IV-5 VBIED Example	IV-5
25	Figure A-1 Example Strip Map.....	A-14
26		
27		
28	TABLES	
29	Table A-1 Sample Convoy Manifest	A-4
30	Table A-2 Time Schedule.....	A-5
31	Table D-1 Risk Management Card	D-1
32	Table D-2 Sample Tactical Convoy Risk Reduction Worksheet	D-5
33	Table F-1 Convoy Equipment National Stock Numbers.....	F-2

FOUO
FINAL COORDINATION DRAFT

1 Table F-2 Combat Lifesaver Kit F-4

2 **EXECUTIVE SUMMARY**

3 **Multi-Service Tactics, Techniques, and**
4 **Procedures for Tactical Convoy Operations**

5 **Overview**

6 This publication provides a quick-reference guide for convoy commanders
7 operating in combat support and combat service support units. Convoy
8 commanders are faced with many asymmetrical threats as they conduct tactical
9 convoy operations on today's nonlinear, non-contiguous battlefield.

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

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

26 **Troop Leading Procedures/Planning Considerations**

27 Chapter I provides an introduction to critical procedures that convoy
28 commanders must perform before, during, and after executing a tactical convoy.
29 The chapter discusses general planning along with additional considerations
30 (route selection, Vehicle and Convoy configuration, Communications, Support to
31 convoys, Coalition partner and Civilian participation) that will ensure the convoy

1 commander plans all details associated with tactical convoy operations planning.

2 **Gun Truck and Escort Employment**

3 Chapter II provides best practices for employing gun trucks and convoy
4 escorts. The chapter provides recommended task organization, command and
5 control, and TTPs for the security element.

6 **Mounted Tactics**

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

11 **Improvised Explosive Device and Vehicle Borne IED**

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

16 **Appendices**

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

- 21 • Convoy Forms and Checklists
- 22 • Reports
- 23 • Convoy Briefing
- 24 • Risk Management Considerations
- 25 • Tactical Convoy Training
- 26 • Resources - Websites and quick reference for national stock numbers
27 (NSN) of tactical convoy related equipment.

PROGRAM PARTICIPANTS

The following commands and agencies participated in the development of this publication:

Joint

US Joint Forces Command, Norfolk, VA
US Central Command, MacDill AFB, FL
US Special Operations Command, MacDill AFB, FL
US Transportation Command, Scott AFB, IL
MPRI, Udairi, Kuwait

Army

US Army Training and Doctrine Command, Fort Monroe, VA
1st Battalion, Training and Support Field Artillery 290 Regt., Fort Sill, OK
Combined Arms Support Command (CASCOM)/DCD, Fort Lee, VA
ARCENT-KU, Camp Doha, Kuwait
ASG-KU, Camp Arifjan, Kuwait
Joint Readiness Training Center, Ft. Polk LA
National Training Center, Ft. Irwin, CA
Combat Maneuver Training Center, Grafenwohr, GE
765th Transportation Battalion, Ft. Eustis, VA
8th Transportation Bde, Ft. Eustis, VA
2d Brigade, 1st Armored Division, Baumholder, GE

Marine Corps

Marine Corps Combat Development Command, Quantico, VA
1ST Marine Division, Camp Pendleton, CA
Tactical Training Exercise Control Group (TTECG), 29 Palms, CA
MAGTFTC MCAGCC, 29 Palms, CA
MAG 14, Cherry Point, NC

Navy

Navy Warfare Development Command, Newport, RI
First Naval Construction Division, Norfolk, VA
Naval Coastal Warfare GRU TWO, Portsmouth, VA
Naval Construction Battalion Seven Four, Gulfport, MS

Air Force

AFDC/DO, Maxwell AFB, AL

FOUO
FINAL COORDINATION DRAFT

- 1 HQ ACC/LGT/LGTV/LGTVO/LGRV/CEA/DOYA, Langley AFB, VA
- 2 Basic Combat Convoy Course (BC3), Lackland AFB, TX
- 3 820th Security Forces Group, Moody AFB, GA
- 4 96th Ground Combat Training Squadron, Eglin AFB, FL
- 5

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34

Chapter I

TROOP LEADING PROCEDURES/PLANNING CONSIDERATIONS

Introduction

- a. Tactical convoys are characterized by situational awareness, an aggressive posture, agility, and unpredictability. 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. THERE IS NO SUCH THING AS AN ADMINISTRATIVE MOVE IN A COMBAT ZONE!
- b. Tactical convoys are combat operations. They require additional planning and coordination beyond normal line-haul operations due to the noncontiguous, nonlinear battlefield of today.
- c. 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.

General Planning

- d. Sequence of events
 - (1) Initiate TLPs:
 - (a) Receive the mission. The convoy commander (CC) may 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).
 - (b) The CC ensures that he completely understands both the mission and the specified and implied tasks involved.
 - (c) The CC quickly analyzes the unit's current capability to accomplish the assigned mission. "See Yourself" means making 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, raise them immediately.
 - (2) The CC designates an Assistant Convoy Commander (ACC). The CC conducts mission planning while the assistant convoy commander concentrates on staging, inspections, manifesting, and rehearsals. The CC remains responsible for all preparations.

FOUO
FINAL COORDINATION DRAFT

- 1 (3) Convoy Commander determines the timeline based on mission, enemy,
2 terrain and weather, time, troops available and civilian (METT-TC). Experience
3 and unit standard operating procedures (SOPs) will accelerate tactical convoy
4 preparation, especially when time is short.
- 5 (4) Issue the WARNO. WARNOs are issued to ensure that subordinate leaders
6 have key information they need to maximize their preparation time. The CC may
7 issue multiple WARNOs as he receives additional information or changes from
8 higher headquarters (See Appendix A).
- 9 (5) Make a tentative plan. The CC will ensure every member in the convoy
10 has enough information needed to complete the mission. A simplified approach
11 to tactical analysis and planning makes use of the following basic considerations
12 of METT-TC.
- 13 (a) Mission. The CC plans to execute all specified and implied tasks found
14 in the higher headquarters OPORD and commander's intent. Determine specified
15 and implied tasks. Limitations must be identified, considered and applied
16 (detours, restricted routes, rules of engagement (ROE)).
- 17 • Radio frequencies/points of contact.
 - 18 • Timeline.
- 19 (b) Enemy Situation.
- 20 • Coordinate with the unit intelligence officer (S2), movement control
21 element, engineers, and the military police (MP) to assist in
22 development of enemy situation.
 - 23 • Determine known danger areas and possible ambush sites.
 - 24 • Gather any additional information needed to complete the mission.
- 25 (c) Terrain and Weather.
- 26 • Conduct map/route reconnaissance. Identify checkpoints (CP), release
27 points (RP), and rally points along the route. If an actual route
28 reconnaissance cannot be conducted, try to coordinate for aerial
29 reconnaissance (e.g. fixed wing, rotary wing or unmanned aerial vehicle
30 [UAV]).
 - 31 • Identify link-up points and link-up procedures.
 - 32 • Prepare strip map for every vehicle and subordinate leader. (See
33 Appendix A)
 - 34 • Coordinate movement support through adjacent units' area of
35 operations (AO) if required.
- 36 (d) Time.

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

- 1 • Complete the plan as quick as possible to allow for subordinate
2 preparation and implementation.
- 3 • Supervise pre-combat checks (PCC).
- 4 • Conduct coordination.
- 5 (e) Troops Available.
- 6 • Manifest-personnel, supplies, sensitive items. The ACC completes the
7 manifest and forwards to higher headquarters.
- 8 • Identify battle hand-off procedures with quick reaction force (QRF).
- 9 • Identify logistics and life support along the route.
- 10 • Identify availability of materials handling equipment.
- 11 (f) Civilians. Standing ROE will dictate guidance, limitations, and
12 restrictions for civilians supporting military forces as well as non-combatant
13 civilians. Identify any additional requirements to military forces in safeguarding
14 civillian personnel and their vehicle in the convoy.
- 15 (6) Issue the OPORD. (See Appendix C: Convoy Brief)
- 16 (7) Confirm radio frequency, call sign, and signals throughout the route.
- 17 (8) Exchange route intelligence and reconnaissance data.
- 18 (9) Delegate preparatory tasks in priority order.
- 19 (10) Conduct PCCs. (See Appendix A)
- 20 (a) Stage vehicles in order of march.
- 21 (b) Mechanic assists with vehicle PCC.
- 22 (c) Harden vehicles.
- 23 (d) Confirm and update manifest immediately prior to departure.
- 24 (11) Consider the following additional factors:
- 25 (a) Gun trucks. Gun trucks will provide the convoy with additional firepower
26 to deter and/or destroy an enemy threat. See Chapter II for further discussion.
- 27 (b) Forward Security Element (FSE). An advance security element can be
28 used in conjunction with a convoy escort. Its purpose is to move ahead of the
29 convoy as a reconnaissance element providing the CC with route information, as
30 well as current enemy and civilian situational awareness. See Chapter II for
31 further discussion.
- 32 (c) Operations Security (OPSEC). Throughout each phase of planning,
33 preparation, and execution, every effort must be made to maintain OPSEC to
34 deny intelligence to the enemy.
- 35 • Suppress the reflective parts of the vehicles windows and headlights.
- 36 • Consider conducting convoys at night.

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

- 1 • Use proper radio procedures and authorized communications
2 equipment.
3 • Cover cargo.
4 • Do not stencil or write names or information, such as callsigns and
5 frequencies, on windshields.
6 (d) Have a destruction plan to destroy convoy execution matrix, radio fill and
7 in extreme incidences be prepared and equipped to destroy some vehicles or
8 loads.
9 (e) Route vehicle recovery plan.
10 (f) Ambulance/medical coverage (ground and/or air).
11 (g) Dispersion of combat lifesavers (CLS) throughout convoy.
12 (h) Designation of aid and litter teams throughout convoy.
13 (i) Designation of assault teams.
14 (j) Rest or rotation plan for drivers.
15 (k) Window screens to deflect grenades.
16 (l) Supply guard to prevent pilferage.
17 (m) MP, infantry or other escort.
18 (n) Dispersion of commodities throughout the convoy — cross load!
19 (o) Convoy signals (i.e., flares, hand and arm, use of vehicle signals/lights).
20 (p) Fires support plan along the route (indirect and Close Air Support (CAS)).
21 (q) Aviation support.
22 (r) Deception plan considerations.
23 (s) Closure report at destination and upon return.
24 (t) Boundary crossing considerations. Movements that cross unit or
25 national boundaries must be properly coordinated by movement control
26 organizations—before convoy movements. The CC must also have the
27 information available and the capability to contact the units along the route in
28 order to facilitate boundary coordination and convoy support if required.
29 (12) Conduct thorough convoy briefing prior to SP (See Appendix C).
30 (a) Tactical Brief
31 (b) Convoy Execution Matrix.
32 (c) Safety Brief — use Risk Management and Risk Reduction (Appendix D).
33 (d) Battle Drills.
34 (13) Conduct Rehearsals.
35 (a) Battle Drills. Clarify individuals' responsibilities upon contact.
36 (b) Routes. Conduct sand table exercise or route walkthrough with focus on

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

- 1 immediate action drills.
- 2 (c) Medical evacuation (MEDEVAC). Plan for and rehearse medical
- 3 evacuation procedures (ground and air) during convoy operations.
- 4 (d) Communication--To include audio, visual, and radio. Redundant means of
- 5 communication is a must.
- 6 (e) Ensure escort (FSE, gun trucks) roles, responsibilities, and actions are
- 7 understood.
- 8 (f) Vehicle recovery operations for disabled equipment. Ensure PCC included
- 9 checking for tow bars or cables for each vehicle.
- 10 (14) Conduct convoy operation.
- 11 (a) Report SP, CP, RP, crossing of unit controlled boundaries, and other
- 12 significant activities to higher headquarters.
- 13 (b) Report in at destination.
- 14 (15) Conduct debrief of convoy personnel with intelligence/S-2 as soon as
- 15 possible upon return.
- 16 (16) Recover and prepare for follow-on mission.
- 17 (a) Post combat/convoy checks.
- 18 (b) Vehicle maintenance.
- 19 (c) Secure weapons, ammunition and sensitive items.
- 20 (d) Release personnel to subordinate leaders after recovery operations are
- 21 complete.
- 22 e. Summation: The bottom line is that a convoy has all the preparation
- 23 requirements of any detached tactical operation. Plan, prepare, rehearse to
- 24 execute convoys the same way infantry squad conducts a combat patrol.

Route Selection

- 26 a. Route Reconnaissance and Selection. A reconnaissance of possible convoy
- 27 routes should precede the actual selection of a route. Higher headquarters may
- 28 specify the route selected or the determination may be left to the CC. The CC or
- 29 a designated representative should make a reconnaissance of both the primary
- 30 and alternate route by ground or air if circumstances will allow it.
- 31 b. Reconnaissance.
- 32 (1) A map reconnaissance is made first, followed by a physical (ground or air)
- 33 reconnaissance, if possible. When making the map reconnaissance, other
- 34 available information such as engineer intelligence, military police information,
- 35 and aerial photos should be used. Since route conditions are susceptible to
- 36 change in a relatively short time due to enemy action or weather, a physical

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

- 1 reconnaissance is highly beneficial if time and the security situation permit.
- 2 (2)Physical reconnaissance should be conducted in concert with the supporting
- 3 engineer element. This is particularly critical when gap crossings and route
- 4 construction may be required. Aerial reconnaissance may be conducted visually,
- 5 using aerial photography, or using unmanned aerial vehicles (UAVs) to identify
- 6 danger areas and choke points on each proposed route.
- 7 c. Pre Convoy Considerations.
- 8 (1)In general, convoy routes are selected by identifying, evaluating, and
- 9 comparing those factors which tend to facilitate convoy movement and control.
- 10 This information can be analyzed using METT-TC.
- 11 (2)Route Characteristics. Considerations related to route characteristics
- 12 include:
- 13 (a)Road surface and bridge capacity
- 14 (b)Grades
- 15 (c)Height, weight, widths and turning radius limitations
- 16 (d)Trafficability
- 17 (e)Rural vs. urban areas
- 18 (f) Estimated operating speeds over various sections of the route
- 19 (g)Probable traffic conditions
- 20 (h)Probable effect of adverse weather on trafficability
- 21 (i) Convoy control requirements
- 22 (j) Avoid predictability (Don't be easily timed, approached, or observed)
- 23 (k)Friendly and threat force locations
- 24 (3)Enemy Capability. The enemy's capabilities along a route are fully
- 25 evaluated based on current intelligence. Other considerations in evaluating the
- 26 enemy threat include recent experiences by other convoys utilizing the route and
- 27 the identification of known danger areas along the route, which enhance the
- 28 enemy's ability to interdict the convoy.
- 29 (4)Route Classifications. Movement restrictions and highway route control
- 30 classifications must be considered within the Area of Operations (AO). Route
- 31 classification is assigned to a route using factors of minimum width, worst route
- 32 type, least bridge, raft, or culvert military load classification, and obstructions to
- 33 traffic flow. See related individual Service publications for more detail on this
- 34 topic.
- 35 d. Post Convoy Actions
- 36 (1)Record and report actual convoy route taken (as opposed to planned

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

1 route). These should be used as a historical record to avoid patterns and
2 predictability (sometimes referred to as "Honesty Trace").

3 (2) Report any suspicious activity, enemy TTPs, or unusual events to
4 intelligence or counter intelligence element.

Convoy Configuration

5
6 a. General. Convoys are planned to organize and control road movements. This
7 includes tactical movement of combat forces, tactical movement of logistics units
8 and the movement of personnel, supplies, and equipment to support forces in
9 combat.

10 b. A tactical convoy is defined as a deliberately planned combat operation to
11 move personnel and or cargo via a group of ground transportation assets in a
12 secure manner to or from a target destination under the control of a single
13 commander in a permissive, uncertain or non-permissive environment.

14 c. Key Personnel/Teams and Functions/Locations. All of the personnel and team
15 functions described here pertain to any size convoy. Depending on the number
16 of vehicles involved, multiple duties may be performed by a single vehicle crew.

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

19 (a) Optimal location for the CC is in the center or just forward of center of the
20 convoy in order to facilitate command and control. However, the CC is free to
21 travel or move to any location to enhance their ability to command and control
22 the convoy.

23 (b) Overall responsibility for conduct of convoy.

24 (c) Ultimate on-ground decision maker.

25 (d) Approves task organization and delegates personnel and vehicle
26 responsibilities.

27 (e) Conducts convoy OPORD/brief (See Appendix C), and debrief.

28 (f) Responsible for maintaining internal and external communications.

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

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

32 (b) Assists the CC in all duties.

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

35 (d) Preparation and coordination of medical assets to treat and evacuate
36 casualties.

