

U.S. ARMY SERGEANTS MAJOR ACADEMY (BNCOC)

W333/ REACT TO POSSIBLE IMPROVISED  
EXPLOSIVE DEVICES (IEDs)

OCT 04



**Stand Alone Common Core**

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**TRAINING SUPPORT PACKAGE (TSP)**


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<b>TSP Number / Title</b>	W333 / REACT TO A POSSIBLE IMPROVISED EXPLOSIVE DEVICE (IED)
<b>Effective Date</b>	01 Oct 2004
<b>Supersedes TSP(s) / Lesson(s)</b>	None
<b>TSP Users</b>	600-BNCOC Basic Noncommissioned Officer Course
<b>Proponent</b>	The proponent for this document is the Sergeants Major Academy.
<b>Improvement Comments</b>	Users are invited to send comments and suggested improvements on DA Form 2028, <i>Recommended Changes to Publications and Blank Forms</i> . Completed forms, or equivalent response, will be mailed or attached to electronic e-mail and transmitted to:  <p style="text-align: center;">COMDT USASMA ATTN: ATSS DC BLDG 11291 BIGGS FIELD FORT BLISS, TX 79918-8002</p> <p style="text-align: center;">Email: <a href="mailto:atss-dcd@bliss.army.mil">atss-dcd@bliss.army.mil</a></p>
<b>Security Clearance / Access</b>	Unclassified
<b>Foreign Disclosure Restrictions</b>	FD5. This product/publication has been reviewed by the product developers in coordination with the USASMA foreign disclosure authority. This product is releasable to students from all requesting foreign countries without restrictions.

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**PREFACE**

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**Purpose**

This Training Support Package provides the instructor with a standardized lesson plan for presenting instruction for:

**Task Number****Task Title**

093-401-5050 React to a possible improvised explosive device (IED)

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**This TSP  
Contains**

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**REACT TO A POSSIBLE IMPROVISED EXPLOSIVE DEVICE (IED)  
W333 / Version 1  
01 Oct 2004**

**SECTION I. ADMINISTRATIVE DATA**

<b>All Courses Including This Lesson</b>	<u>Course Number</u>	<u>Version</u>	<u>Course Title</u>								
	600-BNCOC	1	Basic Noncommissioned Officer's Course								
<b>Task(s) Taught(*) or Supported</b>	<u>Task Number</u>	<u>Task Title</u>									
	093-401-5050	React to a possible improvised explosive device (IED)									
<b>Reinforced Task(s)</b>	None.										
<b>Academic Hours</b>	The academic hours required to teach this lesson are as follows:										
	<u>Resident Hours/Methods</u>										
	1 hr	00 mins / Conference / Discussion									
	0 hr	00 mins / Practical Exercise (Performance)									
Test	0 hr										
Test Review	0 hr										
	Total Hours:	1 hr									
<b>Test Lesson Number</b>	<u>Hours</u>	<u>Lesson No.</u>									
	Testing (to include test review)	N/A									
<b>Prerequisite Lesson(s)</b>	<u>Lesson Number</u>	<u>Lesson Title</u>									
	None										
<b>Clearance Access</b>	Security Level: Unclassified Requirements: There are no clearance or access requirements for the lesson.										
<b>Foreign Disclosure Restrictions</b>	FD5. This product/publication has been reviewed by the product developers in coordination with the USASMA foreign disclosure authority. This product is releasable to students from all requesting foreign countries without restrictions.										
<b>References</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;"><u>Number</u></th> <th style="width: 35%;"><u>Title</u></th> <th style="width: 15%;"><u>Date</u></th> <th style="width: 25%;"><u>Additional Information</u></th> </tr> </thead> <tbody> <tr> <td>TC 9-21-01 (093-89D-01)</td> <td>Soldiers Improvised Explosive Device (IED) Awareness Guide IRAQ and AFGHANISTAN Theaters of Operation</td> <td>20 April 2004</td> <td>Change 1, version 1</td> </tr> </tbody> </table>			<u>Number</u>	<u>Title</u>	<u>Date</u>	<u>Additional Information</u>	TC 9-21-01 (093-89D-01)	Soldiers Improvised Explosive Device (IED) Awareness Guide IRAQ and AFGHANISTAN Theaters of Operation	20 April 2004	Change 1, version 1
<u>Number</u>	<u>Title</u>	<u>Date</u>	<u>Additional Information</u>								
TC 9-21-01 (093-89D-01)	Soldiers Improvised Explosive Device (IED) Awareness Guide IRAQ and AFGHANISTAN Theaters of Operation	20 April 2004	Change 1, version 1								

**Student Study Assignments**

Before class--

- Read student handouts.

During class--

- Participate in classroom discussion.

After class--

- Turn in recoverable reference materials.

**Instructor Requirements**

1:16, SSG, BNCOC graduate, ITC and SGITC qualified.

**Additional Support Personnel Requirements**

<u>Name</u>	<u>Stu Ratio</u>	<u>Qty</u>	<u>Man Hours</u>
None			

**Equipment Required for Instruction**

<u>ID Name</u>	<u>Stu Ratio</u>	<u>Instr Ratio</u>	<u>Spt</u>	<u>Qty</u>	<u>Exp</u>
4110010190392 PROJECTOR, CANNON	1:16	1:2	No	1	No
673000T101700 PROJECTOR, OVERHEAD, 3M	1:16	1:2	No	1	No
702101T134520 DELL CPU, MONITOR, MOUSE, KEYBOARD	1:16	1:2	No	1	No
702501T132972 MONITOR, 17", LITE ON TECHNOLOGY	1:16	1:2	No	1	No
703500T102257 DESKTOP/EPSON PRINTER	1:16	1:2	No	1	No
704500T119010 POWER BACKUP, APC, BK400	1:16	1:2	No	1	No
AV CENTER WITH AUDIO CAPABILITIES OF T-NET AND VTC	1:16	1:2	No	1	No
MICROPROCESSOR 1.7 GHZ, P4 MICROPROCESSOR, 20.5 GIGABYTES HDD	1:16	1:2	No	1	No
SNV1240262544393 36 - INCH COLOR MONITOR W/REMOTE CONTROL AND LUXOR STAND	1:16	1:2	No	1	No
SOFTWARE-1 MS-DOS, LATEST GOVERNMENT APPROVED VERSION	1:16	1:2	No	1	No
SOFTWARE-2 WINDOWS XP, LATEST GOVERNMENT APPROVED VERSION	1:16	1:2	No	1	No
TV SYSTEM 8 - CHANNEL CLOSED-CURCUIT TV SYSTEM, 1/2"	1:16	1:2	No	1	No

\* Before Id indicates a TADSS

**Materials Required**

**Instructor Materials:**

- Training support package.
- VGT-1 thru VGT-27.

**Student Materials:**

- Pen or pencil and writing paper.
- Reading material listed on the advance sheet.

**Classroom, Training Area, and Range Requirements**

CLASSROOM INSTRUCTION 900 SF, 16 PN or Classroom Conducive to Small Group Instruction of 16 Students.

**Ammunition Requirements**

<u>Id</u>	<u>Name</u>	<u>Exp</u>	<u>Stu Ratio</u>	<u>Instr Ratio</u>	<u>Spt Qty</u>
None					

**Instructional Guidance**

**NOTE:** Before presenting this lesson, instructors must thoroughly prepare by studying this lesson and identified reference material.

Before class--

- Inform students that they must read their student handouts prior to class.

After class--

- Collect and turn in all recoverable materials.

Student Discussion Leader:

Before class--

- Study the TSP material and references before presenting this lesson.

During class--

- Facilitate group process IAW TSP.

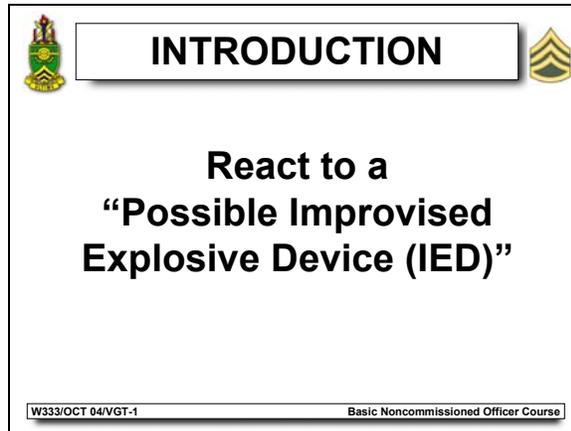
**Proponent Lesson Plan Approvals**

<u>Name</u>	<u>Rank</u>	<u>Position</u>	<u>Date</u>
/s/Sanchez, Roy R.	GS-11	Senior Training Specialist	10 AUG 04
/s/King, Philip	GS-11	Course Manager B/ANCOC	10 AUG 04
/s/Bennett-Green, Agnes D.	SGM	Chief, B/ANCOC	10 AUG 04
/s/Lemon, Marion	SGM	Chief, CDDD	10 AUG 04

**SECTION II. INTRODUCTION**

Method of Instruction: Conference / Discussion  
 Technique of Delivery: Small Group Instruction (SGI)  
 Instructor to Student Ratio is: 1:16  
 Time of Instruction: 5 min  
 Media: None.

Motivator

**SHOW VGT-1, INTRODUCTION**

Throughout the 20th century improvised explosive devices commonly referred to as “IED’s” have injured, maimed and killed soldiers and civilians. More recently the Global War on Terrorism (GWOT) has seen enemy and terrorist forces develop and implement IED’s as a weapon of choice due to their ease of manufacture, employment and destructive potential. The purpose of the IED is to disrupt operations, spread fear and panic and lessen the will of the local people, and friendly forces to continue operations in support of democracy by injuring, maiming, and killing combatants as well as non-combatants. Leaders must ensure that soldiers can perform this life-critical task to standard, ultimately ensuring their survival in an Army at War as well as an Army at peace.