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

- 1 (3)Lead Vehicle Commander (LVC).
- 2 (a)Performs convoy navigation duties.
- 3 (b)Maintains convoy speed/ interval as seen from their location or via radio.
- 4 (c) Is familiar with the route.
- 5 (d)LVC responsibilities are given to mature, experienced subordinate leaders.
- 6 (4)Vehicle Commander (VC).
- 7 (a)Responsible for standard equipment requirements (ammunition, food,
- 8 water, fuel, etc..) as well as, organizing, and rehearsing crew drills of assigned
- 9 vehicle.
- 10 (b)Task organizes all personnel in vehicle based on type of vehicle.
- 11 (c)Maintains communications with CC and other vehicle commanders.
- 12 (d)Provides supervision and guidance to driver as required.
- 13 (e)Serves as alternate navigator (if applicable based on type of vehicle).
- 14 (f)Designates alternate driver (if applicable based on type of vehicle).
- 15 (g)Designates crew-served weapon (CSW) sectors of fire.
- 16 (5)Driver.
- 17 (a)Primary duty is to drive.
- 18 (b)Scans assigned sector of observation.
- 19 (c) Is prepared to return fire in extreme situations.
- 20 (d)Responsible for fueling and maintaining vehicle.
- 21 (e)Can be rotated when required.
- 22 (6)Navigator (NAV).
- 23 (a)Ensures vehicle is on correct route via map, global positioning system
- 24 (GPS) based movement tracking system (Blue Force Tracker, Movement Tracking
- 25 System (MTS), and/or Qualcomm).
- 26 (b)Communicates checkpoints, turns, danger areas, etc, to VC.
- 27 (c)Records changes to route and provides to S-2/intel, post-operation.
- 28 (d)Covers assigned sector with direct fire.
- 29 (7)CSW Operator.
- 30 (a)Responsible for primary and alternate sectors of fire.
- 31 (b)Targets greatest threat along the route.
- 32 (c) Can be rotated out.
- 33 (8)Designated Marksman.
- 34 (a)The purpose of the designated marksman is to facilitate precision fires
- 35 and control rates and quantity of fire returned at the enemy
- 36 (b)Assists the CC to ensure proportionate fire is used for any given threat.

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

- 1 This helps to prevent collateral damage and unnecessary civilian casualties (e.g.
2 a single designated marksman in the convoy engaging a single IED trigger man).
3 (c) Should be an expert shooter if possible and/or have an advanced optical
4 site.
- 5 (9) Security Personnel (SEC). All other personnel participating in convoy.
6 (a) There are no passengers in a tactical convoy.
7 (b) Observe for potential close threats.
8 (c) Signal and direct civilian traffic as required by VC.
9 (d) Can rotate as necessary into other positions (except for NAV or VC).
10 (e) Dismount on order.
11 (f) Under duress, can serve as alternate drivers, NAVs, CSW, or VCs.
- 12 (10) Combat Life Savers (CLS)/Medics. Combat Life Savers / Medics render
13 medical treatment and supervise evacuation of casualties. If possible, multiple
14 CLSs should be assigned throughout the convoy and given responsibility for
15 designated vehicles in order to speed medical attention. If limited capability
16 exists, CLS assets should be positioned in the rear of the formation to better
17 support the convoy.
- 18 (11) Aid and Litter (A&L) Team. The A&L teams consist of two personnel
19 each and are responsible for providing buddy aid, preparation of casualties for
20 movement and/or evacuation under supervision of the CLS. If possible, multiple
21 A&L teams should be assigned throughout the convoy and assigned responsibility
22 for designated vehicles to speed medical assistance. If limited capability exists,
23 teams should be positioned in the rear of the convoy to support the CLS. CLS
24 personnel should not be assigned to an aid and litter team. They should focus
25 on treatment.
- 26 (12) Landing Zone (LZ) Team: The LZ team consists of a minimum of two
27 personnel responsible for establishing and marking the LZ site. If possible,
28 assign an alternate team. PCC should include inventory of all equipment
29 necessary for LZ establishment.
- 30 (13) Assault Team: The CC designates personnel within the convoy to act as
31 an assault element in the event the convoy encounters heavy enemy action
32 requiring the convoy to halt. If the configuration of the convoy (i.e. unit move)
33 has personnel available to dismount the vehicle separate from vehicle crew
34 members, this assault element should travel within the body of the convoy to act
35 as an assault element under the guidance of the CC.
- 36 (14) Recovery Team: Maintenance recovery personnel and vehicle(s) should

FOUO
FINAL COORDINATION DRAFT

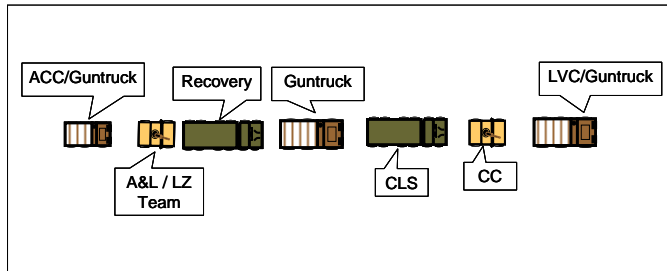
FOUO
FINAL COORDINATION DRAFT

1 be designated to assist with maintenance and recovery of convoy assets along
2 the route. Wheeled maintenance and recovery vehicles are preferred. If not
3 available, the recovery vehicle should be capable of towing any vehicle in the
4 convoy and be equipped with chains, tow cables, etc., and requisite tools to
5 provide minor repairs and recovery. The personnel assigned to this vehicle
6 rehearse hasty recovery prior to SP. This vehicle is normally the next to last
7 vehicle in the convoy if there is a rear gun truck. If it is the last vehicle, it must
8 have a rear guard with an automatic weapon to provide protection to the rear of
9 the convoy. As an additional recovery capability, all vehicles should carry tow
10 cables or ropes in order to be able to recover a like or smaller size vehicle.

11 d. Convoy Organization / Order of March: Convoys are generally organized in
12 three elements: the lead, main body, and trail. The lead element consists of the
13 lead gun truck (if available) and the Lead VC. The main body consists of the
14 majority of the vehicles in the convoy with the CC traveling wherever deemed
15 necessary to best command and control from within this element. Petroleum or
16 ammunition vehicles should be separated throughout this element. Heavier and
17 slower vehicles should be forward in the main body to assist in
18 gauging/maintaining convoy speeds.

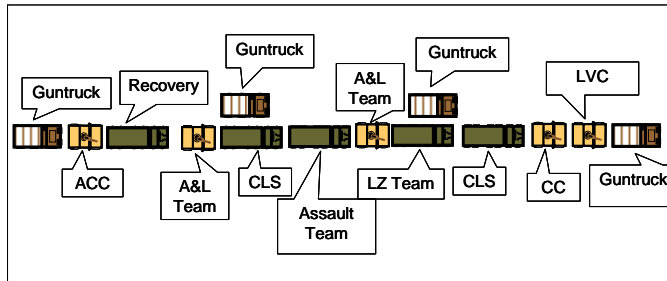
19 e. For large convoys (20 or more vehicles), multiple CLS/Aid and Litter Teams
20 and additional gun trucks should be dispersed throughout this element. The trail
21 element consists of a CLS/Aid and Litter Team, the recovery vehicle(s), the ACC,
22 and the rear gun truck. How key personnel and teams might be organized in an
23 order of march for small and large vehicle convoys is illustrated in Figures I-1
24 and I-2.

FOUO
FINAL COORDINATION DRAFT



1

Figure I-1 Small Convoy Configuration



2

Figure I-2 Large Convoy Configuration

3

f. Convoy Configuration.

4

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

5

(2) Experienced senior driver in lead vehicle.

6

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

7

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

8

(5) Wrecker in rear element of convoy in order to recover disabled vehicles.

9

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

10

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

11

(8) Spread Classes of supplies throughout the convoy.

12

(9) Avoid isolating a gun truck by itself when scouting ahead of the convoy.

13

When scouting ahead, use two Gun Trucks to provide mutual supporting fires.

FOUO
FINAL COORDINATION DRAFT

- 1 (10) When there are only 2-3 gun trucks in a convoy, it is best to keep the
2 gun trucks with the convoy.
3 g. Vehicle Interval
4 (1) Vehicle interval (distance or gap) should be directed by CC according to
5 terrain and threat. A critical factor affecting intervals should include minimizing
6 the enemy threat while maximizing mutually supportive overlapping fires. When
7 a halt occurs, all vehicles stop at the interval dictated by the CC in the convoy
8 brief.
9 (2) Speed and Safety. Convoy Commander will dictate normal speed and
10 catch-up speed during the Convoy Brief. The rate of speed is determined by
11 METT-TC and:
12 (a) Physical condition and level of training of the vehicle operators.
13 (b) Types and mechanical condition of the convoy vehicles.
14 (c) Speed of the slowest vehicle based on capability, type, or weight of load.
15 (d) Degree of urgency the convoy requires.
16 (e) Condition of the roads (dust, mud, snow, and ice).
17 (f) Physical characteristics of the roadway along the route (grades, sharp
18 turns, congestion).
19 (g) Weather conditions.

Vehicle Configuration

- 20
21 a. Hardening Vehicles--Kevlar blankets, armor plating, ballistic glass, other
22 protective devices (i.e. sand bags).
23 (1) Makes certain vehicle components less vulnerable.
24 (2) Significantly protects occupants from injury or death in the case of attack.
25 b. Camouflage and Concealment.
26 (1) Camouflage or cover shiny surfaces.
27 (2) Paint vehicles in a pattern to blend in with the terrain and break the outline.
28 (3) Train operators to look for other means of concealment to break the outline
29 of the vehicle.
30 (4) Don't run lights during a daytime convoy.
31 (5) Tape over running lights and front lights to reduce profile.

Convoy Communication

- 32
33 a. Primary means of communication with movement control, air support, and
34 within the convoy is by radio. Radios must be secure-capable communications
35 means.
36 b. There are three types of communications to be considered:

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

- 1 (1) Vehicle internal.
2 (2) Truck to truck.
3 (3) External to convoy.
4 c. Alternate communications techniques within the convoy (e.g. hand signals,
5 pyrotechnics, vehicle signals, etc.) must be covered by the CC during the convoy
6 briefing and rehearsals.
7 d. Strive to have minimum of two GPS navigation and messaging systems within
8 each convoy.
9 e. CC and ACC know theater level convoy channel to coordinate with Battalion
10 level command posts that monitor and can assist with QRF.
- Special Operations Forces Considerations for Convoys**
- 11
12 f. Conventional forces must be capable of identifying friendly special operations
13 forces (SOF) so as not to mistakenly confuse them with enemy forces. SOF
14 elements may be operating throughout the AO performing such missions as:
15 (1) Critical Intelligence Collection
16 (2) Direct Action
17 (3) Training of Forces
18 (4) Civil Military Operations
19 (5) Personal Security Details
20 g. SOF units may come from US Forces, coalition forces, or other government
21 agencies.
22 h. Conventional forces conducting convoy operations must be aware that SOF
23 operates in their midst. SOF operate in a discreet manner using non-tactical
24 vehicles (NTV) (e.g. Armored Sedans/SUVs, local-style sedans/vans/trucks, and
25 "Technical" (armored pick-up trucks such as the Toyota Hi-Lux). These
26 operators may not be in conventional uniform or lack a "military appearance."
27 SOF will do their best to forewarn conventional forces either through prior
28 coordination or deconfliction. However, this is not always possible either due to
29 OPSEC, time, or other considerations.
30 i. SOF will also use tactical vehicles in an unconventional manner or
31 configuration such as having doors removed, outboard faced seating, and limited
32 seatbelt use. SOF will operate in patrols as small as two vehicles, day or night,
33 in any location, and will often ignore local traffic control mechanisms. Tactical
34 Vehicles include, but are not limited to: M1113 desert/ground mobility vehicle,
35 ranger special operations vehicle, and foreign tactical trucks.
36 j. Expect SOF, traveling in a discreet manner, to approach the convoy with

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

- 1 caution and with some form of friendly marking (near recognition). Examples
2 include, but are not limited to:
- 3 (1)VS-17 Panels.
 - 4 (2)US Flags.
 - 5 (3)Ball Caps.
 - 6 (4)ID cards.
 - 7 (5)“Wig-Wag Lights”/headlight code.
 - 8 (6)Infra red strobe.
 - 9 (7)Hand/arm signals (with eye contact).
- 10 k. In order to prevent fratricide, it is imperative that conventional forces:
- 11 (1)Are aware of the presence of SOF units along the convoy route.
 - 12 (2)Quickly identify discreet friendly forces.
 - 13 (3)Do not point weapons systems at the discreet friendly forces.
 - 14 (4)Do not prevent or otherwise hinder the passage of SOF in vicinity of the
15 convoy.

Support to Convoys

- 17 a. Aviation: Aviation can be a force multiplier to the CC. The overt presence of
18 aircraft will often prevent an attack or cause the enemy to break contact.
19 Unfortunately, effective employment of aircraft can be confusing. In most cases
20 a convoy will not have a dedicated joint terminal attack controller (JTAC). This
21 does not mean that CC cannot coordinate air support. It is the CC's
22 responsibility to become familiar with what air support is available and how to
23 employ it. Aviation support to convoys not only includes close air support (CAS)
24 but also can be used for Route Recce and show of force.
- 25 (1)CAS is air action by fixed- and rotary-wing aircraft against hostile targets
26 that are in close proximity to friendly forces and which require detailed
27 integration of each air mission with the fire and movement of those forces. The
28 most effective way to stop an enemy attack on a convoy is to kill the attackers.
29 The standard format for CAS is spelled out in the ALSA J-FIRE MTTP and JP 3-09.
30 Although terminal attack controllers have very specific procedures for CAS, a
31 qualified JTAC is not required to employ effective air support. The minimum
32 information a CC needs to convey to the pilots are:
- 33 (a)Friendlies location: Friendly location can be passed using grid coordinate,
34 latitude/longitude or reference to a distinctive terrain feature (e.g. a bridge or
35 tower). A formation of vehicles is very visible from the air. However, if there are
36 any friendlies away from the convoy, they need to be identified to the pilots

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

1 before ordnance is delivered.
2 (b) Enemy location: The enemy's position will usually be referenced relative
3 to the convoy's position. For example: 'From the lead vehicle...North 200
4 meters, from the tallest building.' This is referred to as a 'talk-on' and may take
5 some time. Sometimes things that are obvious from the ground are invisible
6 from the air. Don't get frustrated if the pilots can't see the reference point.
7 When in doubt, use plain English. (See Appendix B)
8 (c) Amplifying remarks: The pilot will do his best to defend the convoy,
9 however ROE may require him to ask more specific questions; like proximity to
10 civilians and enemy actions.
11 (d) Lastly, the ground observer needs to be able to stop an unsafe situation
12 before it develops. For example, a friendly unit approaching the enemy position
13 as a jet begins a strafing run. If an unsafe situation does develop the ground
14 observer should transmit "Abort, Abort, Abort" to stop the attack.
15 (2) Route Recce.
16 (a) While on the move, the convoy's route can be examined by either fixed
17 wing, rotary wing, or UAV aircraft.
18 (b) Most tactical jets can carry sensor pods that enable them to reconnoiter
19 the route both day and night, for miles ahead of the convoy position at high
20 altitudes.
21 (c) Attack helicopters also carry light and heat sensors and can reconnoiter
22 by force ahead of convoy routes and screen the flanks of the convoy.
23 (d) UAVs can assist in locating road blocks, enemy firing positions on building
24 roofs and deliberate ambush sites.
25 (3) Show of Force: Many convoy routes will go through known danger areas
26 but will not be permitted to fire unless threatened by the enemy based on ROE.
27 A show of force is a low/fast pass, simulating a strafing run by a tactical jet over
28 a suspected enemy position and serves as a deterrent. The specific aircraft
29 attack profile and theater ROE will dictate how low the aircraft can over-fly.
30 b. Electronic Counter measures: There are several developments in this area to
31 help counter threat IED tactics that are beyond the scope of this document. The
32 CC needs to be familiar with these assets, if they are available in theater.
33 c. Fire Support. Higher headquarters provides indirect fire support assets to the
34 CC for planning should they be available and within range of the convoy route.
35 Targets such as choke points, suspected ambush sites, known danger areas, and
36 easily identified terrain features should be coordinated prior to the convoy

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

- 1 departure. Fires can be shifted from these pre-coordinated target reference
2 points or simply called in with exact grid coordinates of the target. As with air
3 support, the ground observer must be able to stop any unsafe situation that
4 develops. Indirect fire should always be controlled with "eyes on target" in order
5 to ensure the desired target is hit. "Cease fire, Cease Fire, Cease Fire" over the
6 radio will stop the supporting firing unit from continuing with the indirect fire
7 mission.
8 d. Mobile Security Force (MSF)/QRF. CC should know if this is available and
9 ensure the convoy briefing includes standard call sign and frequency for any
10 dedicated ground units available to support their convoy along it's route.

Coalition participation in U.S. convoys

- 11 a. Fully integrate coalition vehicles into convoy, but maintain organizational
12 integrity.
13 b. Coalition convoys present a command and control challenge. U.S. Forces will
14 always be under the command and control of U.S. leadership. It is important to
15 determine and communicate, who is in charge of the convoy during planning.
16 c. Beware of cultural sensitivities and brief to all members of the convoy.
17 d. Verify ROE specifics between forces.
18 e. Rehearse all battle drills; focusing on actions on contact that may require an
19 aggressive posture.
20 f. Consider language barriers and use of interpreters; consider challenges to
21 communications due to differences in language/dialects. Are interpreters
22 required, and if so, how many? (See Appendix F)
23 g. Consider communication systems compatibility. Coordinate how
24 communications will work for the command and control of all assets in the
25 convoy.
26

Civilian Contractor participation in U.S. convoys

- 27 a. Disperse civilian contractor vehicles throughout the convoy.
28 b. Consider that contracted drivers will be unarmed. Specific force protection
29 measures (mission dependent) could include: military shotgun guard (i.e., 1 to
30 every 3 contractor vehicles).
31 c. Realize that contractors may not speak English and will proportionally increase
32 C2 interpreter training and rehearsal requirements.
33 d. Distribute civilian vehicles throughout the convoy due to limited
34 communications capabilities.
35 e. Consider cultural and discipline differences among civilian drivers and possible
36

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

- 1 implications on convoy. This will impact vehicle crew mix.
- 2 f. Consider different capabilities of civilian vehicles to tactical vehicles due to
- 3 terrain conditions
- 4

1
2
3
4
5
6
7
8
9
10
11
12

Chapter II

GUN TRUCK AND ESCORT EMPLOYMENT

Gun Truck Employment

a. Definition. A gun truck, like the two pictured in Figure II-1, is a vehicle where the primary weapon system is a CSW with a 360 degree field of fire capability. Ideal platform is a hardback / or up-armored high mobility multipurpose wheeled vehicle (HMMWV) (M1114/M1113). 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.



13
14
15
16
17
18
19
20
21
22
23
24
25

Figure II-1 Examples of Gun trucks used in Iraq

- b. Gun Truck Missions.
- (1) Route security.
 - (2) Observe assigned sectors of fire and observation.
 - (3) Stationary security.
 - (4) Traffic control points.
 - (5) FSE and lead or rear security for main body of convoy.
 - (6) Dispersed throughout the order of march or moving freely among the convoy to maintain security.
 - (7) Counter Assault Element.
- c. The CC is responsible for gun trucks operating in direct support of the convoy. 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

FOUO
FINAL COORDINATION DRAFT

- 1 react quickly to various types of enemy contact, their movement, maneuver and
2 engagements must be coordinated and monitored by the CC or other designated
3 subordinate convoy leaders.
- 4 (1) In the event of significant enemy contact, gun trucks maneuver to the
5 flanks of the threat, positioning behind cover with stand-off distance to deliver
6 accurate and sustained fires.
- 7 (2) Gun truck weapon systems must be displayed in an offensive posture to
8 deter aggression.
- 9 (3) Gunners will scan their surroundings and remain alert, observing civilians
10 actions (paying attention to hands) to view suspicious behavior and also ensure
11 enemies are aware of alert convoy posture.
- 12 d. Possible Gun Truck Design Considerations.
- 13 (1) M-2, MK-19, M-240, M-60, and M-249 with a stable adapter pintle (See
14 Appendix F for NSNs).
- 15 (2) Use of support vehicles with weapon system.
- 16 (3) Use ballistic blankets and fiber sheets as an alternative protective material
17 to steel. Protective material must be able to protect gunner(s) from IEDs, direct
18 fire, and vehicle motion. Designs protection so that vehicle is not too heavy.
19 Take into consideration weight of armor on performance of vehicle.
- 20 (4) Must give 360 degree area of visibility and firing.
- 21 (5) Must have communications between crew members.
- 22 e. Responsibility
- 23 (1) Gun truck crews should be trained on the following (See appendix E):
- 24 (a) All weapons systems carried or used in vehicle.
- 25 (b) TLPs, SOPs, reporting requirements, and the importance of cross training.
- 26 (c) All battle drills.
- 27 (d) How to identify, discriminate, and quickly engage to suppress threat
28 targets.
- 29 (e) Convoy control and movement techniques.
- 30 (f) Maintenance of vehicle and all assigned equipment.
- 31 (g) Communications procedures.
- 32 (h) Safety and risk assessment to increase survivability.
- 33 (i) ROE.
- 34 (2) Gun trucks maintain communication and visual contact with the convoy. At
35 halts, gun trucks provide 360 degree security at positions on flanks that provide
36 clear fields of fire.

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

- 1 (3) Upon attack, Gun truck gunners scan for enemy who initiated attack.
2 Gunners return well aimed suppressive fire on attacks from small arms and RPG
3 attacks. Gunners scan and identify enemy RPG gunners and search for telltale
4 puff of bluish-gray smoke from RPG launch. Use appropriate level of force.
5 (4) During the convoy execution phase, the VC:
6 (a) Arrives at SP on time and maintains position in convoy, to include interval
7 and speed.
8 (b) Controls the gun truck based on orders from the CC.
9 (c) Positions truck, normally at the front, center, and rear of the convoy.
10 (d) Is prepared to aggressively respond to threats.
11 (e) Identifies the threat and directs return fire as soon as feasible, engaging
12 the most dangerous threat first. Target prioritization will be covered in direct fire
13 planning in the OPORD and specify target precedence for each weapon systems.
14 (f) If under indirect fire, identifies and directs gunner's fire on the enemy.
15 (g) Ensures drivers follow convoy procedures for contact alerts, signaling, and
16 reporting.
17 (h) Quickly assesses the situation and reports to the CC.
18 (i) If the CC cannot be contacted, reacts in accordance with the convoy
19 briefing and SOPs.
20 (j) Maintains convoy security throughout movement.
21 (k) Orients weapons as directed to provide 360 degree coverage.
22 (l) Reports contact and develops situation to provide situational update.
23 (m) When convoy is halted:
24 (1) Selects positions that ensure convoy security.
25 (2) Conducts consolidation and reorganization operations.
26 (3) Checks condition of troops and equipment and reports.
27 (4) Submits SITREP, SPOT, or ACE reports.
28 (5) In crowded areas, gun trucks can be used to disperse crowds, and to block
29 intersections to allow convoys through.
30 (6) Do not isolate gun truck by itself to recon ahead of the convoy outside of
31 mutual support. When conducting reconnaissance ahead of convoy, no less than
32 two gun trucks should cover each other.
33 (7) Gun trucks maneuver to block and contain vehicles driving erratically in and
34 around convoy. Show of force posture from gun truck is usually enough to ward
35 off civilian vehicles that challenge convoy with aggressive driving (See Chapter
36 III).

FOUO
FINAL COORDINATION DRAFT

Convoy Escorts

- 1
2 a. Definition. Any security element/augmentation that has an independent task
3 organization that will be supporting a convoy—to include air support, MP
4 detachment, or security element from a maneuver battalion.
- 5 b. Task Organization. METT-TC will determine the size of the security element
6 supporting. Mechanized/light armored vehicle units are better suited to this
7 mission than HMMWV units because of their firepower and armor protection from
8 direct fire, indirect fire, and mines. Careful evaluation of the threat must be
9 undertaken prior to assigning convoy escort to HMMWV-equipped security
10 elements.
- 11 c. The convoy escort mission requires that the security element/convoy escort
12 provide a convoy with close-in protection from direct fire/complex ambushes.
- 13 (1) Command and Control. Command and control during convoy escort is
14 especially critical due to the inherent challenges of working with units that may
15 not have habitual/organic relationships. When the security element/ escort
16 leader is executing the escort mission, it operates under the control of the CC,
17 regardless of rank. The relationship between the convoy escort (Security
18 element leader) and the CC must provide for unity of command.
-
- 19 Note: No matter how experienced the security element is, all battle drills should
20 be covered (and then rehearsed) to ensure all attached units understand the
21 escort's SOPs.
-
- 22 (2) Tactical Disposition. The convoy escort is broken down into a FSE and a
23 counter assault element (CAE). The FSE is responsible for forward security. It
24 should have a portion of the dismounted force capable of dealing with known
25 danger areas (overpasses, bridges likely IED/ambush sites). The remainder of
26 the security element can be located throughout the convoy to serve as a reaction
27 force and does not need to be co-located (e.g. two gun trucks in the rear of the
28 formation (trail) and part of the dismount force centrally located in the convoy
29 (see Figure II 2). Engineer assets, if available, should be located toward the
30 front to respond to obstacles and the fire support team (FIST) should be located
31 near the CC and/or security element leader. The convoy escort will normally use
32 the column formation due to their inherent speed and ease of movement.

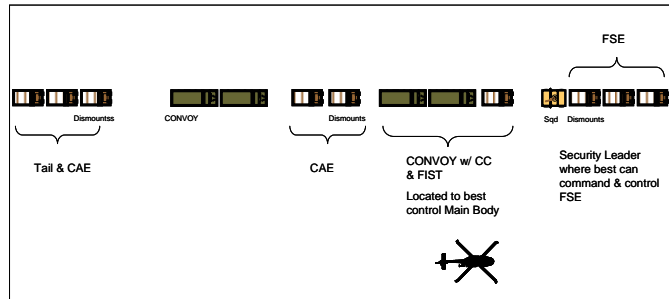


Figure II-2 Mechanized Security Element Escorting Convoy

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

- 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 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 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 assign designated marksman in each vehicle throughout the escort element. Successful use of the designated marksman requires a quick assessment by the unit leader –in the event of an IED – to determine if the explosion is just an IED or actually the initiation of a complex ambush. This initial assessment by the leader is most crucial and difficult. It can be extremely challenging to control an inexperienced unit from overreacting prior to an accurate assessment. This assessment needs to be done by each VC, as well as the security element and CC.
- e. TTPs for the FSE.

FOUO
FINAL COORDINATION DRAFT

- 1 (1) Forward reconnaissance.
- 2 (a) Known danger areas. Certain areas may attract continuous enemy
- 3 attacks due to advantageous terrain. These known danger areas should be
- 4 avoided if possible. The following is a list of recommended TTPs if a convoy is
- 5 required to pass through a known danger area:
- 6 (1) Provide an overwatch unit.
- 7 (2) Use advanced optics to scan the area for IEDs or enemy
- 8 positions prior to crossing.
- 9 (3) Use UAVs or air support to observe.
- 10 (4) Have preplanned fire support.
- 11 (5) Use dismounts to conduct a sweep of the area for IEDs and/or
- 12 IED initiators.
- 13 (b) For specific battledrills at overpasses/off-ramps chokepoints and traffic
- 14 control see Chapter III.
- 15 (2) In the event of significant enemy contact against the FSE while ahead of
- 16 the convoy, the FSE leader will recommend a course of action to the CC (i.e.
- 17 bypass, hold current position, send up reinforcements, etc.). FSEs should
- 18 establish SOPs that facilitate the basic principles of establishing a support by fire
- 19 position and having the dismounts attached to the FSE conduct fire and
- 20 maneuver to close with and destroy the enemy threat.

FOUO
FINAL COORDINATION DRAFT

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. There are many ways to accomplish these battle drills and 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.

(2) Deterrence – Presenting a menacing and aggressive posture demonstrating the readiness and willingness to engage. The convoy owns the road.

(3) Agility – The ability of the tactical convoy to adapt 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. Drive as fast as appropriate for road conditions and driver's skills.

(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) 360 degree security is necessary to prevent vehicles from approaching from any direction.

(4) Maintain an aggressive posture in order to keep vehicles from approaching too close.

(5) 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.

(6) Maintain visual contact with the vehicles to your front and rear.

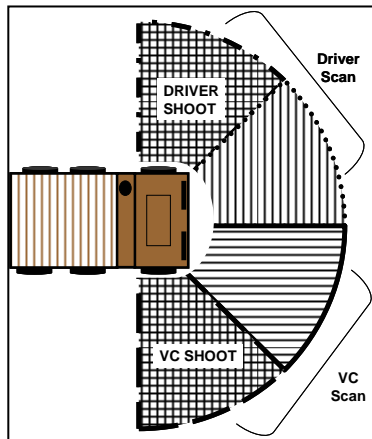
(7) If the convoy has no escort or internal gun trucks available, the vehicles in the rear and front need to be able to observe in those directions.

c. Sectors of observation and fire:

(1) Sector of observation is comprised of the entire area visible to the crew

FOUO
FINAL COORDINATION DRAFT

- 1 member. Not all areas that can be observed can be affected by direct fire.
2 Observers scan both in depth and width without excessive focus on any object,
3 activity or person. Your eyes do not depart your sector of observation regardless
4 of what others within your vehicle are doing.
5 (a) Driver's observes from 9:00 to 13:00
6 (b) VC's observes from 11:00 to 3:00
7 (2) Sector of fire is the area that can be covered with direct fire. Consider
8 designating primary and alternate sectors of fire for both crew compartment as
9 well as CSW personnel. Drivers must be trained to fire their weapon while
10 continuing to operate the vehicle. The driver's primary mission is to operate the
11 vehicle and should only engage targets if the vehicle is halted unless there is no
12 one else who can neutralize the threat from that side.
13 (a) Driver's sector of fire is from 9:00 to 11:00
14 (b) VC's sector of fire is from 1:00 to 3:00
15 (c) Figure III-1 depicts Driver and VC fields of observation and fire for a
16 single vehicle and Figure III-2 for a convoy.

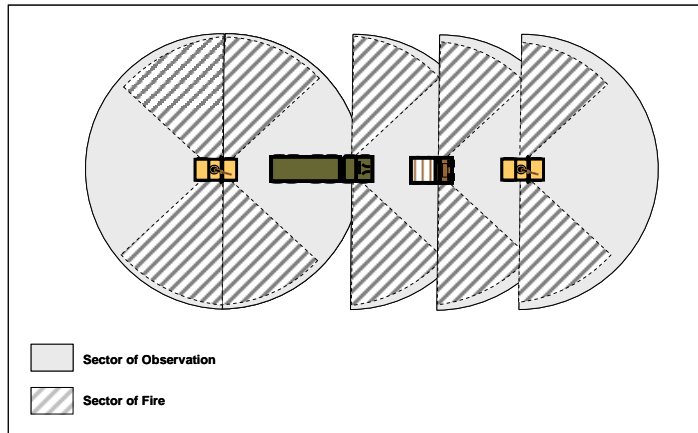


17 **Figure III-1 Single Vehicle Sectors of Observation and Fire**
18

FOUO
FINAL COORDINATION DRAFT

III-2

FOUO
FINAL COORDINATION DRAFT

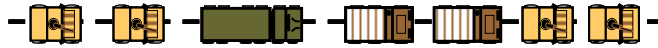


1

Figure III-2 Convoy Sectors of Observation and Fire

Movement Formations and Techniques

- 1
2 The following are techniques that can be used based on the situation, road
3 conditions, and the judgment of the CC.
4 a. File formation, Gun trucks front and rear (Figure III-3).
5 (1) Best used with inexperienced or foreign drivers.
6 (2) Advantages:
7 (a) Simplicity.
8 (b) Usable at night but interval will have to be compressed.
9 (c) Minimizes IED blast effects (when driving on centerline of road).
10 (3) Disadvantages:
11 (a) Weak left flank security.
12 (b) Reduced field of view.
13 (c) Reduced headlight coverage at night.



14

Figure III-3 Formation: File

b. Staggered Formation (Figures III-4 and III-5).

(1) Used only on multi-lane 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.

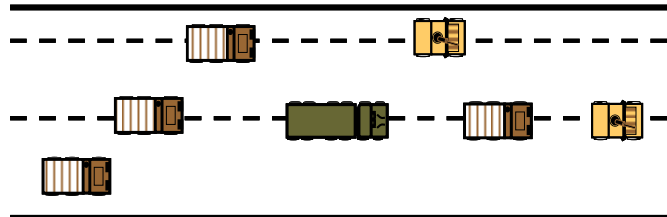


Figure III-4 Formation: Stagger

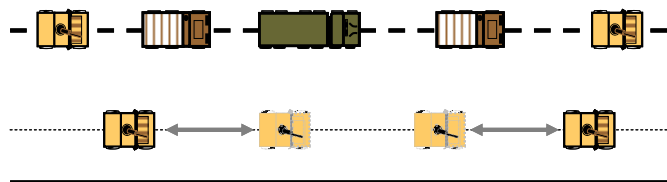


Figure III-5 Formation: Stagger with Gun Trucks

c. Offset Formation (Figure III-6).