**REMOVE VGT-1**

**Terminal Learning Objective**

**NOTE:** Inform the students of the following Terminal Learning Objective requirements.

At the completion of this lesson, you [the student] will:

<b>Action:</b>	React to a possible improvised explosive device (IED)
<b>Conditions:</b>	As a squad leader/staff NCO in a company or battalion level unit and given TC 9-21-01 (093-89D-01) and Lessons Learned from IRAQ FREEDOM (OIF).
<b>Standards:</b>	Reacted to a possible improvised explosive device (IED) IAW TC 9-21-01 and student handouts.

**Safety Requirements**

None

**Risk Assessment Level**

Low

**Environmental Considerations**

**NOTE:** It is the responsibility of all soldiers and DA civilians to protect the environment from damage.

None

**Evaluation**

This lesson material in this TSP is nontestable.

**Instructional Lead-In**

**Note:** The following VGT's are examples of IED usage.

**SHOW VGT-2, DESTROYED VEHICLE**



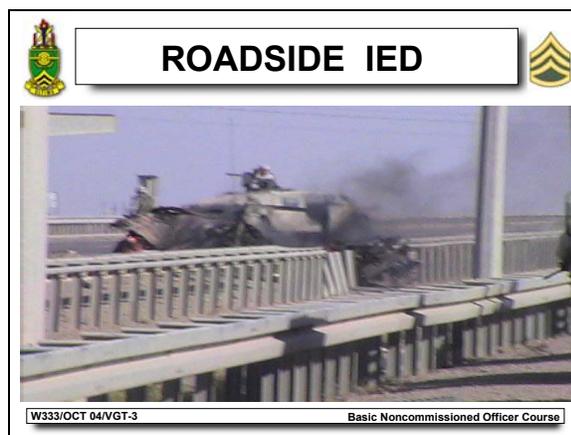
The construction of improvised explosive devices (IED's) consists of any available material and contain various fillers to include; explosive, chemical,

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biological, or hazardous materials. Improvised explosive devices may range in size from a cigarette pack or carton to a large vehicle. The only limitations an enemy bomber faces are: availability of resources, personal ingenuity, and the degree or extent of “know-how” required to facilitate construction and in some cases application of an improvised explosive device.

**REMOVE VGT-2**

**SHOW VGT-3,**



Improvised explosive devices are nonstandard, and usually fabricated from common materials. The mass quantities of cached, captured enemy ammunition (CEA) and stockpiled munitions within the Iraq and Afghanistan theaters of operations provide the explosive materials to “would be” enemy bombers.

IEDs vary in size, shape, material, and construction. IEDs can range from simple mechanical devices to complex electronic and radio controlled (R/C) command detonated devices.

**REMOVE VGT-3**

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### SECTION III. PRESENTATION

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1. Learning Step / Activity 1. Possible improvised explosive device (IED).  
 Method of Instruction: Conference / Discussion  
 Technique of Instruction: Small Group Instruction (SGI)  
 Instructor to Student Ratio: 1:16  
 Time of Instruction: 35 min  
 Media: VGT-4 thru VGT-23

QUESTION: What is the definition of improvised explosive devices?

ANSWER: See VGT-4

#### SHOW VGT-4, DEFINITION



**DEFINITION**



**“Improvised Explosive Device” (IED)**

A nonstandard device usually fabricated from common materials. It may incorporate explosives, captured enemy ammunition (CEA), destructive, lethal, noxious, or pyrotechnic chemicals.

Its construction is only limited to the bombers imagination.

W333/OCT 04/VGT-4
Basic Noncommissioned Officer Course

Ref TC 9-21-01, ch 1 Background, p. Background 1-1

#### REMOVE VGT-4

**NOTE:** Do not consider the IEDs shown in these photos to be all inclusive. These are some examples of IEDs encountered during OEF/OIF.

#### SHOW VGT-5, PLASTIC BOTTLE IED



**PLASTIC BOTTLE IED**



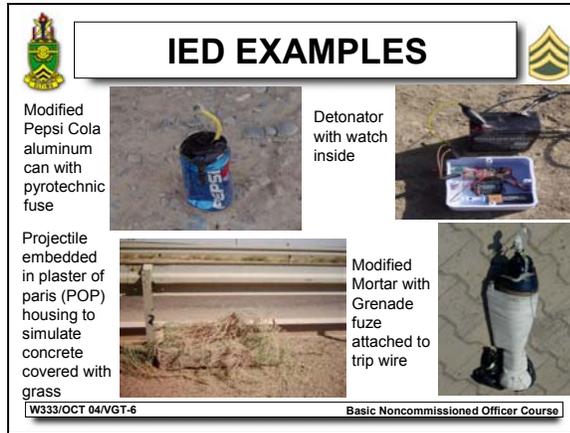


W333/OCT 04/VGT-5
Basic Noncommissioned Officer Course

Ref: TC 9-21-01, p Iraq Theater Operation 2-6 & 2-7

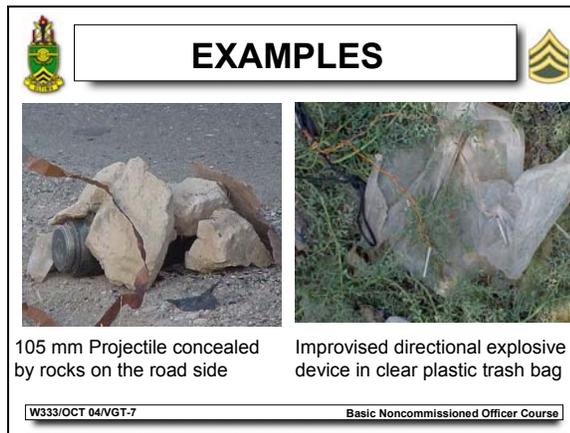
**REMOVE VGT-5**

**SHOW VGT-6, IED EXAMPLES**



**REMOVE VGT-6**

**SHOW VGT-7, EXAMPLES**



Ref: TC 9-21-01, p. Iraq Theater of Operation 2-4

**REMOVE VGT-7**

**SHOW VGT-8, EXAMPLES CONTINUE**

**EXAMPLES CONTINUE**



Motorcycle with two Anti-Tank (AT) Landmines concealed under the seat

Vehicle bomb strewn with approximately 300 lbs of explosive

W333/OCT 04/VGT-8 Basic Noncommissioned Officer Course

Ref: TC 9-21-09, p. Afghanistan Theater of Operation 3-4

**REMOVE VGT-8**

**SHOW VGT-9,**

**ANTI-TANK MINE**



TC-6 anti-tank (AT) Landmine attached to former Soviet Union FAB-250 high explosive (HE) bomb

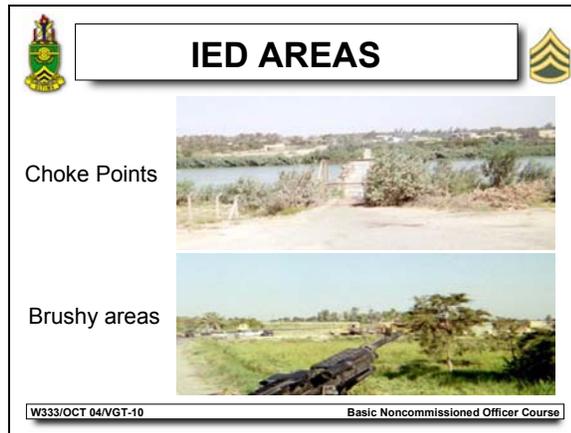
W333/OCT 04/VGT-9 Basic Noncommissioned Officer Course

Ref: TC 9-21-09, p. Afghanistan Theater of Operation 3-1

**REMOVE VGT-9**

Be cautious of choke points, vehicle breakdown, bridges, one way roads, traffic jams, sharp turns and common troop access/gathering areas.

**SHOW VGT-10, IED AREAS**



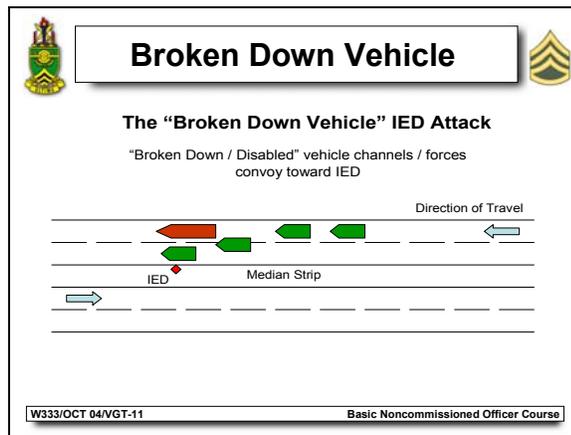
If something stops movement, either mounted or dismounted, survey your immediate area for a possible improvised explosive device (IED).

**REMOVE VGT-10**

The following diagram and photo depict possible techniques and methods of employment used to attack with IEDs.