(1) Used to block third party traffic and assists in changing lanes.

(2) Advantages:

- 1 (a) Combines flexibility of Stagger with the ease of File Formation.
- 2 (b) Allows CC to control third party traffic.
- 3 (3) Disadvantages:
- 4 (a) Vulnerable to IED blast effects.
- 5 (b) Difficult to command and control.

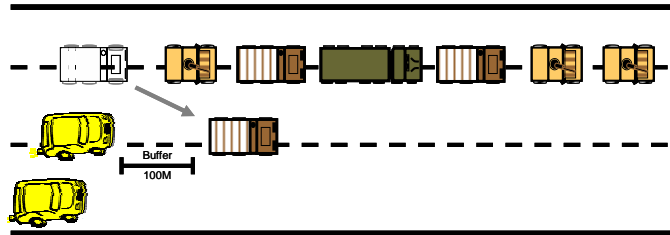


Figure III-6 Formation: Offset

- 6
- 7
- 8 d. Inverted 'T' Formation (Figure III-7)
- 9 (1) Used on multilane roads, convoy runs the centerline of their lanes.
- 10 (2) Advantage: Limits third party vehicle infiltration.
- 11 (3) Disadvantages:
- 12 (a) Requires experienced drivers.
- 13 (b) Difficult to command and control without sufficient communications.
- 14 (c) Weak left flank security.

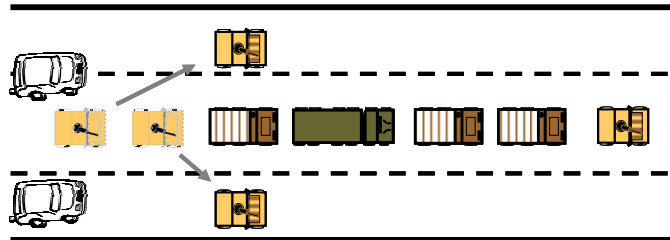
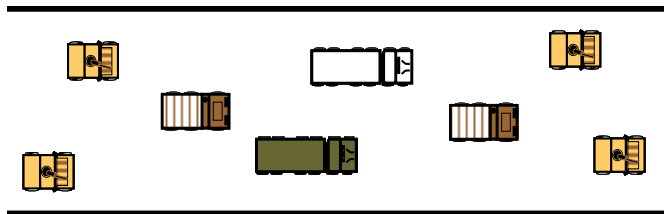


Figure III-7 Formation: Inverted "T"

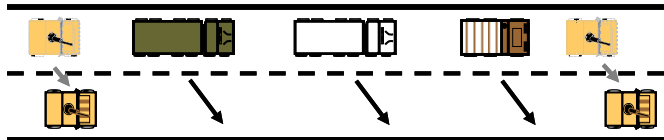
- 15
- 16

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



7 **Figure III-8 Formation: Diamond**

- 8
9 f. Changing Lanes (Figure II-9).
10 (1) Used to prevent third party traffic interference with the convoy's ability to
11 change lanes.
12 (2) A pre-designated blocking vehicle in the rear is ordered to block left or
13 right.
14 (3) Blocking vehicle moves into appropriate lane to block third party traffic.
15 (4) Once in position the convoy changes lanes in front of the blocking vehicle.
16 (5) The offset formation (above) also allows for easy lane changes.



17 **Figure III-9 Movement Technique: Changing Lanes**

18 **Danger Areas**

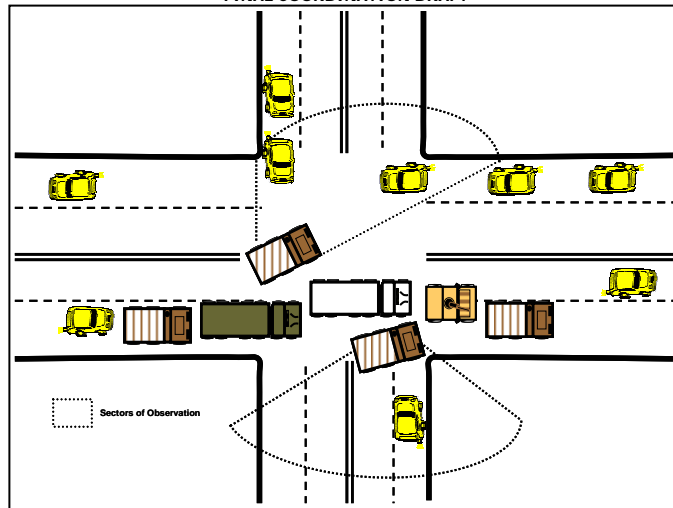
- 19
20 a. Actions at Danger Areas: Danger Areas are specific locations where additional
21 awareness and control is required to allow a convoy to move through a point

FOUO
FINAL COORDINATION DRAFT

- 1 while both controlling third party traffic and remaining alert to potential threats.
2 Examples are intersections, traffic circles, overpasses, and on/off ramps. The
3 following techniques are used based on the CC's mission analysis.
- 4 (1) Blocking and Bumping Techniques. Blocking is an advanced technique used
5 to physically block the road with a vehicle to prevent traffic from feeder roads,
6 traffic circles and on/off-ramps from intermingling with your convoy.
- 7 (a) These techniques are battle drills that require extensive rehearsals.
8 (b) Route reconnaissance/analysis is critical to determine ahead of time
9 where these techniques will be used.
- 10 (c) Blocking vehicles are designated during mission preparation.
11 (d) Blocking vehicles should not be the front or rear escort vehicles.
12 (e) If a gun truck is to be used as a "Blocker," more crewmembers than just
13 a driver and VC will be required.
- 14 (f) "Block Left" or "Block Right" commands indicate a particular side of the
15 road.
- 16 (g) In large convoys, blocking trucks can be relieved in place by subsequent
17 blocking trucks from within the convoy to maintain order of march.
- 18 (h) Blocking requires extensive command and control and experienced teams.
19 (i) Command given by designated VC or CC indicating requirement for
20 designated vehicles to bump up to a location to block.
- 21 (j) Road Intersections (Figure III-10):
- 22 (1) Reduce speed as you approach the intersection.
23 (2) Reduce interval but maintain sufficient room for maneuver.
24 (3) Blocking vehicle(s) move up the side of the convoy where they
25 are to set the block.
26 (4) Blocking vehicles set before the convoy enters the intersection.
27 (5) Once the convoy passes, blocking vehicle(s) move forward and
28 resume position in order of march.

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT



1

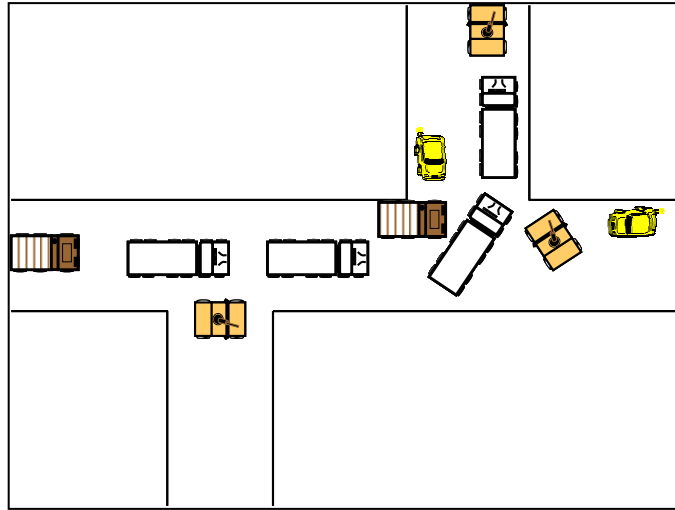
Figure III-10 Blocking Intersection

FOUO
FINAL COORDINATION DRAFT

1
2
3
4
5

(k) Multiple Intersections (Figure III-11):

- (1) Each additional intersection is handled by a different blocking vehicle from the convoy.
- (2) Blocking vehicles that are not gun trucks need internal security.

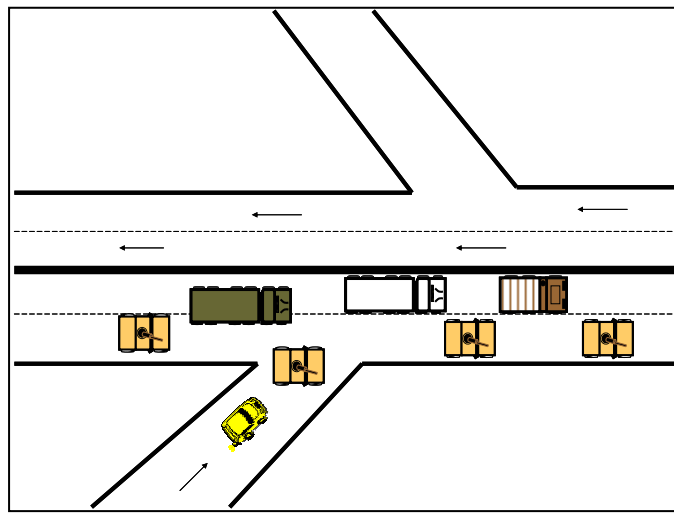


6

Figure III-11 Blocking Multiple Intersections

1
2
3

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

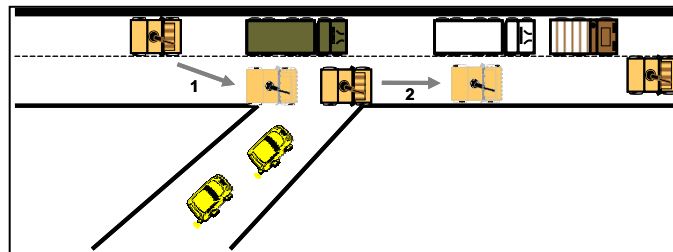


4

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

1
2
3
4
5
6
7

(m) Bumping (Figure III-13) is the replacement of one blocking vehicle with another. This technique is similar to "road guards" during a unit PT 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 blocking vehicles to better reconstitute.



8

Figure III-13 Danger Areas: Bumping Through Example

- 1
2 (n) Traffic Circles (Figure III-14)
3 (1) Allows the convoy to control the circle and move rapidly
4 through without interference from third party traffic.
5 (2) Reduce speed as you approach the circle.
6 (3) Reduce interval but maintain sufficient room for maneuver.
7 (4) Blocking vehicle(s) move up the side of the convoy where they
8 are to set the block.
9 (5) Blocking vehicles need to be set before the convoy enters the
10 circle.
11 (6) Once the convoy passes, blocking vehicle(s) move forward and
12 resume position in order of march.

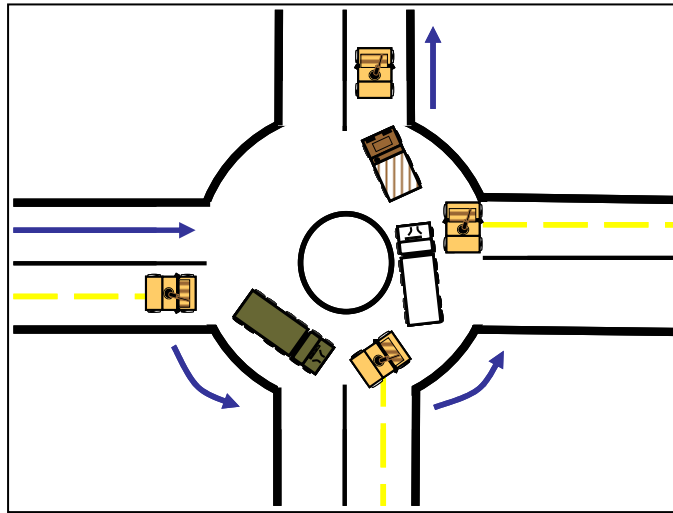
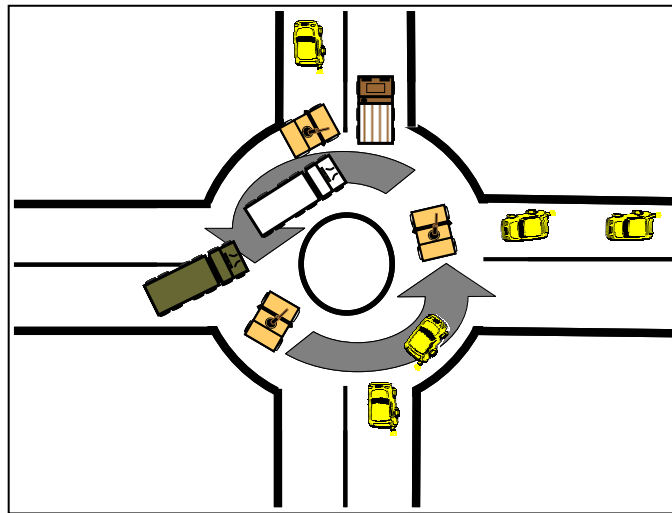


Figure III-14 Danger Areas: Traffic Circles

- 13
14
15 (o) Alternate Traffic Circle Technique (Figure III-15)

FOUO
FINAL COORDINATION DRAFT

- 1 (1) Variation of the same drill to take more direct route.
- 2 (2) Allows the convoy to control the circle and move rapidly
- 3 through without interference from third party traffic.
- 4 (3) Reduce speed approaching the circle.
- 5 (4) Reduce interval but maintain sufficient room for maneuver.
- 6 (5) Blocking vehicle(s) move up the side of the convoy where they
- 7 are to set the block.
- 8 (6) Blocking vehicles need to be set before the convoy enters the
- 9 circle.
- 10 (7) Once the convoy passes blocking vehicle(s) move forward and
- 11 resume position in order of march.
- 12 (8) Higher risk due to traveling against the flow of traffic.
- 13



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

15 (p)Overpass. Overpasses present a unique hazard in that there is dead

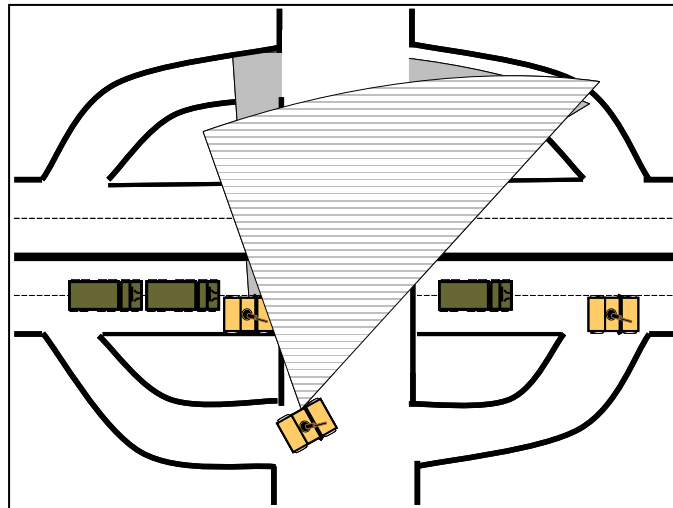
FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

1 space on the top that can not be observed. There are 3 techniques for clearing
2 an overpass. Mission analysis will dictate which to use.

3 (1) Deliberate High Clear (Figure III-16):

- 4 • Clearing vehicles, designated during the mission preparation
- 5 phase, accelerate to the overpass.
- 6 • Lead vehicle stops short of the overpass and elevates their
- 7 weapons systems to cover the overpass.
- 8 • Second vehicle takes the off-ramp and moves up to observe the
- 9 top of the overpass.
- 10 • Once the convoy passes the overpass, high security vehicle
- 11 comes down the ramp while low vehicle continues to cover.
- 12 • Low vehicle moves behind high vehicle and rejoins the convoy.



13 **Figure III-16 Danger Area: Deliberate High Clear**

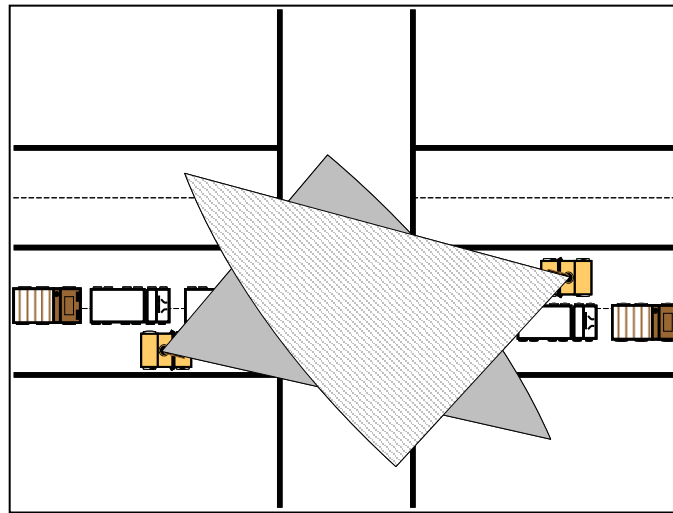
14 (2) Deliberate Low Clear (Figure III-17):

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

1
2
3
4
5
6
7
8
9
10
11
12

- 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 (far-side) and elevates their weapon systems to cover the overpass from the opposite side.
- Once the convoy passes the overpass, the near-side security vehicle 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 the prior positions in the convoy.



13
14
15

Figure III-17 Danger Area: Deliberate Low Clear

(3) Hasty Clearing (Figure III-18)

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

- 1 • Technique used when the situation does not permit a
2 deliberate clearing such as in an urban area.
3 • Lead vehicle elevates weapon system and observes the top of
4 the overpass.
5 • Each vehicle in the convoy has one crew member elevate a
6 weapon and observe the top of the overpass.
7 • As each vehicle passes under the overpass, they face to the
8 rear and continue to cover the overpass from the far side.

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

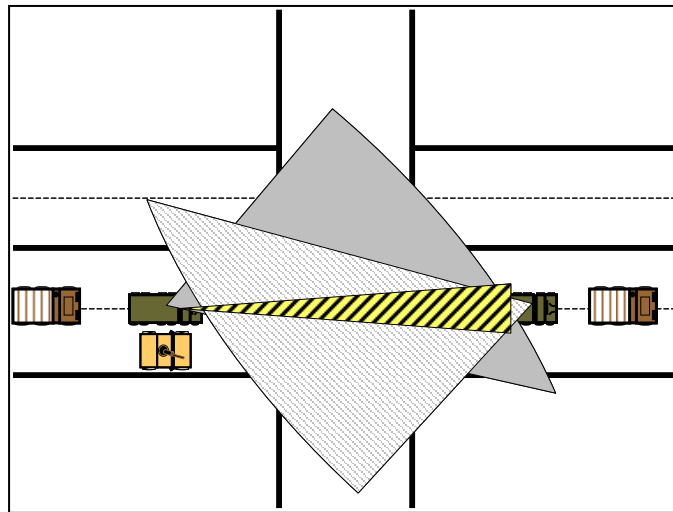


Figure III-18 Danger Areas: Hasty Clearing

Battle Drills

- 11
12
13
14 a. Individual Drills.

FOUO
FINAL COORDINATION DRAFT

- 1 (1) Downed driver.
- 2 (a) VC gains control of steering wheel.
- 3 (b) If possible – third person pulls driver out of driver’s compartment and VC
- 4 moves into driver’s seat.
- 5 (2) Bailout. Used when vehicle is inoperative or when occupants are required
- 6 to use the vehicle as cover.
- 7 (a) Crew on the cold side dismounts, assumes hasty position to the rear of
- 8 the vehicle and returns fire.
- 9 (b) Hot side returns fire until clear to dismount on the cold side and moves to
- 10 the front of the vehicle.
- 11 (c) Assume firing positions using the vehicle as cover.
- 12 (d) 360 degree security - Do not fix on the enemy.
- 13 b. Collective Drills.
- 14 (1) Hasty Vehicle Recovery.
- 15 (a) Use a strap, cable or chain. Preposition the straps, cable, or chain ahead
- 16 of time.
- 17 (b) After fire superiority is obtained, recovery vehicle moves forward.
- 18 (c) Driver stays in vehicle while VC ties onto disabled vehicle.
- 19 (d) VC gets into disabled vehicle to steer/work brakes.
- 20 (e) Recovery vehicle moves out pulling disabled vehicle behind it.
- 21 (f) Move to a rally point and reconfigure to a more stable means of towing.
- 22 (g) If unable to get in front of vehicle push-through is an option.
- 23 (h) Pre-mounting a used tire on the front of the vehicle assists with push-
- 24 through.
- 25 (2) In-stride Hasty Recovery (Figure III-19):
- 26 (a) For small to medium vehicles and not a heavy or tractor trailer
- 27 configuration.
- 28 (b) Minimum of two 10,000 lb (HMMWV/NTV) or 25,000 lbs straps (LMTV, 5-
- 29 ton, 7-ton, or HEMTT) with a connecting device (clevis or 10,000 lb carabiner).
- 30 (c) Straps are mounted on the left front and right rear of the vehicles.
- 31 (d) Straps are s-rolled and held in place by a break-away method (retainer
- 32 bands, Velcro, ¼" 80lb test cotton webbing or 100 mile-per-hour tape).
- 33 (e) Front strap runs into the driver’s compartment.
- 34 (f) Rear strap runs into VC compartment.
- 35 (g) If vehicle is disabled the driver and VC extend the strap from both the
- 36 disabled and recovery vehicle.

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

- 1 (h) Recovery vehicle moves alongside disabled vehicle.
- 2 (i) VC and driver attach connecting device and release straps.
- 3 (j) Recovery vehicle continues to move forward slowly taking up the slack
- 4 and pulling the vehicle out.

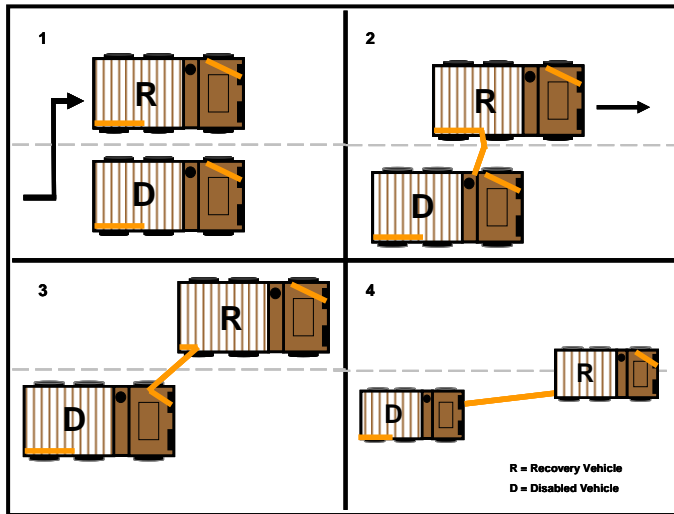


Figure III-19 In stride Hasty Vehicle Recovery

- 5
- 6
- 7 (3) Dismount and Remount Procedures. These procedures can be used to
- 8 dismount when not in contact but in proximity of persons who may pose a
- 9 threat.
- 10 (a) Dismount/Mount.
- 11 (1) Dismount call is made by the VC.
- 12 (2) Do not get in between any vehicles but protect space between
- 13 vehicles.
- 14 (3) Rear security is the only one behind a vehicle, but should stay
- 15 off to the side.

FOUO
FINAL COORDINATION DRAFT

- 1 (4) Use your weapon to motion civilians back.
2 (5) As a last resort, a muzzle or palm strike may be required.
3 (6) If fired upon, move to a hard point, suppress with fire, or
4 mount and extract (situation dependent).
5 (7) Vehicles moving forward can signal the mounting call.
6 (b) Dismount: Short Halt (Figure III-20):
7 (1) Used for slow traffic, market places, or for quick rests.
8 (2) Protect rear of convoy with vehicles and 360 degree security.
9 (3) Act as a buffer between third party personnel and vehicles.
10 (4) Maintain situational awareness. Continually scan sectors and
11 act as a deterrent. Use "5/25" Meter Scan technique.
12 (5) Have more than one egress route at all times.
13 (6) Be prepared to use the vehicle as a lethal weapon if necessary.
14 (7) CSWs remain manned and have interlocking sectors of fire.
15 (8) Drivers remain in vehicles and ready to drive.
16 (9) Walk along vehicles. If dismounts are running, then either slow
17 down or remount.
18 (10) Ensure no third party personnel/vehicles get between or near
19 vehicles.
20 (11) Remount call given by CC through VCs. Collapse perimeter
21 back into vehicles.

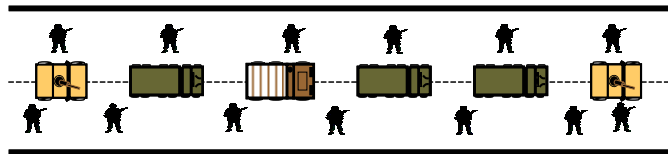


Figure III-20 Dismount: Short Halt

- 22
23
24
25 (c) Dismount: Long Halt (Figure III-21):
26 (1) Used for longer durations, i.e. vehicle breakdowns, dropping off
27 cargo, etc.
28 (2) Seek out and use hard cover. (Vehicle hard points, buildings,
29 etc.).

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

- 1 (3) Clear blind spots and cover adjacent alleys and streets.
- 2 (4) Man crew served weapons.
- 3 (5) Drivers only dismount at a long halt when absolutely necessary.
- 4 (6) Push security out to establish a secure perimeter and maintain
- 5 mutual support.
- 6 (7) Protect the vehicles from third party personnel/vehicle
- 7 approach.
- 8 (8) Remount call given by CC through VCs. Collapse perimeter
- 9 back into vehicles.

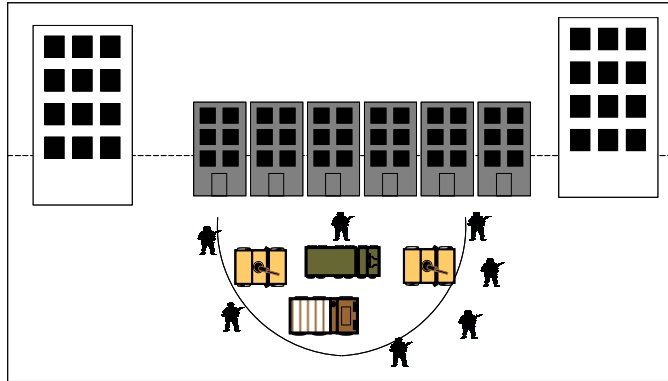


Figure III-21 Dismount: Long Halt

- 10 (4) React to Contact. Figure III-22 depicts the decision matrix a CC must
- 11 address when faced with enemy contact and the subsequent battle drills that
- 12 flow from those decisions.
- 13

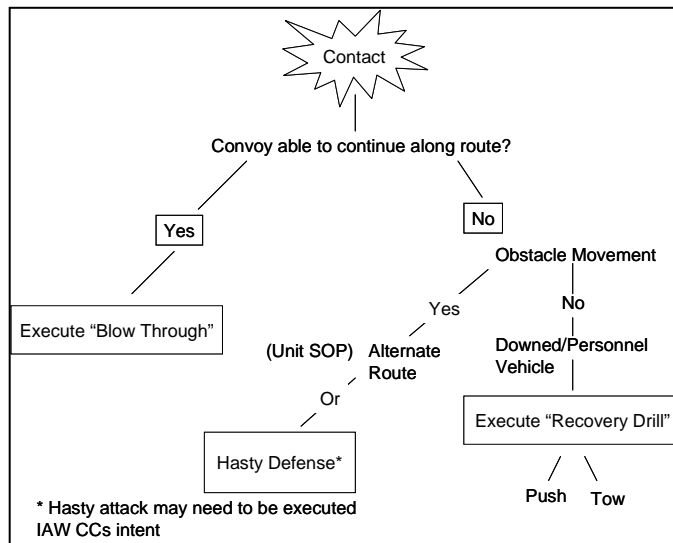
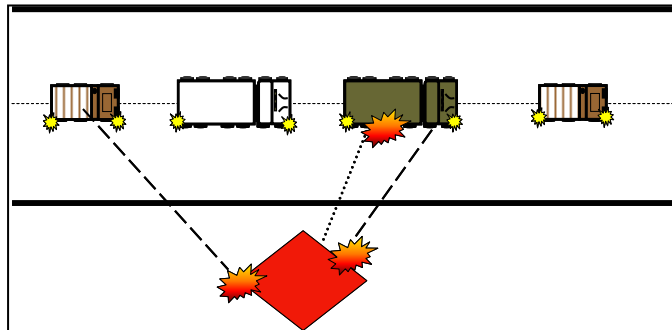


Figure III-22 React to Contact Flow Chart

1
2
3
4
5
6
7
8
9
10
11

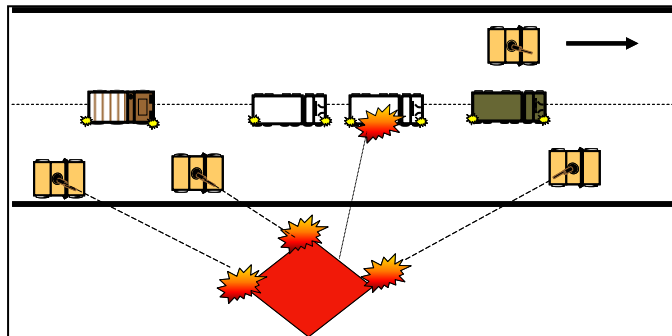
(a) React to Contact Drill Blow Through (Figures III-23 and III-24).

- (1) Speed up.
- (2) Signal – visual signal to indicate general direction of enemy.
- (3) Return fire - proportional and accurate fires within the ROE.
- (4) Send a report.
- (5) Move to a rally point.
- (6) Establish 360 degree security.
- (7) Send ACE report (Appendix B).
- (8) Continue the mission.



1

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



2

Figure III-24 Battle Drill: Blow Through (Escorted)

3

4

(b) Recovery Drill: No Obstacle (Figures III-25 and III-26)

5

(1) Convoy is forced to stop; no obstacle to movement.

6

(2) Convoy stops.

7

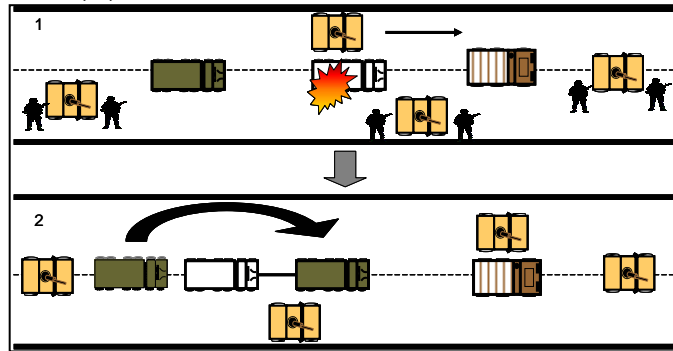
(3) Dismount.

8

(4) 360 degree security – Maintain sector of scan/fire - Do not fix

FOUO
FINAL COORDINATION DRAFT

- 1 on the enemy.
- 2 (5) Achieve fire superiority – maneuver gun trucks (escorts if
- 3 available) to support by fire positions.
- 4 (6) Report to higher – request assistance if needed.
- 5 (7) Recover casualties from cold side of vehicle.
- 6 (8) Recovery vehicle – execute hasty recovery with strap, chain or
- 7 cable, or have a rear vehicle push disabled vehicle out of kill zone.
- 8 (9) Continue movement – gun trucks/escort vehicles cover
- 9 movement out of area.
- 10 (10) Move to rally point.
- 11 (11) Establish 360 degree security.
- 12 (12) Send ACE report.
- 13 (13) Continue the mission.