**NOTE:** Explain to the students how the following techniques and methods occur.

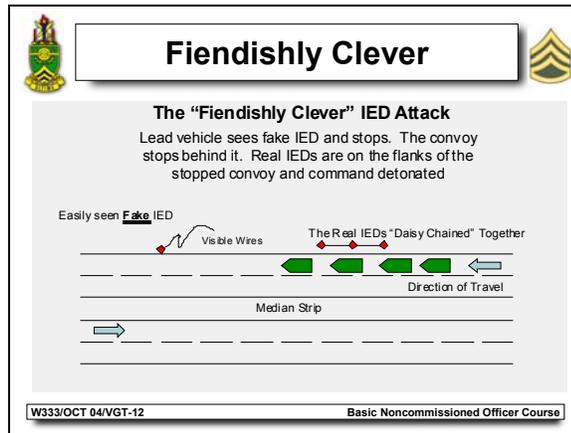
**SHOW VGT-11, BROKEN DOWN VEHICLE**



Ref: TC 09-21-01, Background 1-5

**REMOVE VGT-11**

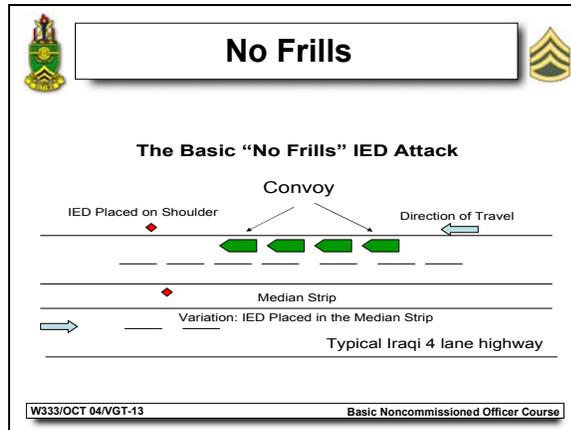
**SHOW VGT-12, FIENDISHLY CLEVER**



Ref: TC 09-21-01, Background 1-6

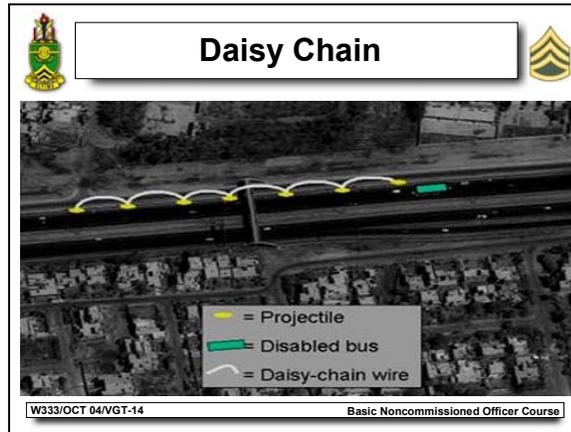
**REMOVE VGT-12**

**SHOW VGT-13, NO FRILLS**



Ref: TC 09-21-01, Background 1-5

**REMOVE VGT-13**

**SHOW VGT-14, DAISY CHAIN**

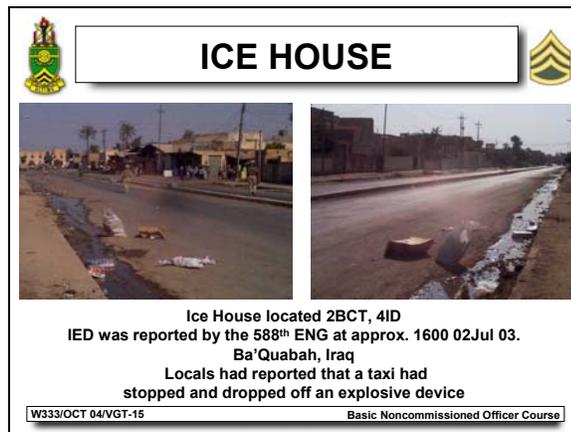
Ref: TC 09-21-01, Background 1-6

**REMOVE VGT-14**

To keep from becoming caught in an IED trap; avoid setting predictable patterns; do not frequent the same locations at the same times everyday, vary routes as much as possible.

**NOTE:** Inform the students that the following situation is an example of predictable patterns.

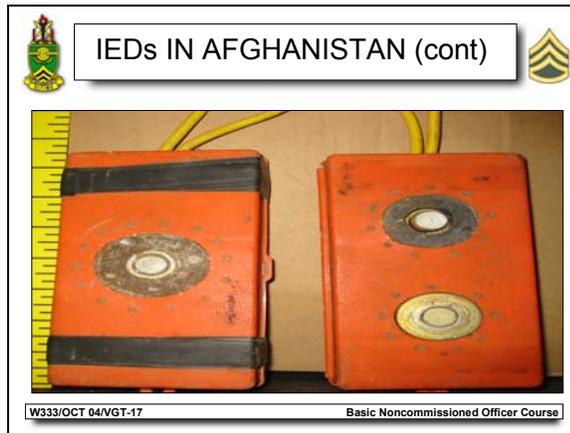
During OIF there was an ice house located in a village where units went to pick up ice. Soldiers would go to the ice house using the same route and arrive at the same exact time everyday. The enemy watched this activity for a period of time, recognized the pattern used by troops and placed an IED along the route where soldiers parked to pick up the ice.

**SHOW VGT-15, ICE HOUSE**

An alert soldier noticed a suspicious item lying beside the road and reported it to his



**SHOW VGT-17, IEDs IN AFGHANISTAN (cont)**

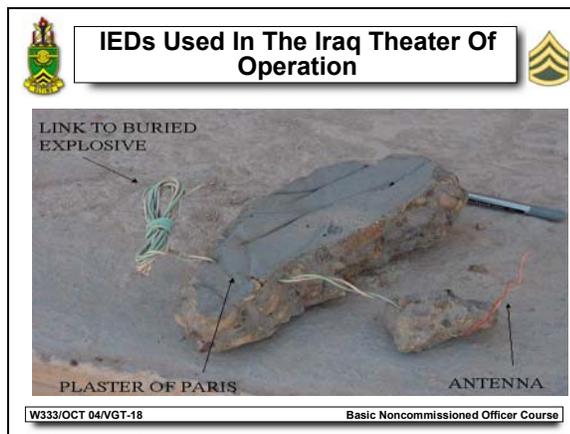


This VGT shows plastic boxes as a improvised explosive device with detonating cord and stereo speaker magnets.

Ref: TC 9-21-01, p. Afghanistan Theater of Operation 3-6

**REMOVE VGT-17**

**SHOW VGT-18, IEDs USED IN THE IRAQ THEATER OF OPERATION**



Ref: TC 9-21-01, p. Iraq Theater of Operation 2-12

**REMOVE VGT-18**

**SHOW VGT-19, IEDs USED IN THE IRAQ THEATER OF OPERATION (cont)**

Ref: TC 9-21-01, p. Iraq Theater of Operation 2-9

**REMOVE VGT-19**

Remember that it is always better to treat an item as a possible IED. This will protect soldiers and equipment thereby allowing accomplishment of the mission and protection of the force.

**Hazard Mitigation**

Always be aware of the possibility of secondary devices and of “come-on” or “false” IEDs used in an attempt to channel you into an area that may have an actual or larger device.

1. The following basic guidelines will assist in reducing the hazards associated with IEDs.

(a) Trust your instincts. If something does not seem right it probably isn't. Be aware of your surroundings (situational awareness).

(b) Watch the locals in your area of operation and ask yourself these questions--

- Are the “familiar” locals in the area?
- Are people that are moving away from you or your element acting or appearing nervous? Most bombers don't blow up their own neighborhoods.

(c) Be aware of news crews in the area for no apparent reason. Most bombers like their work filmed, but do not like pictures of themselves.

**SHOW VGT-20, SUSPECT RATHER THAN IGNORE**

2. Before each and every convoy, or patrol, brief your personnel on the latest IED threat intelligence.

- Ascertain what types of items are currently in use.
- Know techniques, patterns and likely locations of emplacement.
- Where in the area has there been previously placement of items?
- Intelligence on your current route of march (primary and alternate).

3. Rehearse actions (battle drill) for reacting to a possible improvised explosive device.

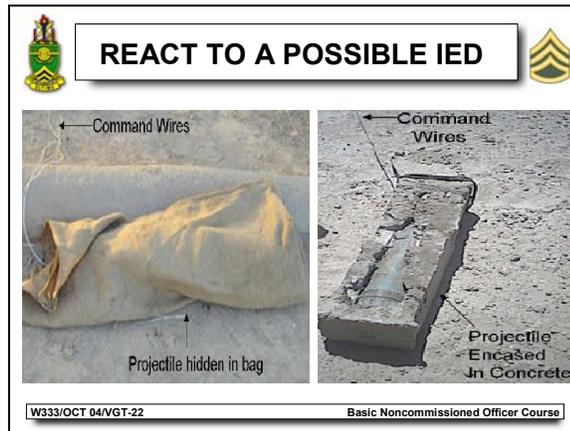
Ref: TC 9-21-01, p. Iraq Theater of Operation 2-11

**REMOVE VGT-20****SHOW VGT-21, WEAR PROTECTIVE EQUIPMENT**

4. Wear personal protective equipment (vest, helmets and eye protection) at all times while on duty. This equipment may save your life!

Ref: TC 9-21-01, p. Background 2-11

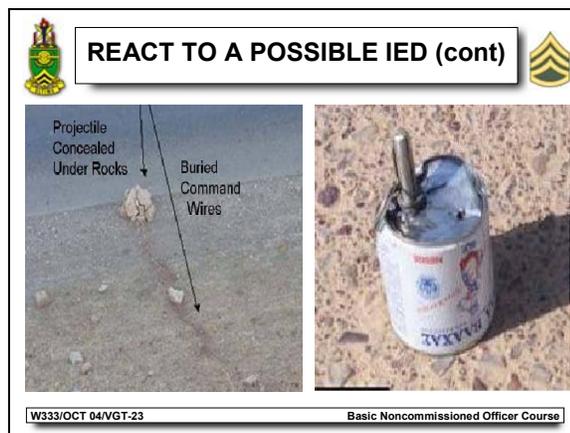
**REMOVE VGT-21**

**SHOW VGT-22, REACT TO A POSSIBLE IED**

Ref: TC 9-21-01, p. Iraq Theater of Operation 2-3

**REMOVE VGT-22**

5. Maintain speed and movement whenever possible.
6. Maintain dispersion while conducting either mounted or dismounted operations.
7. Be cautious of choke points, vehicle breakdown, bridges, one-way roads, traffic jams, and sharp turns.
8. If something stops movement, either mounted or dismounted, survey your immediate area for possible improvised explosive devices.

**SHOW VGT-23, REACT TO A POSSIBLE IED (cont)**

9. Always be cognizant of “come-on” or “false” IEDs. If using an alternate route is necessary be aware of the possibility that an obvious alternate route may have IEDs placed on them in an attempt to trap you.

Ref: TC 9-21-01, p. Iraq Theater of Operation 2-2

**REMOVE VGT-23**

**OTE:** Inform the students that the following is another example of situational awareness.

During Operation Enduring Freedom, a Special Forces ground assault force (GAF) convoy was returning to FOB Gecko after an operation. The convoy stopped for a routine security halt outside the city of Khandahar prior to entering the FOB. Since the SF ODA had established a good rapport, and were familiar with the locals in the area surrounding the FOB, they were always willing to report any suspicious activity to the SF team.