14

Figure III-25 Battle Drill: Recovery Drill (In Stride Tow)

FOUO
FINAL COORDINATION DRAFT

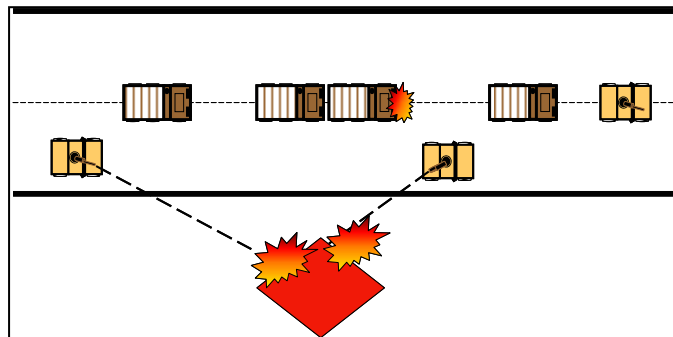
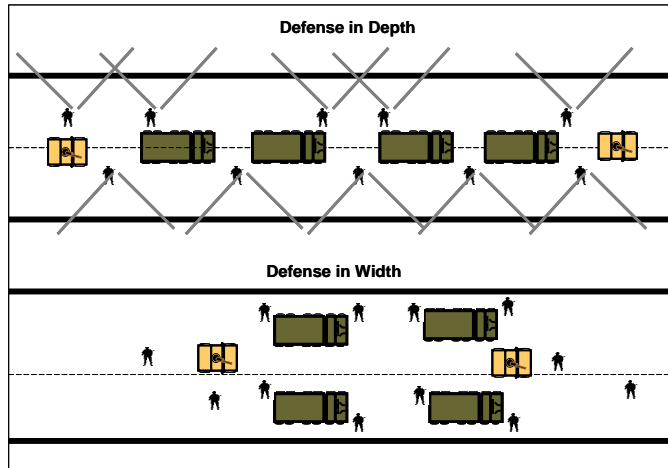


Figure III-26 Battle Drill: Recovery Drill (Push Through)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

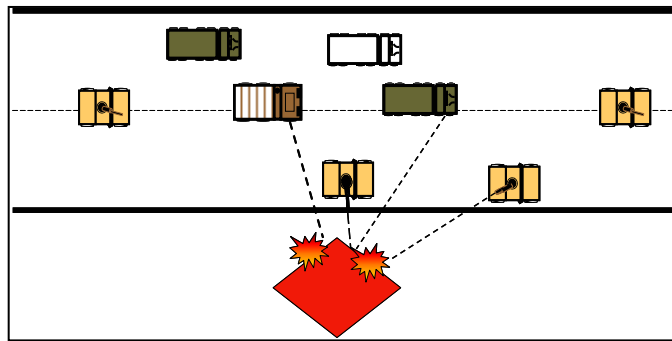
(c) Recovery Drill: Obstacle (Figures III-27, III-28, and III-29)

- (1) Crowd or other impediment prevents movement and convoy is forced to stop.
- (2) Convoy stops.
- (3) Dismount.
- (4) 360 degree security -- Maintain sector of scan/fire - Do not fix on the enemy.
- (5) Achieve fire superiority -- maneuver gun trucks/escorts to support by fire positions.
- (6) Recover casualties from cold side of vehicle.
- (7) CC assesses situation and--Establishes a hasty defense (Figure III-27) and awaits QRF, or assaults through ambush using fire and maneuver (Figure III-28)



1

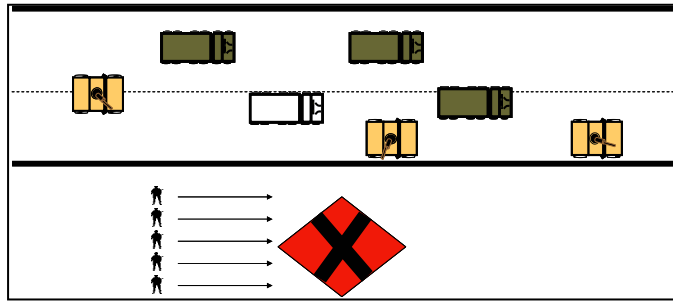
Figure III-27 Battle Drill: Hasty Defense



2

Figure III-28 Battle Drill: Hasty Attack (Suppress)

FOUO
FINAL COORDINATION DRAFT



1

Figure III-29 Battle Drill: Hasty Attack (Assault)

FOUO
FINAL COORDINATION DRAFT

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35

Chapter IV **Improvised Explosive Devices & Vehicle Borne IED**

Introduction

- a. IEDs are one of the greatest threats to convoys, and often initiate an ambush. Convoy personnel should always expect an ambush immediately following an IED detonation. CC 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 and look for actual IEDs or likely IED hiding places. Varying routes and times, switching lanes at random, entering overpasses on one side 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)Morning is 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, MRE packs, roadside mounds, rock piles, etc. could conceal IED. There are no obvious IED indicators (wires, det cord, antennas). Report immediately. Requires 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.

1
2

Identifying IEDs



3 **Figure IV-1 Typical Improvised Explosive Device Configurations**

- 4
5 a. May be constructed using mortar shells, artillery projectiles, anti-tank mines,
6 diesel fuel, rockets, black powder, fertilizer, chemical explosives, etc.
7 Construction is only limited by the enemy's imagination.
8 b. IEDs can be hidden in potholes, abandoned vehicles, in dead animal carcasses
9 and secured to telephone poles and guardrails.
10 c. May be disguised as loose trash/debris, trash bags, soda cans, milk cans,
11 buckets, burlap bags, MRE bags, etc (Figure IV-2).
12 d. Can be command detonated, victim actuated, or timed. Car alarms, battery-
13 powered remote doorbell devices, remote controlled light switches, and cordless
14 and cellular telephones are common means of detonation.
15 e. Insulated wire or det cord--used to connect the detonator to the explosive.

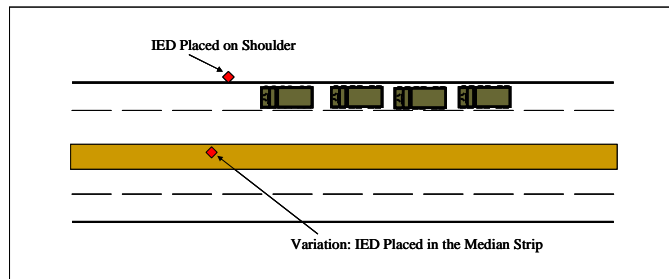


Figure IV-2 Basic IED Attack

1
2
3
4
5
6
7
8
9
10
11

- 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.
- 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)

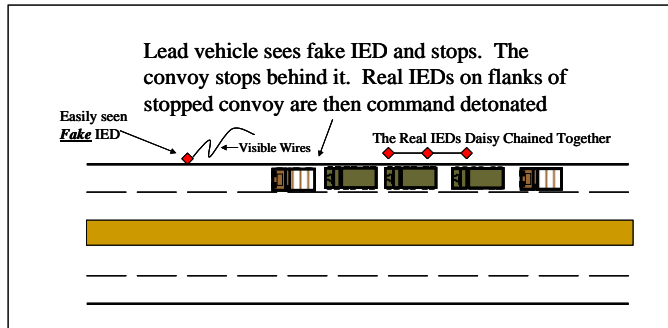


Figure IV-3 Decoy IED Attack

1
2
3
4
5
6

- 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 don't belong and vehicles with loose wires hanging off of them.

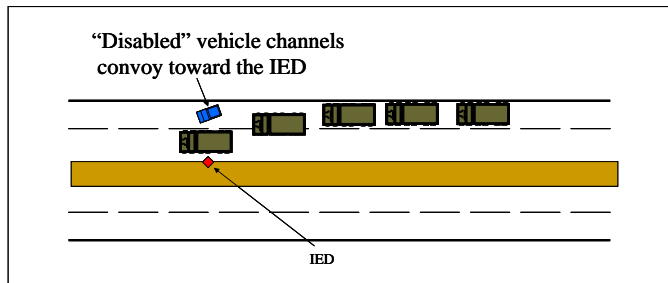


Figure IV-4 Disabled Vehicle IED Attack

7
8



Figure IV-5 VBIED Example

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

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.
- c. Signs of tampering, exposed wires, or objects taped or otherwise attached to the backsides of guardrails.
- d. Fresh concrete 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/S2 during pre-convoy brief.
- 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.

FOUO
FINAL COORDINATION DRAFT

- 1 (9) Presence of vehicles or personnel on overpasses.
- 2 (10) Third party personnel with video cameras or presence of a media crew.
- 3 (11) Vehicle following convoy for long distances and then pulling off to the side.
- 4 (12) Freshly dug holes along the roadway (possible future IED site--report it).
- 5 (13) Obstacles in roadway in order to channel the convoy.
- 6 (14) Personnel inside traffic circles.

Driving Considerations:

- 9 a. Be unpredictable: vary SP times and convoy routes.
- 10 b. Attach signs to convoy vehicles in common languages of the indigenous
- 11 population warning civilians to stay clear of military vehicles.
- 12 c. Configure vehicle to eliminate blind spots (i.e., move mirrors, fording kits, and
- 13 avoid obscuring vision during vehicle hardening).
- 14 d. Use available optics to facilitate scanning (binoculars, tube launched optically
- 15 tracked wire guided missile sight optics, other weapons sights, handheld forward
- 16 looking infrared devices, etc.).
- 17 e. If available, use two designated "spotter personnel" to scan (using optics) in
- 18 the forward convoy element.
- 19 f. Use available electronic counter measure systems.
- 20 g. Wear helmets, ballistic vests (with collars attached), seat belts, and ballistic
- 21 eye protection.
- 22 h. Maintain the minimum designated convoy speed when possible.
- 23 i. If conditions permit, periodically change your rate of speed and vary convoy
- 24 formations to avoid predictability.
- 25 j. Maintain vehicle interval; avoid accordion effect.
- 26 k. Watch for visible ordinance on the road. Convoys may be channeled into the
- 27 kill zone after the lead vehicle discovers a suspected IED in the open.
- 28 l. Follow the tracks of preceding vehicles on unpaved roads.
- 29 m. Stay on the pavement. Avoid driving on the shoulder of the road.
- 30 n. Travel in the lane best suited to allow rapid travel. IEDs are statistically
- 31 ineffective on convoys moving faster than 40 miles per hour with at least a 50-
- 32 meter interval.
- 33 o. If conditions permit, travel down the middle of the road, changing lanes
- 34 often, to stay as far away as possible from IEDs on the median and breakdown
- 35 lane.
- 36 p. If convoy must stop, watch the flanks for IEDs, dismount and establish 360

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

- 1 degree security.
2 q. Use "rolling stop" when halting; slow vehicle and scan using 5/25 scan
3 pattern for IEDs before coming to a complete stop.
4 r. Exercise caution at choke points; watch for vehicle breakdowns, bridges,
5 one-way roads, traffic jams, and sharp turns.
6 s. Once dismounted, initially conduct 5/25 scan for IEDs.
7

IED Battle Drills--Actions on IED contact

- 8
9 a. To increase odds of survivability, rehearse actions for IED contact based upon
10 unit SOP and METT-TC. Convoy commanders must rapidly assess type of attack
11 – IED, IED initiated ambush, VBIED, etc.
12 b. The "Five Cs":
13 (1)CONFIRM the suspected IED sighting and report the finding to higher
14 headquarters using IED/UXO format. (Do not approach or tamper with it).
15 (2)CLEAR the area surrounding the IED (minimum 300 meters unless
16 otherwise specified by unit SOP). The convoy assumes a box formation on each
17 side of the IED. Vary distance from IED to remain unpredictable.
18 (3)CORDON off and secure the area. Post guards to prevent risk to military
19 personnel and vehicles.
20 (4)CONTROL entry and exit to area around the IED. Establish an entry point.
21 If mission permits, do not let third party personnel or military traffic transit the
22 area. Do not allow anyone to enter the area unless authorized to do so (i.e.,
23 EOD personnel).
24 (5)CHECK for secondary devices. Always assume there is at least one
25 secondary device. Scan the side of the road out to 25 meters from the shoulder
26 of the road. Use gun trucks or dismounted personnel for this mission.
27 c. Upon detecting a suspected IED:
28 (1)Determine the IED location (grid coordinates) and report the situation to
29 higher headquarters and follow-on convoy elements.
30 (2)Mark IED location according to unit SOP.
31 (3)Do not approach a suspected IED.
32 (4)Possible courses of action depending on METT-TC and unit SOP:
33 (a) "Blow by it," move as far as possible to the opposite side of the road
34 while staying on the pavement, accelerate, and keep moving.
35 (1) Mark IED site as you pass.
36 (2) CC forwards IED report as convoy passes.

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

- 1 (3) Stay alert to decoy IEDs used to channel traffic into ambush or
2 daisy chained IED.
- 3 (b)“Stop and secure” the site--remain alert for a possible ambush (360
4 degree security). Block all traffic in vicinity of the IED until cleared by EOD or
5 relieved by MPs.
- 6 (1) Vehicles that cannot stop before reaching the IED site should
7 continue a safe distance beyond the site. Vehicles that have not yet reached the
8 IED site stop a safe distance before the site.
- 9 (2) If convoy must continue, hand off to nearest friendly unit to
10 block traffic.
- 11 (3) Time/distance permitting; maintain a standoff distance of at
12 least 300 meters unless otherwise specified by unit SOP. Vary standoff distance to
13 avoid a decoy IED attack. Radio or cell phone transmissions within 300 meters may
14 cause detonation.
- 15 (4) Look for potential secondary devices in what may seem like the
16 best possible location to occupy or along an alternate route.
- 17 (5) Submit IED/UXO report. (See Appendix B).
- 18 d. Static Vehicle-Born Improvised Explosive Device (VBIED), follow procedures
19 listed above.
- 20 e. Suspected mobile VBIED actions:
- 21 (1)Avoid vehicle if possible.
- 22 (2)Gain distance from vehicle.
- 23 (3)Ascertain intent. Is vehicle attacking convoy or moving to predetermined
24 target location? If convoy is under attack, place heavy volume of fire upon the
25 vehicle.
- 26 (4)Attempt to warn off a suspicious vehicle using show of force by bringing
27 individual weapons and CSW to the ready. Use flash-bang pyrotechnics to warn
28 further. If the driver's intent to attack becomes clear, concentrate fire on the
29 vehicle.
- 30 (5)Note current position and report to higher. Use SALUTE report (See
31 Appendix B). Specify direction of travel, make/model of car, description of
32 driver/passengers, and VBIED indicator(s).
- 33 f. React to IED Detonation:
- 34 (1)Drive through kill zone if all vehicles are still operable.
- 35 (2)Determine if the IED initiated an ambush. If convoy is ambushed, follow
36 procedures in Chapter III.

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

- 1 (3) If any vehicle is disabled, stop entire convoy—consistent with unit SOP.
- 2 (4) Dismount vehicles and establish 360 degree security; look for additional
- 3 devices.
- 4 (5) Coordinate Casualty Evacuation (CASEVAC or MEDEVAC) if required.
- 5 (6) Determine extent of damage and initiate vehicle recovery operations per
- 6 SOP.
- 7 (7) Mark position; report to higher.
- 8 (8) Proceed to the next rally point.
- 9

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

Appendix A Convoy Forms And Checklists

The following forms and Checklists are included in this Appendix:

- a. Sample Warning Order
- 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 Checklist
- i. Convoy Strip Map Standards.
- j. Post Convoy Operations Checklist.

Sample Warning Order

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))

3. TASK ORGANIZATION: (Convoy manifest)

FOUO
FINAL COORDINATION DRAFT

1 4. Initial Time Schedule:

When	What	Where	Who

2 5. Special Instructions: (PCC/PCI guidance, rehearsals, additional tasks to be
3 accomplished)

4 _____
5 _____
6 _____
7 _____
8 _____
9 _____
10 _____

11 6. Service and Support: (Based on SOPs from combat and individual loads)
12 Class I: (Rations/Water)

13 _____
14 _____
15 _____

16 Class III: (POL)

17 _____
18 _____
19 _____
20 _____

21 Class V: (Ammunition/Pyrotechnics)

Weapon System	Rounds	Type

23

FOUO
FINAL COORDINATION DRAFT

1

Pyrotechnic Device	Number	Location

2

Class VIII: (Medical/CLS/Supplies)

3

4

5

Maintenance of vehicles and equipment

6

7

7. Uniform and Equipment Common to All:

8

9

10

11

12

1
2

Table A-1 Sample Convoy Manifest

CONVOY MANIFEST					
(CONVOY NUMBER IF ASSIGNED)					
UNIT: _____					
DATE: _____					
CONVOY CDR: _____					
PAGE ____ of ____					
March Order Callsign	BUMPER #	CONVOY PERSONNEL RANK / (Last Name, First Name)	TASKS	KEY EQUIP	COMMS

3

1
2
3
4
5
6
7
8
9
10
11
12
13

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 Pre-Combat Checks (PCCs) and individual / vehicle rehearsals supervised by subordinate convoy leaders. 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). Pre-Combat Inspections (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.