At this particular security halt a local reported a “non-local” individual had placed an unknown item along the route used by the team to travel to the FOB. The team was already in the protective posture and ready for a possible ambush.

The EOD team attached to the ODA prepared to investigate the suspect item. As the EOD Team Leader began his approach, the device detonated spraying fragmentation over the convoy.

Familiarity and positive interaction with the local populace, along with proper preparation and protective posture prevented US Forces from getting killed or wounded during this incident.

**Reaction upon encountering an item deemed as a possible improvised explosive device.**

1. STOP all movement toward the “possible improvised explosive device (IED)” and immediately evaluate your surrounding area for possible secondary improvised explosive devices.

- Do not approach the “possible improvised explosive device.”
- Do not attempt to move the “possible improvised explosive device.”
- If possible, avoid using any communications/electronic equipment within the previously established and SECURE exclusion area.

2. Establish security.

- Establish an area around the “possible improvised explosive device.” Adjust the exclusion area based on METT-TC, local command policy/guidance, tactics, techniques and procedures and standing operating procedures (SOPs).
- Search initial secure area for possible secondary explosive device(s)/hazards, while maintaining security.
- Identify potential enemy forces observation/vantage points.
- Seek all available manmade or natural frontal and overhead cover.
- Avoid establishing a “reaction” pattern.

3. Forward information to higher HQ using the standard 9-line UXO report.

4. Continue mission IAW higher HQ guidance.

**CHECK ON LEARNING:**

QUESTION: What are 7 possible locations of IED placement?

ANSWER: Choke points, vehicle breakdown, bridges, one-way roads, traffic jams, sharp turns and common troop access/gathering areas.

Ref: TC 9-21-01

QUESTION: What is a good way to avoid being caught in an IED trap?

ANSWER: By varying your routes as much as possible and avoid setting a pattern when conducting any activity.

Ref: TC 9-21-01

QUESTION: Why is it almost impossible to identify an IED based on external features?

ANSWER: Because the construction of an IED consists out of almost any available material.

Ref: TC 9-21-01

QUESTION: What do you protect when treating suspicious items as possible IEDs?

ANSWER: Soldier's and equipment.

Ref: TC 9-21-01

2. Learning Step / Activity 2. Report a possible improvised explosive device (IED).
  - Method of Instruction: Conference / Discussion
  - Technique of Delivery: Small Group Instruction (SGI)
  - Instructor to Student Ratio: 1:16
  - Time of Instruction: 10 min
  - Media: VGT-24 thru VGT-27

**Report a "possible improvised explosive device (IED)"**

All soldiers must receive a theater specific IED threat brief to successfully accomplish this task. Specific identification features for IEDs are ever changing based on the enemy's capabilities and available resources.

**NOTE:** Refer the students to TC 9-21-01 (SH-2), Appendix A, pages A-4 and A-5, figures 1 and 2 for a better look at the enemy's capabilities and resources.

**SHOW VGT-24, ENEMY'S CAPABILITIES AND AVAILABLE RESOURCES**

		<b>Enemy's Capabilities and Available Resources</b>			
		<b>Threat Description</b>	<b>Explosive Mass (TNT equivalent)</b>	<b>Ballistic Penetration Distance</b>	<b>Exclusion Zone Distance</b>
High Explosives (HE) Equipment		Pipe Bombs	0 lbs	27 ft	0-1000 ft
		Blastone Blast	10 lbs	50 ft	1,000 ft
		Blastone Vast	10 lbs	110 ft	1,000 ft
		Blastone/Blastone Blast	100 lbs	400 ft	1,000 ft
		Commercial Blastone	1000 lbs	1000 ft	1,000 ft
		Blastone	1000 lbs	1000 ft	1,000 ft
		Passenger/Cargo Van	1000 lbs	1000 ft	1,000 ft
		Small Moving Vehicle/Empty Truck	1000 lbs	1000 ft	1,000 ft
		Moving Van/Water Truck	1000 lbs	1000 ft	1,000 ft
		Blastone	1000 lbs	1000 ft	1,000 ft
Liquid Explosives (LE) - Source of Ignition		Small LPG Tank	200 lbs/25 gal	40 ft	100 ft
		Large LPG Tank	1000 lbs/125 gal	100 ft	200 ft
		Commercial/Residential LPG Tank	2000 lbs/250 gal	100 ft	200 ft
		Small LPG Truck	1000 lbs/125 gal	100 ft	200 ft
		Blastone	1000 lbs	1000 ft	1,000 ft

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- Do not attempt to move the possible improvised explosive device (IED).
- Do not approach the possible improvised explosive device (IED).
- If possible, avoid using any communications/electronic equipment within established exclusion area.

Any of the above dangers may cause a possible improvised explosive device (IED) to explode.

Ref: TC 9-21-01, App A p. A-4 & A-5

**REMOVE VGT-24**

**Performance Steps for reacting to a possible improvised explosive device**

1. Establish minimum initial exclusion area of 300 meters around possible improvised explosive device (IED).

- Adjust initial exclusion area based on METT-TC (see VGT-24 as a basic guide).

2. Establish Security.

- Search secure area for possible secondary explosive device(s)/hazards, while maintaining security.
- Identify potential enemy force observation/vantage points.
- Seek all available manmade or natural frontal and overhead cover.
- Avoid establishing a "reaction" pattern.

3. Forward information to higher HQ using the standard 9-line UXO report

**NOTE:** Go over the report line by line and then show the example on VGT-26.



**SHOW VGT-26, EXAMPLE OF UXO REPORT**

<b>EXAMPLE OF UXO REPORT</b>	
<u>Line 1:</u>	121300LMAR98
<u>Line 2:</u>	1-75 <sup>th</sup> Infantry Bn, C-Co, EP2134567891, 350 meters south of grid referenced road junction
<u>Line 3:</u>	49.7000, Tripwire 60 or 1-800-435-6789 SFC Snuffy
<u>Line 4:</u>	Placed, Possible Improvised Explosive Device (IED)
<u>Line 5:</u>	None
<u>Line 6:</u>	MSR Speedway
<u>Line 7:</u>	Unit cannot conduct resupply operations, MSR is impassable
<u>Line 8:</u>	Constructed sandbag barricade and evacuated non-essential personnel 300M. Mission essential personnel are in protective gear and utilizing frontal and overhead cover.
<u>Line 9:</u>	Immediate
<small>W333/OCT 04/VGT-26 Basic Noncommissioned Officer Course</small>	

Line 1: 121300LMAR98.

Line 2: 1-75th Infantry Bn, C-Co, EP2134567891, 350 meters south of grid referenced road junction.

Line 3: 49.7000, Tripwire 60 or 1-800-435-6789 SFC Snuffy.

Line 4: Placed, Possible Improvised Explosive Device (IED).

Line 5: None.

Line 6: MSR Speedway.

Line 7: Unit cannot conduct re-supply operations, MSR is impassable.

Line 8: Constructed sandbag barricade and evacuated nonessential personnel 300M. Mission essential personnel are in protective gear and utilizing frontal and overhead cover.

Line 9: Immediate.

Ref: TC 9-21-01, App A, p A-6

**REMOVE VGT-26**

**SHOW VGT-27, MINIMUM REQUIRED REPORTING INFORMATION**



## Minimum Required Reporting Information



Proper format is not as important as getting the information to the higher HQ.

- (a)** “*Who*” discovered the item (Point of Contact)
- (b)** “*What*” item is (Type / Sub-group)
- (c)** “*Where*” the UXO is (Location / Grid 8-digit minimum)
- (d)** “*When*” the discovery of the item
- (e)** Recommended priority (Immediate, Indirect, Minor, or No Threat)

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At a minimum the report must contain the following:

- a. “Who” discovered the item (point of contact).
- b. “What” item is (type/sub-group)
- c. “Where” the UXO is (location/grid 8-digit minimum).
- d. “When” the discovery of the item.
- e. Recommended priority (immediate, indirect, minor, or no threat).

Once you’ve completed the report and send it forward, the last step is:

4. Continue mission IAW higher HQ guidance.

Ref: TC 9-21-01, App A, p A-2

**REMOVE VGT-27**

**SECTION IV. SUMMARY**

Method of Instruction: <u>Conference / Discussion</u>	
Technique of Delivery: <u>Small Group Instruction (SGI)</u>	
Instructor to Student Ratio is: <u>1:16</u>	
Time of Instruction: <u>5 min</u>	
Media: <u>None.</u>	

**Check on Learning**

QUESTION: What is the recommended evacuation distance for possible IED's?

ANSWER: A minimum of 300 meters.

Ref: TC 9-21-01, App A, A-1.

QUESTION: If possible, what are some items that you would limit the use of around possible IED's?

ANSWER: Communications and electronic devices.

Ref: TC 9-21-01, App A, A-1.

QUESTION: What is the name of the report used when reporting an IED?

ANSWER: The UXO/IED 9-line Report.

Ref: TC 9-21-01, App A, A-5.

QUESTION: What is the minimum information required for reporting an IED when not using a UXO/IED 9-line Report?

ANSWER: "Who," "What," "Where," and recommended priority.

Ref: TC 9-21-01, App A, A-6

QUESTION: Once you encounter a possible IED, you should \_\_\_\_\_?

ANSWER: Evacuate the surrounding area immediately.

Ref: TC 9-21-01, Background 1-2.

**Review / Summarize Lesson**

During this lesson we discussed possible improvised explosive devices (IED's), their possible locations, visual indicators, reactions to IED's, avoidance, and reporting IED's.

**SECTION V. STUDENT EVALUATION**

---

**Testing  
Requirements**

**NOTE:** Describe how the student must demonstrate accomplishment of the TLO. Refer student to the Student Evaluation Plan.

There are no testing requirements for this TSP.