Table A-2 Time Schedule

<i>Time Schedule</i>			
<i>When</i>	<i>What</i>	<i>Where</i>	<i>Who</i>

1
2
3

Sample Pre-Combat Checks and Pre-Combat Inspections

Individual Checklist: (per SOP, as designated by unit commander)

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, 2 canteens min 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	_____

FOUO
FINAL COORDINATION DRAFT

___ sets of DCUs 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	_____
Weapon Cleaning Kit / Lube	Serviceable, Stored per SOP	_____
___ MREs	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	_____

1

Vehicle / Operator Checklist

Item	Inspection	Remarks
-------------	-------------------	----------------

FOUO
FINAL COORDINATION DRAFT

A-7

FOUO
FINAL COORDINATION DRAFT

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	Cleaned, Serviceable	_____
Window(s)/Mirror(s)/turn signals, lights		_____
Cargo Strap(s)/Load(s)	Serviceable, Secure, Stored per SOP	_____
Warning Triangles	Cleaned, Serviceable, Stored per SOP	_____
Litter(s)/Body Bag(s)	Cleaned, Serviceable,	_____

FOUO
FINAL COORDINATION DRAFT

Item	Inspection	Remarks
Hasty Recover System(s)	Stored per SOP 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 nine- 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 clean	Windows / mirrors	
Vehicle load plans	All similar vehicles loaded according to load plans	

1

2

Landing Zone Kit (stored in each key leader and LZ team vehicle)

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

FOUO
FINAL COORDINATION DRAFT

Item	Inspection	Remarks
2 – Star Clusters	Cleaned, Serviceable, Stored per SOP	Marker 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 Kit bag / box		

1
2

Combat Life Saver Kit Packing List

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-IOD 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

3

A-10

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

1	Leader Checklist Item	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	_____
	Strip Map / Execution Matrix	Additional Copies	_____
	Leaderbook / Writing Device		_____
	Mission Coordination Checklist	Updated, All Phases of Mission	_____
	Map (Area of Operation)	Current Graphics (Units / Intel)	_____
	Units / Frequencies	Updated, All Phases of Mission	_____
	Current Intelligence Brief	Updated – Focus First Phase of Mission	_____
	Risk Analysis	Reviewed / Approved by Higher	_____
	SOI / ANCD / CEOI	Current / Checked	_____
	Communication check	Internal / Higher HQ / Air Support	_____
	ROE	Does everyone have / understand current ROE card	_____
	Combat lifesavers	Aid bags complete, enough CLS certified personnel for	_____

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

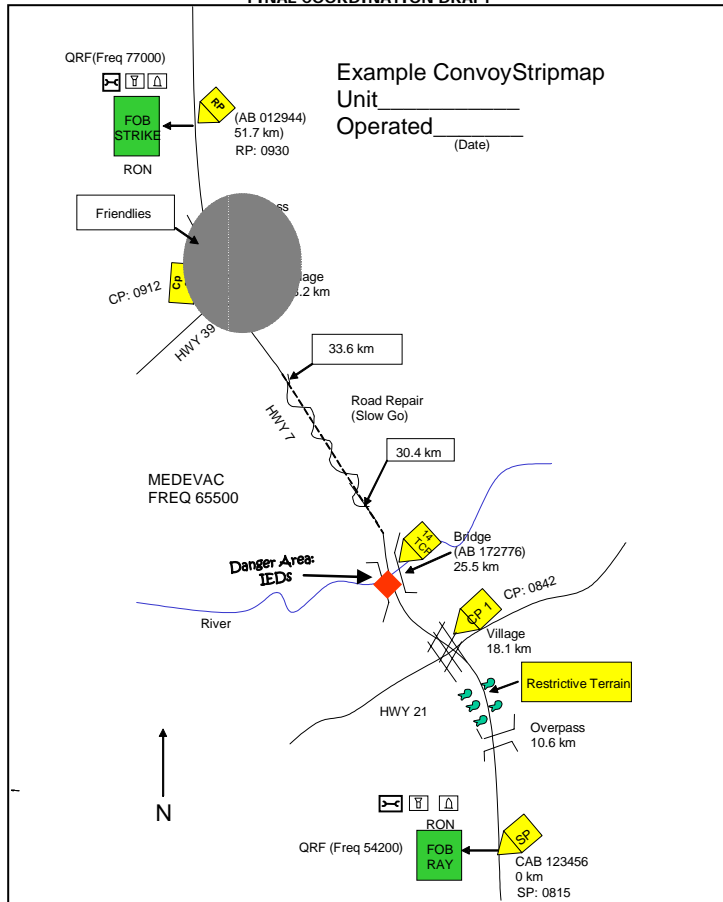
Item	Inspection	Remarks
Weapons test fire / function check	convoy Ensure all weapons serviceable	<hr/> <hr/>
Conduct rehearsals	Thorough and complete rehearsals of all battle drills	<hr/>

1

Convoy Strip Map Standards

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27

- 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, known 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 reproduce these strip maps and insure 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 points/checklist.
 - (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 intersections, and mileage between points.
 - (9) Major Cities and towns.
 - (10) North Orientation.
 - (11) Duress frequency (911 or "Sheriff" freq).
 - (12) Logistical support data, including the location of all logistical support facilities.
 - (13) Known danger areas and type of threat



1

Figure A-1 Example Strip Map

A-14

Convoy Post-Operations Checklist

1
2
3
4
5
6
7
8
9
10
11

- a. Immediately upon convoy closure, report vehicle convoy operation completion to the higher headquarters.
- b. Conduct debrief with intelligence section

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

- c. Route actually traveled vs. route planned, also known as the "honesty trace."
- d. Vehicles, Weapons, and Equipment: Refuel; clean, inventory, and perform Preventative Maintenance Checks and Services (PMCS).

Appendix B Reports

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

Reports Included:

- a. Accident Procedures and Reporting.
- b. Unexploded Ordnance (UXO).
- c. Spot Report.
- d. Salute Report.
- e. ACE Report.
- f. MEDEVAC.
- g. 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:
 - (1) Status of personnel.
 - (2) 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)

When mines, explosives or other UXO are found, report them immediately to the LTF TOC using the following format:

LINE 1. DATE/TIME group discovered.

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

FOUO
FINAL COORDINATION DRAFT

- 1 LINE 3. Method of Contacting Over Watching Unit (Radio freq/Call
2 Sign/Telephone No.).
3 LINE 4. Type of munitions (dropped, projected, placed, or thrown).
4 LINE 5. NBC Contamination.
5 LINE 6. Resources Threatened.
6 LINE 7. Impact on Mission.
7 LINE 8. Protective Measures Taken.
8 LINE 9. Recommended Priority (immediate, indirect, minor, or no threat).
9 (Immediate: stops a unit's maneuver and mission capability or threatens
10 critical assets vital to the mission; indirect: stops the unit's maneuver and
11 mission capability or threatens critical assets important to the mission;
12 Minor: reduces the unit's maneuver and mission capability or threatens non-
13 mission critical assets of value; no threat: has little or no effect on the unit's
14 capabilities or assets)
15 Marking UXO.
16 (1) If SAFE to do so, mark area using marking tape, engineer tape, candy
17 striped tape, mine signs or whatever means are available to keep personnel
18 or local nationals out of the area.
19 (2) Protective Measures: Build a barricade far enough away from the UXO so
20 that it cannot fall on it.
-
- 21 Note: Do not enter an uncleared area to mark a mine or UXO. Place marking in
22 the closest cleared area (i.e., if mine or UXO is off the side of the road, place
23 marking on the edge of the road).
-

- 24
25 **Spot Report (for any information requiring a report)**
26
27 WHO (Unit or Personnel Involved in the Incidents).
28 WHAT (Detailed Description of the Incident).
29 WHERE (Grid and Location Where the Incident Took Place).
30 WHEN (Date and Time).
31 ACTIONS ALREADY TAKEN BY UNIT.
32

SALUTE Report (for enemy contact)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33

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.
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, callsign 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
Line 4: Special equipment required. As applicable, express either none, hoist, or stokes litter (basket).
A = None.
B = Hoist
C = Extraction Equipment

FOUO
FINAL COORDINATION DRAFT

- 1 D = Ventilator
- 2 Line 5: # of patients by type. (Litter/Ambulatory).
- 3 Line 6: Security of pick-up site. (What possible/known threat is in the area)?
- 4 Line 7: Method of marking pick-up site. (near/far recognition devices).
- 5 A = Panel
- 6 B = Pyro
- 7 C = Smoke
- 8 D = None
- 9 E = Other
- 10 Line 8: Patient nationality and status (Coalition Military, US Contractor, non-US
- 11 Contractor, Enemy Prisoner of War)
- 12 A = US Military
- 13 B = US Civilian
- 14 C = Non-US military
- 15 D = EPW
- 16 Line 9: NBC Contamination.
- 17 N = Nuclear
- 18 B = Biological
- 19 C = Chemical

Call for Fire

- 22 NOTE: A call for fire is a concise message prepared by the observer. It is a
- 23 request for fire, not an order. There are six elements of the call for fire sent to
- 24 the fire direction center (FDC) in three transmissions. (See ALSA J-Fire MTTTP)
- 25 a. Observer identification
- 26 b. Warning Order (type of mission-adjust fire, fire for effect, immediate
- 27 suppression)
- 28 c. Target location
- 29 d. Target description
- 30 e. Method of engagement (danger close, high angle, ammo type requested)
- 31 f. Method of control (at my command, request time of flight, request splash,
- 32 request Time on Target)

34 **SAMPLE Call for Fire**

B-4

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

1 First Transmission: Observer ID (callsign) and WARNO; "H24 this is N24,
2 adjust fire" (or "request close air support")
3 Second transmission: Target location; "Grid WF111222" or "At intersection of
4 MSR Drum and highway 12"
5 Third Transmission: Target description, method of engagement and control;
6 "Enemy gun truck in open, fire when ready, over"
7
8 **SAMPLE Call for Emergency Close Air Support:**
9 "Crash" is the callsign of a 20 vehicle tactical convoy.
10 "Anvil 41" is a section of AV-8Bs.
11
12 Note: This is not a text-book example of how to coordinate air support but
13 rather an example of how to protect your convoy in an emergency using plain
14 English. The doctrinal example can be found in JP 3-9.3.
15 The lead vehicle of the "Crash" convoy has been hit with an IED. The convoy
16 is stopped and the wounded are being transferred to other vehicles. After air
17 support has been requested over the Convoy Control Net, Anvil 41 is headed
18 toward the site.
19
20 Anvil 41: "Crash, this is Anvil 41, What's your location?"
21 Crash: "Anvil 41, Crash is west-bound on Mobile, just short of the Thar
22 Thar Bridge"
23 Anvil 41: "I've got a burning vehicle with about 20 vehicles stacked up
24 behind him to the east."
25 Crash: "That's us. Our lead vehicle hit an IED or a mine. The convoy is
26 stopped and we're taking fire from the north."
27 Anvil 41: "Roger, we're looking north. Describe the fire."
28 Crash: "Anvil, we just had an RPG shot at us about 100 meters north of
29 the lead vehicle."
30 Anvil 41: "Tally that shot. Do you have any friendlies away from the
31 vehicles in that direction?"
32 Crash: "Negative, everyone is either still inside or to the south."
33 Anvil 41: "Roger, we're going to make a gun run from east to west into that
34 enemy firing position."
35 Crash: "Roger"

FOUO
FINAL COORDINATION DRAFT

B-5

FOUO
FINAL COORDINATION DRAFT

1 Anvil 41: "Anvil 41, In from the east...Off to the west"
2 Crash: "Those hits were right where the shots were coming from. We
3 need to get out of here. We're going to proceed west across the bridge."
4 Anvil 41: "Roger. We'll watch your right flank and the bridge. Cobras are
5 ten minutes out."
6

**Appendix C
Convoy Briefing**

Sample Convoy Commander's Brief (OPORD format)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

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)

1. SITUATION:

a. Enemy Forces: Discuss enemy.

 Identification of enemy (if known).

 Composition/capabilities/strength/equipment.

 Location (known 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).

FOUO
FINAL COORDINATION DRAFT

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36

d. Friendly Forces:

- Units along the route
 - Operational support provided by higher headquarters.
 - Aviation support.
 - 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)
-
-
-
-

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).

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.)

FOUO
FINAL COORDINATION DRAFT

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36

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

c. Coordinating Instructions: (Instructions for ALL units)
Order of march (spacing of serials/location of support elements)

d. Routes (Ensure strip map is attached)

e. Additional movement issues (speed, intervals, lane, parking, accidents, etc.)

f. Convoy Execution:

FOUO
FINAL COORDINATION DRAFT

- 1 (1)Timeline
2 (a)Vehicle/personal gear preparation; preventive maintenance checks and
3 services (PMCS) completed.
4 (b)Briefing.
5 (c)Put on equipment.
6 (d)Load vehicles.
7 (e)Rehearsals/test fires.
8 (f) Start point (SP)/departure.
9 (g)Return to base (RTB).
10 (h)Debrief.
11 (i) Recovery: Maintain vehicles/personal gear.
12 (j) Coordinating instructions.
13 (2)Sectors-of-fire: Cover assigned sectors while mounted/dismounted; cover
14 up/down bridges, rooftops, balconies, storefronts, multi-story structures, and
15 cross streets.
16 (a)Scan crowds, vehicles, and roadsides for attack indicators. (Note:
17 Communicate indicators throughout the convoy).
18 (b)Beware of motorcycles, vans with side doors, and dump trucks.)
19 (c)Beware of objects in the road (cars, potholes, objects, fresh asphalt, and
20 trash).
21 (3)Convoy speed. _____min/max_____
22 (a)Speed is dictated by either the rear vehicle's ability to keep up or having
23 slower vehicles in the lead
24 (b)Highways/open roads: Example: 50+ mph.
25 (c)Urban/channeled areas: As fast as traffic will allow (Be prepared for
26 evasive maneuvers, bumping and blocking to allow for continuous movement.)
27 (4)Vehicle interval.
28 (a)Highways/open roads/clover leafs/bridges/ramps: Open spacing, but do
29 not allow vehicles to enter convoy.
30 (b)Urban/channeled areas: Close interval, but must have visual of tires on
31 vehicle in front of your vehicle. Drive on wrong side as necessary.
32 (5)Headlight status (on/off, blackout, use of night observation devices).
33 (6)ROE for Convoy Operations (AOR specific).
34 (7)Battle drills will be rehearsed during rehearsals – no need to cover in brief.
35
36

FOUO
FINAL COORDINATION DRAFT

- 1
2
3 4. ADMIN & LOGISTICS (Equipment).
4 a. Individual Equipment (pre-combat inspections [PCIs] see checklist)
5 b. Vehicles (see PCI checklist).
6 5. COMMAND and CONTROL.
7 a. Chain of Command. (Positioning in Convoy)
8 b. Convoy Call sign(s): _____
9 c. Area of Operations Communications/MEDEVAC and CASEVAC Plan.
10 d. Convoy Primary/Alternate/Contingency/Emergency (PACE)
11 Communications (extra batteries):
12 e. Vehicle internal (Back to: _____)
13 f. Hand and arm/visual signals (as per unit SOPs).
14 Radio: _____ primary/alternate _____/_____
15 Radio: _____ primary/alternate _____/_____
16 g. Vehicle to vehicle
17 Hand and arm/visual signals (as per unit SOPs).
18 Radio: _____ primary/alternate _____/_____
19 Radio: _____ primary/alternate _____/_____
20 h. Convoy to Higher HQ
21 Radio: _____ primary/alternate _____/_____
22 Radio: _____ primary/alternate _____/_____
23 i. Other Support
24 MSF/QRF: freq: _____ call sign: _____ (Note: HOPSETS
25 changes with ORs).
26 CASEVAC: freq: _____ call sign: _____
27 j. Crew commands / Pro-words / Brevity Codes:
28 k. Blue Force Trackers SN #s.
29 l. Pyrotechnics.
30 m. Special instructions (SPINS).
31 n. Supporting arms: freq: _____ call sign: _____
32 o. Reports (individual and higher)
33 6. SAFETY. (See Appendix E-Risk Assessment)
34 a. Overall Risk to Force:
35 Low. Medium. High.
36

FOUO
FINAL COORDINATION DRAFT

- 1 b. Overall Risk to Mission Accomplishment:
- 2 Low. Medium. High.
- 3 c. Fratricide Reduction Measure
- 4 7. Review Timeline
- 5 8. Give Time Hack
- 6 9. Ask for Questions
- 7

1
2
3

Appendix D
Risk Management
Table D-1 Risk Management Card

PLANNING

Guidance	Preparation Time		
	Optimum	Adequate	Minimal
Verbal	3	4	5
FRAGO	2	3	4
OPORD	1	2	3
Score _____			

INTELLIGENCE

	Current Route Intelligence			
	>12 Hours	>24 Hours	Historical	No ne
Level 2	3	4	5	
Level 1	2	3	4	
Random	1	2	3	
Score _____				

COMMUNICATION

Overall Threat	Type of Systems		
	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

Overall Threat	Current Status		
	75% COM/CSS LFX	75% Weapon Qual	>75% Not Trained
Level 2	3	4	5
Level 1	2	3	4
Random	1	2	3
Score _____			

SOLDIER ENDURANCE

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

SECURITY

Overall Threat	Security (WPN) Support Provided			
	External	1-8 Gun Truck	1-8 Automatic	M1 6 Only
Level 2	3	4	5	5
Level 1	2	3	4	5
Random	1	2	3	4
Score _____				

PERSONNEL PROTECTION

Hardening / Equipment

FOUO
FINAL COORDINATION DRAFT

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

VISIBILITY

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

SOPs / Rehearsals

Overall Threat	Preparation		
	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 _____			

0-19 20-30 31-39 40+
Low Risk Medium High Risk Very High
 Total Score _____

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

FOUO
FINAL COORDINATION DRAFT

Commander Signature _____

Date _____

This card is prepared by the Company CDR and then briefed to the Convoy Commander at receipt of Mission. The Convoy Commander will backbrief the Company Commander if any established control measures cannot be accomplished.