---

**Feedback  
Requirements**

**NOTE:** Feedback is essential to effective learning. Schedule and provide feedback on the evaluation and any information to help answer students' questions about the test. Provide remedial training as needed.

None

---

---

**VIEWGRAPHS FOR LESSON 1: W333 version 1**

---

Enabling Learning Objective A

Learning Step 1

VGT-1, Introduction

**INTRODUCTION****React to a  
“Possible Improvised  
Explosive Device (IED)”**

W333/OCT 04/VGT-1

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Enabling Learning Objective B

Learning Step 1

VGT-2, Destroyed Vehicle



# DESTROYED VEHICLE



W333/OCT 04/VGT-2

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VGT-3, Roadside IED



# ROADSIDE IED



W333/OCT 04/VGT-3

Basic Noncommissioned Officer Course

## VGT-4, Definition



## DEFINITION



### **“Improvised Explosive Device” (IED)**

A nonstandard device usually fabricated from common materials. It may incorporate explosives, captured enemy ammunition (CEA), destructive, lethal, noxious, or pyrotechnic chemicals.

Its construction is only limited to the bombers imagination.

VGT-5, Plastic Bottle IED



# PLASTIC BOTTLE IED



W333/OCT 04/VGT-5

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VGT-6, IED Examples

	<h1>IED EXAMPLES</h1>		
<p>Modified Pepsi Cola aluminum can with pyrotechnic fuse</p>		<p>Detonator with watch inside</p>	
<p>Projectile embedded in plaster of paris (POP) housing to simulate concrete covered with grass</p>		<p>Modified Mortar with Grenade fuze attached to trip wire</p>	
<p>W333/OCT 04/VGT-6</p>		<p>Basic Noncommissioned Officer Course</p>	

VGT-7, Examples



# EXAMPLES



105 mm Projectile concealed by rocks on the road side



Improvised directional explosive device in clear plastic trash bag

VGT-8, Examples Continue



# EXAMPLES CONTINUE



Motorcycle with two Anti-Tank (AT) Landmines concealed under the seat



Vehicle bomb strewn with approximately 300 lbs of explosive

W333/OCT 04/VGT-8

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VGT-9, Anti-Tank Mine



# ANTI-TANK MINE



TC-6 anti-tank (AT) Landmine attached to former Soviet Union FAB-250 high explosive (HE) bomb



W333/OCT 04/VGT-9

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VGT-10, IED Areas



# IED AREAS



Choke Points



Brushy areas



W333/OCT 04/VGT-10

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VGT-11, Broken Down Vehicle

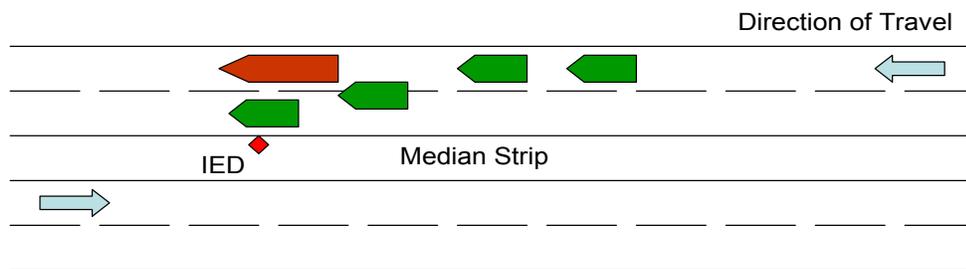


# Broken Down Vehicle



## The "Broken Down Vehicle" IED Attack

"Broken Down / Disabled" vehicle channels / forces  
convoy toward IED



VGT-12, Fiendishly Clever



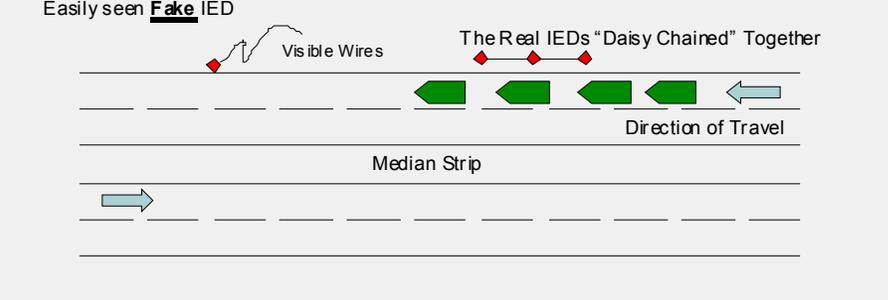
## Fiendishly Clever



### The "Fiendishly Clever" IED Attack

Lead vehicle sees fake IED and stops. The convoy stops behind it. Real IEDs are on the flanks of the stopped convoy and command detonated

Easily seen **Fake** IED



Visible Wires

The Real IEDs "Daisy Chained" Together

Direction of Travel

Median Strip

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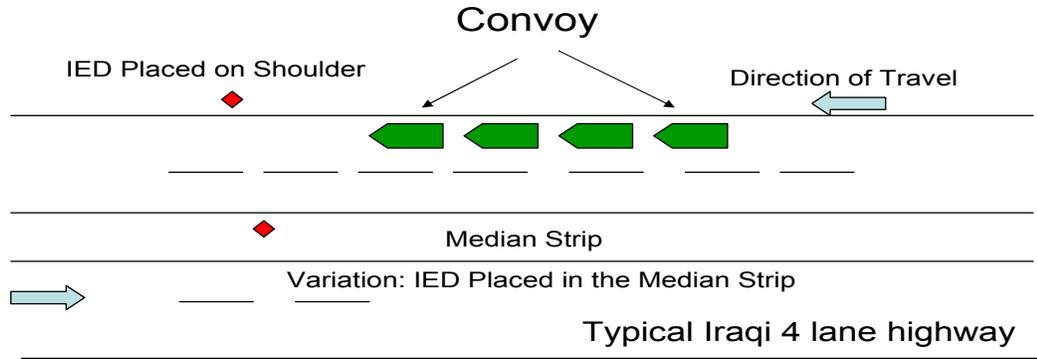
VGT-13, No Frills



# No Frills

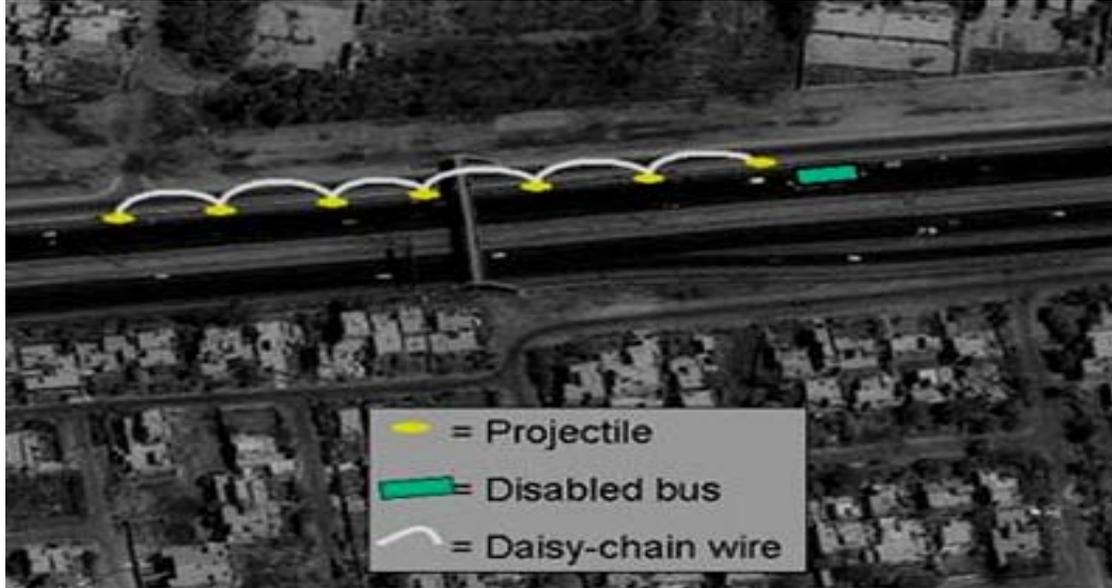


## The Basic "No Frills" IED Attack





# Daisy Chain



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## ICE HOUSE





**Ice House located 2BCT, 4ID  
IED was reported by the 588<sup>th</sup> ENG at approx. 1600 02Jul 03.  
Ba'Quabah, Iraq  
Locals had reported that a taxi had  
stopped and dropped off an explosive device**

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VGT-16, IED's Used in the Afghanistan Theater of Operation



# IEDs Used In The Afghanistan Theater Of Operation



W333/OCT 04/VGT-16

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VGT-17, IEDs in Afghanistan (cont)



# IEDs IN AFGHANISTAN (cont)



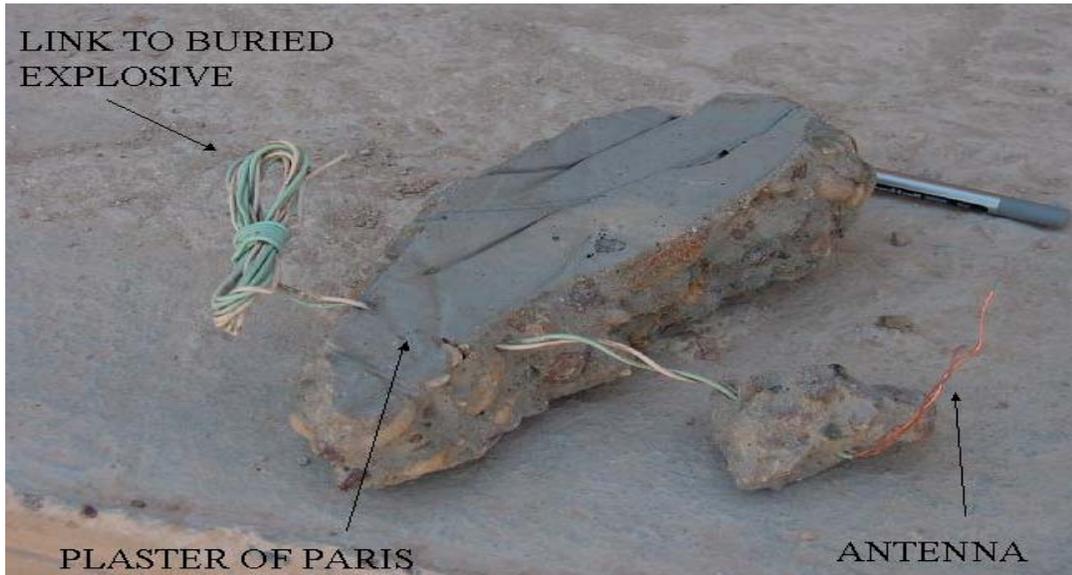
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VGT-18, IEDs Used in the Iraq Theater of Operation



# IEDs Used In The Iraq Theater Of Operation



W333/OCT 04/VGT-18

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VGT-19, IED's used in the Iraq Theater of Operation (cont)



# IEDs Used In The Iraq Theater Of Operation (cont)



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VGT-20, Suspect Rather than Ignore



# Suspect Rather Than Ignore



Steel container with "home made" explosives

W333/OCT 04/VGT-20

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VGT-21, Wear Protective Gear



# Wear Protective Equipment



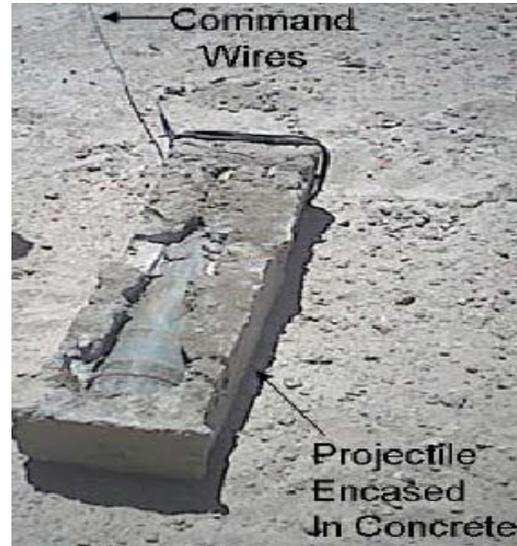
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VGT-22, React to a Possible IED



# REACT TO A POSSIBLE IED



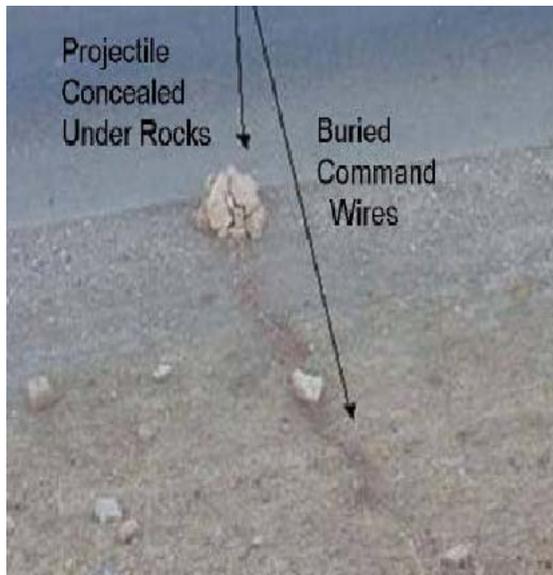
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VGT-23, React to a Possible IED (cont)



# REACT TO A POSSIBLE IED (cont)



W333/OCT 04/VGT-23

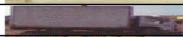
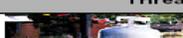
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VGT-24, Capabilities and Available Resources



# Enemy's Capabilities and Available Resources



	Threat Description		Explosives Mass (TNT equivalent)	Building Evacuation Distance	Outdoor Evacuation Distance
High Explosives (TNT Equivalent)		Pipe Bomb	5 lbs 2.3 kg	70 ft 21 m	8300 ft 259 m
		Suicide Belt	10 lbs 4.5 kg	90 ft 27 m	1,080 ft 330 m
		Suicide Vest	20 lbs 9 kg	110 ft 34 m	1,360 ft 415 m
		Briefcase/Suitcase Bomb	300 lbs 23 kg	1300 ft 46 m	1,8300 ft 564 m
		Compact Sedan	3000 lbs 227 kg	320 ft 98 m	1,3000 ft 457 m
		Sedan	1,000 lbs 454 kg	400 ft 122 m	1,7300 ft 534 m
		Passenger/Cargo Van	4,000 lbs 1,814 kg	640 ft 195 m	2,7300 ft 838 m
		Small Moving Van/Delivery Truck	10,000 lbs 4,536 kg	860 ft 263 m	3,7300 ft 1,143 m
		Moving Van/Water Truck	30,000 lbs 13,608 kg	1,240 ft 375 m	6,3000 ft 1,982 m
	Semi trailer	60,000 lbs 27,216 kg	1,570 ft 475 m	7,000 ft 2,134 m	
	Threat Description		LPG Mass/Volume	Fireball Diameter	Safe Distance
Liquefied Petroleum Gas (LPG - Butane or Propane)		Small LPG Tank	20 lbs/5 gal 9 kg/19 lb	40 ft 12 m	160 ft 48 m
		Large LPG Tank	100 lbs/25 gal 45 kg/95 lb	69 ft 21 m	276 ft 84 m
		Commercial/Residential LPG Tank	2,000 lbs/3000 gal 907 kg/1,893 lb	184 ft 56 m	736 ft 224 m
		Small LPG Truck	8,000 lbs/2,000 gal 3,630 kg/7,570 lb	292 ft 89 m	1,168 ft 356 m
		Semi tanker LPG	40,000 lbs/10,000 gal 18,144 kg/37,8300 lb	499 ft 152 m	1,996 ft 608 m

W333/OCT 04/VGT-24

Basic Noncommissioned Officer Course

## VGT-25, Standard 9-Line UXO Report



## Standard 9-Line UXO Report



Line 1: Date time group discovered: (Command policy will dictate Local or Zulu time)

Line 2: Reporting activity: (UIC / Unit Designation), Location (8-digit grid - Include landmarks and reference points)

Line 3: Contact Method: (Radio Freq / Call Sign or Telephone number If using telephone number provide point of contact)

Line 4: Type of Munition: (Dropped, Projected, Placed or Thrown)

Line 5: NBC Contamination: Yes or No, known or suspected NBC contamination. If Yes, report type of agent if known / identified.

Line 6: Resource Threatened: (What resource – is it a critical asset?)

Line 7: Impact on Mission: (How the UXO is affecting the mission)

Line 8: Protective Measures Taken: (Unit emplaced protective measures)

Line 9: Recommended Priority: (Immediate, Indirect, Minor, or No Threat).

VGT-26, Example of UXO Report



## EXAMPLE OF UXO REPORT



Line 1: 121300LMAR98

Line 2: 1-75<sup>th</sup> Infantry Bn, C-Co, EP2134567891, 350 meters south of grid referenced road junction

Line 3: 49.7000, Tripwire 60 or 1-800-435-6789 SFC Snuffy

Line 4: Placed, Possible Improvised Explosive Device (IED)

Line 5: None

Line 6: MSR Speedway

Line 7: Unit cannot conduct resupply operations, MSR is impassable

Line 8: Constructed sandbag barricade and evacuated non-essential personnel 300M. Mission essential personnel are in protective gear and utilizing frontal and overhead cover.

Line 9: Immediate

W333/OCT 04/VGT-26

Basic Noncommissioned Officer Course

## VGT-27, Minimum Required Reporting Information

**Minimum Required Reporting Information**

Proper format is not as important as getting the information to the higher HQ.

- (a) *“Who”* discovered the item (Point of Contact)
- (b) *“What”* item is (Type / Sub-group)
- (c) *“Where”* the UXO is (Location / Grid 8-digit minimum)
- (d) *“When”* the discovery of the item
- (e) Recommended priority (Immediate, Indirect, Minor, or No Threat)

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**Appendix B Test(s) and Test Solution(s) (N/A)**

**Appendix C Practical Exercises and Solutions (N/A)**

---

**HANDOUTS FOR LESSON 1: W333 version 1**

---

This appendix contains the items listed in this table--

<b>Title/Synopsis</b>	<b>Pages</b>
SH-1, Advance Sheet	SH-1-1 to SH-1-2.
SH-2, TC 9-21-01 (093-89D-01)	SH-2-1

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## **Student Handout 1**

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This student handout contains advance sheet

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**STUDENT HANDOUT 1****Advance Sheet**

---

**Lesson Hours** This lesson consists of one hour of small group instruction.

---

**Overview** During this lesson we will discuss reacting to possible improvised explosive devices (IED's), their possible locations, looking for visual indicators, reactions to IED's, how to avoid IED's and reporting IED's using the correct format.

---

**Learning Objective** Terminal Learning Objective (TLO).

---

<b>Action:</b>	React to a possible improvised explosive device (IED).
<b>Conditions:</b>	As a squad leader/staff NCO in a company or battalion level unit and given TC 9-21-01 (093-89D-01 and Lesson Learned from IRAQ FREEDOM (OIF).
<b>Standard:</b>	Reacted to a possible improvised explosive device (IED) IAW TC 9-21-01 (093-89D-01).

---

**LS/A 1** Possible Improvised Explosive Device (IED); visual indicators, location, hazard mitigation practices and reaction.**LS/A 2** Report a possible improvised explosive device (IED).

---

**Assignment** The student assignments for this lesson are:

- Read student handouts
- 

**Additional Subject Area Resources** None.

---

**Bring to Class**

- All reference material received.
- Pencil or pen and writing paper.

---

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## Student Handout 2

---

**This Student Handout Contains**

This student handout contains TC 9-21-01 (093-89D-01), consisting of 40 pages.

---

**Disclaimer:** The training developer downloaded this extract from <http://155.217.58.58/atdls.htm>. The text may contain passive voice, misspellings, grammatical errors, etc., and may not be in compliance with the Army Writing Style Program.

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TC 9-21-01(093-89D-01)

# SOLDIERS

## Improvised Explosive Device (IED) Awareness Guide

### IRAQ & AFGHANISTAN Theaters of Operation

Chief of Ordnance  
US Army Ordnance Corps



EOD Training Department  
Redstone Arsenal, AL



February 2004

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Training Circular  
No. TC 9-21-01(093-89D-01)

US Army Ordnance Corps  
Aberdeen Proving Ground, MD  
09 February 2004

# SOLDIERS

## Improvised Explosive Device (IED) Awareness Guide

### IRAQ & AFGHANISTAN Theaters of Operation

#### Contents

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	<b>PREFACE</b>	<b>iii</b>
<b>Chapter 1</b>	<b>Background</b>	<b>1-1 thru 1-6</b>
<b>Chapter 2</b>	<b>IRAQ Theater of Operation (IEDs)</b>	<b>2-1 thru 2-13</b>
<b>Chapter 3</b>	<b>AFGHANISTAN Theater of Operation (IEDs)</b>	<b>3-1 thru 3-7</b>
<b>Appendix A</b>	<b>React to a Possible Improvised Explosive Device</b> Common Task 093-401-5050	<b>A-1 thru A-6</b>
	<b>Glossary</b>	<b>Glossary-1</b>

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### WARNING

This Soldiers reference guide provides general Improvised Explosive Device (IED) awareness, possible characteristics and safety information. It will:

Provide a visual depiction of some Improvised Explosive Devices (IED) encountered in support of the Iraq (OIF) and Afghanistan (OEF) theaters.

Provide Soldiers with the basic know how in relation to: "Reacting to a Possible Improvised Explosive Device (IED).

This reference guide does NOT supercede any Standing Operating Procedures (SOPs), Orders, or Military Directives.

## Preface

The purpose of this guide is to give Commanders, Leaders and Soldiers a training tool representing some of the Improvised Explosive Devices (IED) used in both the Iraq and Afghanistan theaters of operation.

The intent of this guide is to support readiness, unit training, operational planning, and awareness as well as provide information in relation to Reacting to a Possible Improvised Explosive Device (IED) common task 093-401-5050. Both training and awareness are a proven and effective force protection tool as well as a combat multiplier.

This guide is not all inclusive and should not be used as a sole source of information. Commanders and leaders must remain abreast of current intelligence, tactics, techniques and procedures (TTPs) and local command standing operating procedures (SOPs) available in particular areas of operation in relation to the Improvised Explosive Device threat.

This guide does not cover IED firing / fuzing systems (internal design) or Explosive Ordnance Disposal (EOD) tactics, techniques and procedures.

This guide is derived from multiple unclassified source documentation and materials.

The proponent of this Soldiers reference guide is: The Chief of Ordnance, US Army Ordnance Corps, Aberdeen Proving Ground, MD. The custodian of information is the US Army Ordnance Munitions and Electronics Maintenance School (OMEMS), 59<sup>TH</sup> Ordnance Brigade, Explosive Ordnance Disposal Training Department (EODTD). Submit recommendations for changes, updates, deletions, and / or additions to this publication on DA Form 2028 to:

Commander  
OMEMS  
ATTN: ATSK-TE (Training Division)  
Redstone Arsenal, AL 35897-6790

Unless otherwise stated, masculine nouns and pronouns do not refer exclusively to men.

## Chapter 1

### Background

Improvised Explosive Devices (IEDs) may be constructed out of any available material and contain various fillers to include; explosive, chemical, biological, or hazardous materials. Improvised Explosive Devices may range in size from a cigarette pack or carton to a large vehicle.

The only limitations an enemy bomber faces are: availability of resources, personal ingenuity, and the degree or extent of “know how” required to facilitate construction and in some cases application of an Improvised Explosive Device.

Improvised Explosive Devices are non-standard, and usually fabricated from common materials. The mass quantities of cached, captured enemy ammunition (CEA) and stockpiled munitions within the Iraq and Afghanistan theaters of operation provide the explosive materials to “would be” enemy bombers.

#### **General mitigation measures in relation to the IED threat:**

1. Trust your instincts. If something does not seem right it probably isn't. Be aware of your surroundings (situational awareness).
2. Watch the locals in your area of operation; Are the familiar locals in the area? Are people moving away from you or your element acting or appearing nervous? Most bombers don't blow up their own neighborhoods.
3. Be aware of news crews in the area for no apparent reason. Most bombers like their work filmed, but do not like pictures of themselves.
4. Before each and every convoy or patrol, brief your personnel on the latest IED threat intelligence. ***Brief your personnel each and every time.***
  - a. Ascertain what types of items are currently in use?
  - b. Known techniques, patterns and likely locations of emplacement?
  - c. Where in the area have items previously been placed?
  - d. Intelligence on your current route of march (primary and alternates)?
5. Rehearse actions (battle drill) for reacting to a possible Improvised Explosive Device.

**Background 1-1**

**6. Wear personal protective equipment (vests, helmets and eye protection). They save lives!**

7. Maintain speed and movement whenever possible.

8. Maintain dispersion while conducting either mounted or dismounted operations.

9. Be cautious of choke points, vehicle breakdowns, bridges, one way roads, traffic jams, sharp turns etc...

10. If something stops movement, either mounted or dismounted, survey your immediate area for possible Improvised Explosive Devices.

**Reaction upon encountering an item that is deemed a possible Improvised Explosive Device:**

**Note:** This reference guide does NOT supercede any Standing Operating Procedures (SOPs), Orders, or Military Directives.

1. STOP all movement toward the "Possible Improvised Explosive Device (IED)" and immediately evaluate your surrounding area for possible secondary Improvised Explosive Devices.

a. Do not approach the "Possible Improvised Explosive Device"

b. Do not attempt to move the "Possible Improvised Explosive Device"

c. If possible, avoid using any communication / electronic equipment within the previously established and SECURE exclusion area.

2. Establish security:

a. Establish an area around the "Possible Improvised Explosive Device". Adjust the exclusion area based on METT-TC, local command policy / guidance, tactics, techniques and procedures and standing operating procedures (SOPs).

b. Search initial secure area for possible secondary explosive device(s) / hazards, while maintaining security.

**Background 1-2**

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- c.** Identify potential enemy force observation/vantage points.
- d.** Seek all available manmade or natural frontal and overhead cover.
- e.** Avoid establishing a “reaction” pattern.
- f.** Forward information to Higher HQ using standard 9-line UXO Report.
- g.** Continue mission IAW Higher HQ guidance

**Background 1-3**

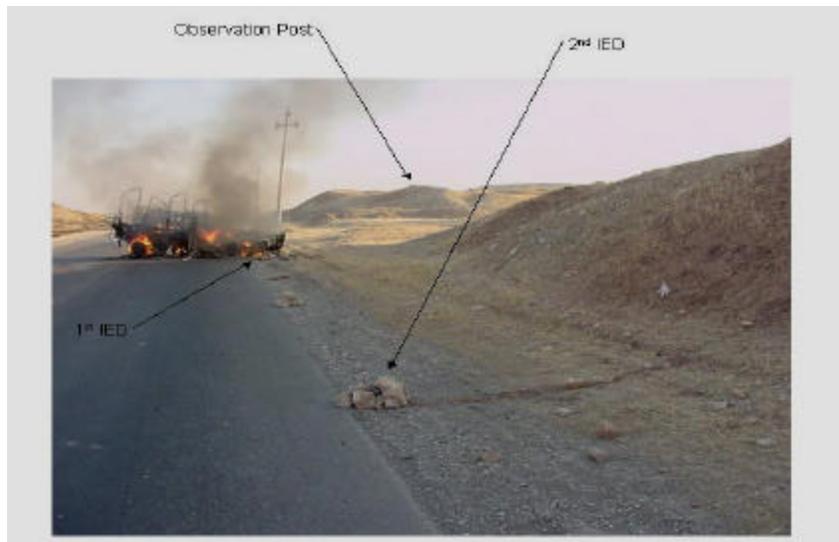
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**WARNING:**

**Recognition features for IEDs are ever changing based on the enemy's capabilities and available resources.**

**THESE PHOTOS ARE MEANT ONLY TO SERVE AS A GUIDE!**

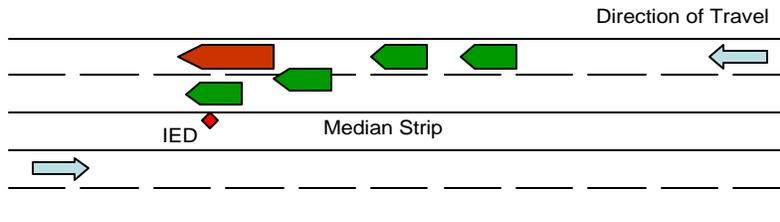
The following photos and diagrams depict possible techniques and methods of employment for Improvised Explosive Devices.



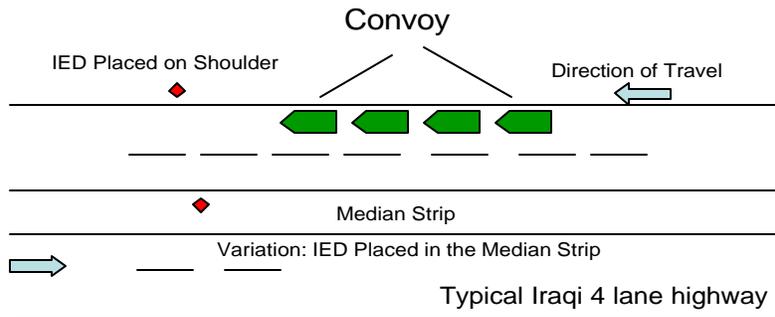
**Background 1-4**

### The "Broken Down Vehicle" IED Attack

"Broken Down / Disabled" vehicle channels / forces  
convoy toward IED

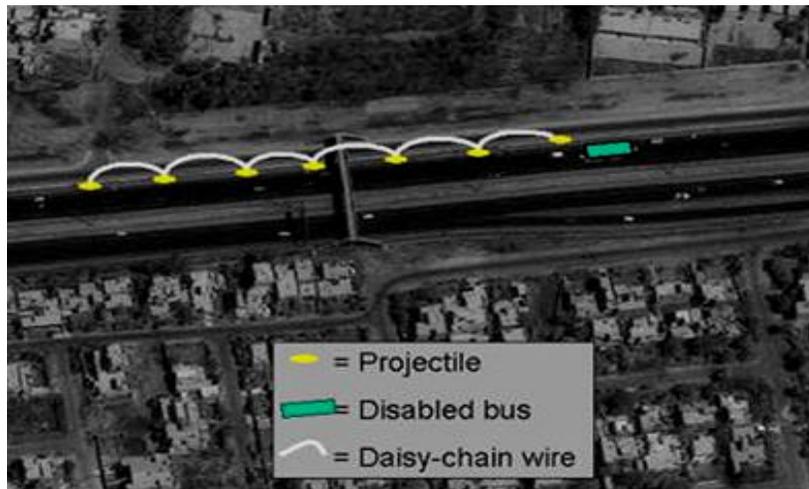
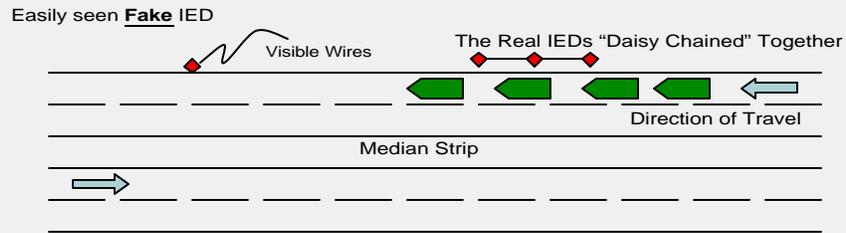


### The Basic "No Frills" IED Attack



### The "Fiendishly Clever" IED Attack

Lead vehicle sees fake IED and stops. The convoy stops behind it. Real IEDs are on the flanks of the stopped convoy and command detonated



**Chapter 2**  
**IRAQ Theater of Operation**

The following photos were taken from multiple unclassified source documentation and materials from the Iraq theater of operation.



130 mm Projectile concealed in burlap style sack (sand bag)



130 mm Projectile concealed in a plastic bag

**IRAQ Theater of Operation 2-1**



Grenade found behind poster of Saddam Hussein



Modified aluminum can made into a hand grenade with hand grenade fuze



Projectile with electric blasting cap in the fuze well

IRAQ Theater of Operation 2-2



Projectile embedded in plaster of paris (POP) housing to simulate concrete covered with grass



Projectile embedded in plaster of paris (POP) housing to simulate concrete

**IRAQ Theater of Operation 2-3**



105 mm Projectile concealed by rocks on the road side



Improvised directional explosive device in clear plastic trash bag

IRAQ Theater of Operation 2-4



Improvised directional explosive device



Improvised directional (shape charge) explosive device

IRAQ Theater of Operation 2-5



Projectiles inside of a roadside culvert pipe



Modified Mortar with tripwire attached to grenade fuze

IRAQ Theater of Operation 2-6



Modified Mortar with tripwire attached to grenade fuze



Former Soviet Union 122mm Projectiles

IRAQ Theater of Operation 2-7



Top view of former Soviet Union 122mm Projectiles modified to accept a blasting cap in the cast high explosive (HE)



Plastic shipping caps for former Soviet Union 122mm Projectiles modified to accept a blasting cap

IRAQ Theater of Operation 2-8



Former Soviet Union 122mm Projectile with modified plastic shipping plug and hand grenade, both items modified to accept electric blasting caps.



Former Soviet Union 122mm projectile with plastic explosive in the fuze well modified to accept electric blasting cap.

**IRAQ Theater of Operation 2-9**



Former Soviet Union 130mm projectile with plastic explosive in the fuze well modified to accept electric blasting cap, concealed in plastic bag.



Cigarette carton filled with plastic explosives

IRAQ Theater of Operation 2-10



Steel container with "home made" explosives



Steel container with "home made" explosives

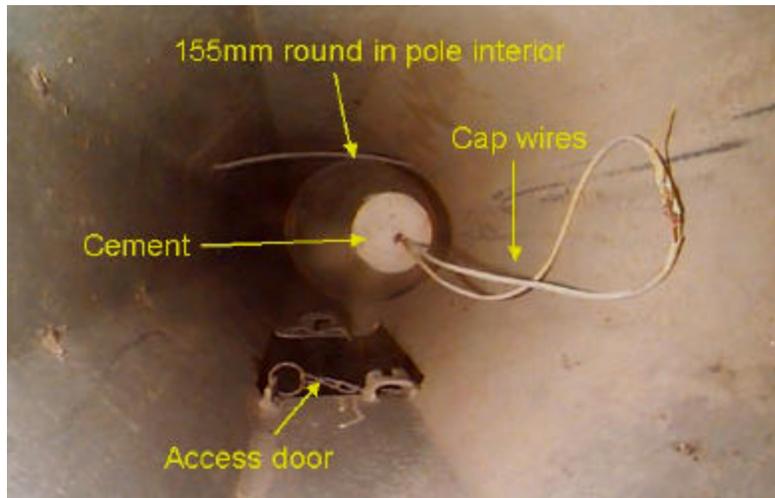
**IRAQ Theater of Operation 2-11**



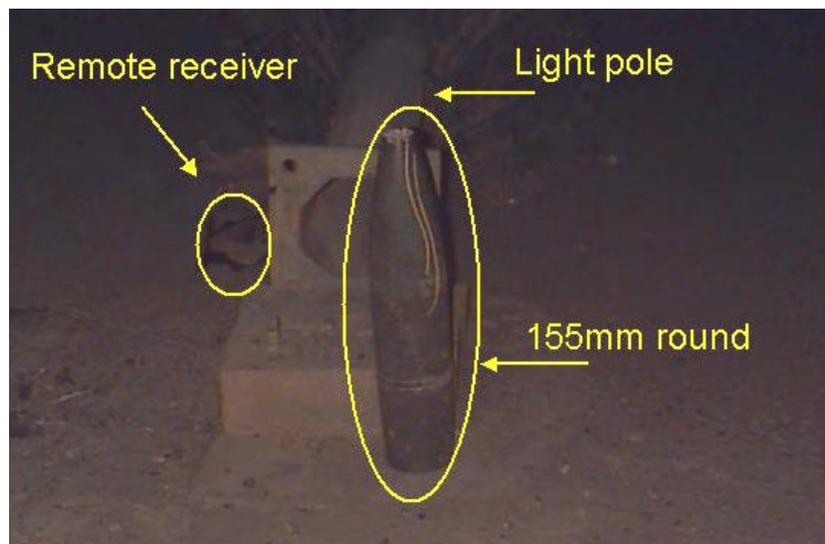
Modified Pepsi cola aluminum can with pyrotechnic fuse



IRAQ Theater of Operation 2-12



155mm Projectile inside of downed street light pole along road side



155mm Projectile outside of downed street light pole along road side

**Chapter 3**  
**AFGHANISTAN Theater of Operation**

The following photos were taken from multiple unclassified source documentation and materials from the Afghanistan theater of operation.



TC-6 anti-tank (AT) Landmine attached to former Soviet Union FAB-250  
high explosive (HE) bomb

**AFGHANISTAN Theater of Operation 3-1**



Propane tanks used as main charges for Improvised Explosive Devices (IEDs)



Modified TC-6 Anti - Tank (AT) Landmine

**AFGHANISTAN Theater of Operation 3-2**



Improvised Explosive Device buried in soft pack roadway

**AFGHANISTAN Theater of Operation 3-3**



Motorcycle with two Anti-Tank (AT) Landmines concealed under the seat



Vehicle bomb strewn with approximately 300 lbs of explosive

**AFGHANISTAN Theater of Operation 3-4**



Paint cans and similar items are filled with explosive and used as  
Improvised Explosive Devices (IEDs)



107mm rockets modified to fire on friendly forces

**AFGHANISTAN Theater of Operation 3-5**



Improvised Explosive Device plastic boxes with detonating cord and stereo speaker magnets, to affix on metal target.



Former Soviet Union 60mm Mortar with hand grenade fuze

**AFGHANISTAN Theater of Operation 3-6**



Hand grenade wedged between a rock and a TC-6 anti-tank (AT) landmine



Propane tank with detonating cord attached to two  
TC-6 anti-tank (AT) landmines

**AFGHANISTAN Theater of Operation 3-7**

APPENDIX A

React to a “Possible Improvised Explosive Device (IED)”  
093-401-5050

**Warning:**

All soldiers must receive a theater specific IED threat brief to successfully accomplish this task.

Specific identification features for IEDs are ever changing based on the enemy’s capabilities and available resources.

**Task:** React to a Possible Improvised Explosive Device (IED)

**Condition:** During military operations you encounter a “Possible Improvised Explosive Device (IED)”.

**Standard:** Properly establish initial exclusion area, security, and report “Possible Improvised Explosive Device (IED)” to Higher HQ with 100% accuracy.

**Danger:**

Do not attempt to move the “Possible Improvised Explosive Device (IED)”

**Danger:**

Do not approach the “Possible Improvised Explosive Device (IED)”

**Danger:**

If possible, avoid using any communication/electronic equipment within established exclusion area

Appendix A React to a Possible Improvised Explosive Device (IED)...A-1  
Common Task 093-401-5050

**Warning:**

**Any of the above “Dangers” may cause a “Possible Improvised Explosive Device (IED)” to explode**

**Performance Steps**

1. Establish minimum initial exclusion area of 300 meters around “Possible Improvised Explosive Device (IED)”.

**Warning:**

**Adjust exclusion areas based on METT-TC  
(See Figure 1 & 2 as a Basic Guide)**

2. Establish security:
  - a. Search secure area for possible secondary explosive device(s)/hazards, while maintaining security.
  - b. Identify potential enemy force observation/vantage points.