1

D-4

FOUO
FINAL COORDINATION DRAFT

1

Table D-2 Sample Tactical Convoy Risk Reduction Worksheet

<i>Check all that apply</i>	<i>Hazard</i>	<i>Risk Level L / M / H</i>	<i>Control Measures</i>	<i>Residual Risk L / M / H</i>
	Adverse Terrain		Drivers training, convoy brief	
	Air Attack		Convoy defense, battle drills, harden vehicles, commo	
	Ambush		Convoy defense, battle drills, harden vehicles	
	Barricades		Convoy defense, rehearsals, battle drills, breach teams	
	Blackout Drive		Drivers training, convoy brief	
	Breakdown		PMCS, PCI's, Class II, SPO's (stripmap)	
	Exhaust Fumes		Enforce no sleep rule (TC's), PMCS, PCI's	
	Cargo (HAZMAT)		Training, PCI's	
	Civilians		Commo, Convoy briefs, training	
	Cold Weather		Cold weather training, PCI's	
	Communication		Training, commo personnel, PMCS, PCI's	
	Desert Environment		Training, convoy briefs	
	Disorientation		Convoy briefs, stripmap (SOP's), training (plugers, etc)	
	Driver Inexperience		Driver placement, training	
	Enemy ATK		Rehearsals, battle drills, convoy briefs, harden vehicles	
	Fratricide		VS-17 panels, on vehicles, markings, commo	
	Halt		Rehearsals, battle drills, convoy briefs	
	Heat		Water, rest halts, convoy brief (safety)	
	Heavy Rain		PMCS, drivers training, reduce speed	

FOUO
FINAL COORDINATION DRAFT

<i>Check all that apply</i>	<i>Hazard</i>	<i>Risk Level L / M / H</i>	<i>Control Measures</i>	<i>Residual Risk L / M / H</i>
	Limited Visibility		NVG's, chemlight markings, training	
	Long hauls		Drivers training, SOP's, rest halts, convoy briefs	
	Minefield		Rehearsals, battle drills	
	Mud		Recovery training, Drivers training (all wheel drive)	
	NBC Attack		Rehearsals, PCI's, recons, commo, training (NBC teams)	
	Recovery Operations		Training (with maintenance, self recovery-wench, toe-bar)	
	Reduced Visibility		Intervals, chemlight markings, training	
	Roll Over		Drivers training, recovery, SOP's (seatbelts, Kevlar's)	
	Sleep Deprivation		Enforce sleep plan, rest stops, work rotations	
	Sniper Fire		Battle drills, convoy briefs, training	
	Snow/Ice		Reduce speed, drivers training (use of CTIS),	
	Strong Winds		Reduce speed, drivers training, convoy briefs	
	Sudden halt		Intervals, training, battle drills (SOP's)	
	Sunlight		Clean windows, sunglasses	
	Fire		Fire extinguishers, evacuation drills	

1

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Appendix E Training

Individual skill sets required before collective training convoy specific tasks.

- a. Weapons familiarity / qualification. Close Quarters Marksmanship (CQM) individual and crew served weapons/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.
- e. Basic communications / radio operators training / visual communications training (train to call for fire, CAS, MEDEVAC).
- f. Special teams training (aid and litter teams, CASEVAC teams, recovery teams, landing zone teams for MEDEVAC).
- g. IED awareness.
- h. 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).

Appendix F Resources

IED Resources

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

General Websites

- 8 a. Air Land Sea Application (ALSA) Center website: www.alsa.mil
- 9 b. ALSA/Center for Army Lessons Learned (CALL) Interpreter Ops handbook,
10 <https://wwwmil.alsa.mil/interpreterops.htm>
- 11 c. Army Training Library(Reimer): www.train.army.mil
- 12 d. CALL Handbook 03-33 Convoy Leader Training:
13 <https://call2.army.mil/products/Handbook.asp>
- 14 e. Center for Army Lessons Learned (CALL): <http://call.army.mil/>
- 15 f. Combat Convoy Simulation Exercise Training:
16 <http://www.commandoperationscenter.com>
- 17 g. Combined Arms Support Command website: <http://www.cascom.army.mil>
- 18 h. Logistics Tool and National Stock Number Lookup tool:
19 http://logtool.net/html/02USA_1identify.php

Training

- 21 a. Convoy LFX training support package:
22 https://www.cascom.army.mil/private/TD/Transportation/training_products/Convoy_Live_Fire/conv_live_fire.htm
- 23 b. Combat Life Saver (CLS/Medics): <http://www.cs.amedd.army.mil/clsp/>
- 24 c. Joint Readiness Training Center (JRTC) Website: www.jrtc-polk.army.mil
- 25 d. Reimer Digital Library: <http://atiam.train.army.mil/portal/index.jsp>
- 26 e. Training Support Package for Convoy Survivability:
27 http://www.cascom.army.mil/private/TD/Transportation/training_products/Convoy%20Survivability/convoy_surv.htm
- 28
- 29

FOUO
FINAL COORDINATION DRAFT

1 **Table F-1 Convoy Equipment National Stock Numbers**

Nomenclature	NSN
Ring Mount for vehicles/weapon system	See Note Below
M6 Pedestal Mount	1005-01-411-6341
Cargo Straps 10K lbs, Kevlar Blanket, Ballistic Tow Cables	1670-00-937-0271
Combat Lifesaver Bag, plus supplies	6545 01 254 9551
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
Swing Arm Mount	
Spot Light	6220-00-735-4815
Ratchet Straps	
Steel Carabiners 10K lbs	
Sling Set, 25K lbs	1670-01-027-2900
Gloves, Nomex	8415-01-074-9432
Gloves, Kevlar Impact II	SMALL- 8415MP-CT05-08
CT	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	6350-00-105-1252

FOUO
FINAL COORDINATION DRAFT

Nomenclature **NSN**

Signaling, Type II
Kit bag, flyers 8460-00-606-8366
MOUT/Mechanical
breacher's kit
Smoke Grenade Launchers

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

3 **MK19 Vehicle Ring Mount**

4 MK 93 Mod 1 NSN: 1005013832757 or MK Mod 9 NSN: 1010014123159
5 M1025/M1026/M1114 HMMWV pintle adapter NSN: 3120011885082
6 M66 machinegun mount ring NSN: 1005007012810
7 800 series 5 ton mounting kit NSN: 1005012264589, cab reinforcement
8 kit NSN: 2590013222694
9 LMTV and FMTV mounting kit NSN: 1005013815431
10 HEMTT mounting kit NSN: 2590012206377 (incl M66 mount ring)
11 PLS mounting kit NSN: 1005013632502
12 Lightweight ring mounting kit for 900 series 5 ton NSN: 1005014323339, Cab
13 reinforcement kit 2590014369144

14
15 **M240B/M249 Vehicle Ring Mount**

16 Ammo adapter bracket assembly NSN: 1005014318324
17 Deflector kit NSN: 1005014680552
18 M197 machinegun mount NSN: 1005014134098
19 M1025/M1026/M1114 HMMWV pintle adapter NSN: 3120011885082
20 M66 machinegun mount ring NSN: 1005007012810
21 800 series 5 ton mounting kit NSN: 1005012264589, cab reinforcement
22 kit NSN: 2590013222694
23 LMTV and FMTV mounting kit NSN: 1005013815431
24 HEMTT mounting kit NSN: 2590012206377 (incl. M66 mount ring)
25 PLS mounting kit NSN: 1005013632502
26 Lightweight ring mounting kit for 900 series 5 ton NSN: 1005014323339, Cab
27 reinforcement kit NSN: 2590014369144

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

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

Table F-2 Combat Lifesaver Kit

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 Gauge	6515-01-282-4878
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

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

Appendix G Tactical Convoy Operations Standard Operating Procedures

SOP Guidelines

- a. There are important planning considerations that should be included in unit standing operation procedures (SOPs) for tactical convoy operations.
- b. An 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.

References

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31

Joint Publications

JP 0-2, Unified Action Armed Forces (UNAAF): 10 July 2001.
Joint Pub 3-09.3 Joint Tactics, Techniques, and Procedures for Close Air Support, 3 September 2003

Multi-Service

ALSA J-Fire, Multi-service Procedures for the Joint Application of Firepower, November 2002
ALSA and CALL Handbook No. 04-7, Interpreter Operations, March 2004
MPRI Convoy Leader Handbook, Revision V, 19 January 2004
CJTF-7 OIF Smart Card 2, Version 1.A., 3 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
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 7 - 7; The Mechanized Infantry Platoon and Squad (APC): March 1985
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, 26 September 2001

Air Force

Other

GLOSSARY

1
2

PART I – ABBREVIATIONS AND ACRONYMS

A	
A&L	aid and litter
ACC	assistant convoy commander
ACE	ammunition, casualties, equipment
AO	area of operations
AOR	area of responsibility
B	
BMNT	before morning nautical twilight
C	
CAE	counter-assault element
CAS	close air support
CASEVAC	casualty evacuation
CC	convoy commander
CLS	combat lifesaver
COA	course of action
CP	checkpoint
CS	combat support
CSS	combat service support
CSW	crew-served weapon
D	
DRAW-D	defend, reinforce, attack, withdraw, and delay
E	
EENT	end of evening nautical twilight
F	
FBCB2	force battle command, brigade and below (see also, blue force tracker)
FIST	fire support team

FOUO
FINAL COORDINATION DRAFT

FOB	forward operating base
FRAGO	fragmentary order
FSE	forward security element
G	
GPS	global positioning system
H	
HQ	headquarters
I	
IED	improvised explosive device
J	
JTAC	joint terminal attack controller
L	
LOC	lines of communication
LVC	lead vehicle commander
LZ	landing zone
M	
MEDEVAC	medical evacuation
METT-TC	mission, enemy, terrain and weather, troops and support available, time available, civilians
MP	military police
MR	moonrise
MS	moonset
MSF	mobile security force
MTS	Movement Tracking System
MTTP	multi-Service tactics techniques and procedures
N	
NAV	navigator
NTV	Non-tactical vehicle

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

NVG	night vision goggles
O	
OGA	other governmental agency
OPCON	operational control
OPORD	operations order
OPSEC	operations security
OVM	on-vehicle material
P	
PCC	pre-combat check
PCI	pre-combat inspection
PMCS	preventative maintenance checks and services
PSD	personal security detail
Q	
QRF	quick reaction force
R	
RECCE	reconnaissance
ROE	rules of engagement
RP	release point
RPG	rocket propelled grenade
S	
SALUTE	size, activity, location, unit, time, equipment
SITREP	situation report
SOF	special operating force
SOP	standard operating procedure; standing operating procedure
SP	start point
SUV	sport utility vehicle
T	
TCP	traffic control point

FOUO
FINAL COORDINATION DRAFT

FOUO
FINAL COORDINATION DRAFT

TLP	troop leading procedures
TTP	tactics, techniques, and procedures
U	
UAV	unmanned aerial vehicle
V	
VBIED	vehicle borne improvised explosive device
VC	vehicle commander
W	
WARNO	warning order

1

2

PART II – TERMS AND DEFINITIONS

3

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

4

5

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 your convoy

6

7

Bumping- the replacement of one blocking vehicle with another. This technique is similar to “road guards” during a unit PT run. Blocking vehicles “bump” ahead and act as barriers to third party interference.

8

9

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

10

11

12

Casualty Evacuation (CASEVAC) - FM 8-10-6 defines as a term used by non-medical units to refer to the movement of casualties aboard non-medical vehicles or aircraft. En route medical care is not provided.

13

14

15

16

17

18

19

20

Cold side- Side of vehicle opposite that which taking fire.

21

6

FOUO
FINAL COORDINATION DRAFT

- 1 **Convoy Escort-** Any security element/augmentation that has an
2 independent task organization that will be supporting a convoy—to
3 include air support (e.g. MP detachment, rotary wing escort, or
4 security element from a maneuver battalion).
- 5 **Daisy Chain-** two or more explosive devices wired together so that a
6 single signal will detonate all the munitions at once.
- 7 **Improvised Explosive Device (IED)** – Device placed or fabricated in
8 an improvised manner incorporating destructive, lethal, noxious,
9 pyrotechnic, or incendiary chemicals, designed to destroy,
10 disfigure, distract, or harass. It may incorporate non-military or
11 military components; it could be static or vehicle borne. IEDs may
12 have an NBC capability. Vehicle-borne IEDs (VBIEDs) may be the
13 most dangerous due to increased explosive payload.
- 14 **Five/twenty-five (5/25) meter Scan-** from position, begin scanning
15 out 5 meters and increase out to 25 meters.
- 16 **Green Convoy-**For purpose of this publication, convoys that consist of
17 military vehicles and personnel.
- 18 **Gun Truck-** A gun truck is a vehicle where the primary weapon system
19 is a crew served weapon with a 360 degree field of fire capability.
20 Ideal platform is a hardback / or up-armored HMMWV
21 (M1114/M1113). Gun trucks are essential direct fire support
22 vehicles for convoys. Gun trucks are manned by a trained crew
23 consisting of VC, gunner, and driver. Gun trucks have the
24 capability to suppress targets and maneuver within unprotected
25 convoy areas.
- 26 **Honesty Trace-** Route actually traveled vs. route planned. Normally
27 tracked by intelligence section (S2) to identify friendly trends that
28 could be predictable by enemy over time.
- 29 **Hot side-** Side of vehicle that which is taking fire.
- 30 **Medical Evacuation (MEDEVAC)** - FM 8-10-6 defines as the timely,
31 efficient movement and en route care by medical personnel of the
32 wounded, injured, and ill persons, from the battlefield and other

FOUO
FINAL COORDINATION DRAFT

References-7

1 locations to MTFs. The term MEDEVAC refers to both ground and
2 air assets. Divisions are equipped with both ground and air
3 MEDEVAC assets.

4 **Pre-Combat Checks (PCCs).** PCCs are procedures for all individuals
5 assigned to a convoy to determine if equipment required for a
6 mission is available and serviceable. PCCs are effective only if they
7 are organized and conducted using an up-to-date checklist. This
8 section provides suggested checklists for leaders, specialty teams
9 and individuals. Use these checklists as a guideline. The type of
10 unit, equipment, operational area and mission will dictate additions,
11 substitutions and deletions. Follow through is essential, missing or
12 unserviceable equipment must be rapidly reported, repaired or
13 exchanged. These checks should be scheduled soon after the
14 warning order is issued at a time where individuals are released
15 from other duties.

16 **Pre-Combat Inspections (PCIs).** PCIs are the series of inspections
17 scheduled early in the preparation sequence to insure that all PCCs
18 have been performed properly and that all vehicles, weapons,
19 communications, special and individual equipment are available and
20 functional. These PCIs are most effective when organized and
21 conducted to exacting standards by first line supervisors with
22 systematic spot checks made by the senior convoy leadership.

23 **Rolling Stop**-slow vehicle and scan the road starting at 5 meters and
24 moving out to 25 meters around vehicle for IEDs before coming to
25 a complete stop.

26 **Route Classifications**-Classification assigned to a route using factors
27 of minimum width, worst route type, least bridge, raft, or culvert
28 military load classification, and obstructions to traffic flow.

29 **Sector of Fire** - the area that can be covered with direct fire.

30 **Sector of Observation**- The entire area visible to the crew member.

31 **Spotter personnel**-Personnel designated to look for specific threats to
32 the convoy.

FOUO
FINAL COORDINATION DRAFT

- 1 **Tactical Convoy**-A deliberately planned combat operation to move
2 personnel and or cargo via a group of ground transportation assets
3 in a secure manner to or from a target destination under the
4 control of a single commander in a permissive, uncertain or non-
5 permissive environment.
6 **Third party personnel/vehicle**-personnel and/or civilian vehicles
7 operated by civilians that are not part of the convoy operation.
8 **White Convoy**-For purpose of this publication, convoys that consist of
9 civilian/contractor vehicles and personnel.
10

1 **FM 3-52.2 (FM 100-103-2)**
2 **MCRP 3-25F**
3 **NTTP 3-56.2**
4 **AFTTP(I) 3-2.17**

5 **Day Month YEAR**

6 **By Order of the Secretary of the Army:**

7	Official:	15	PETER J. SCHOOMAKER
8	JOEL B. HUDSON	16	General, United States Army
9	Administrative Assistant to the	17	Chief of Staff
10	Secretary of the Army	18	

11 *XXX*

12 *XXXX*

13

14

19 **DISTRIBUTION:**

20 Active Army, Army National Guard, and US Army Reserve: Distribute in
21 accordance with the initial distribution number (IDN) TBD, requirements for
22 FM 3-52.2.

23 By Order of the Secretary of the Air Force:

24 **BENTLEY B. RAYBURN**

25 Major General, USAF
26 Commander
27 Headquarters Air Force
28 Doctrine Center

29 **Air Force Distribution: F or X if restricted publication**

FOUO
FINAL COORDINATION DRAFT

1

MARINE CORPS PCN:

PIN: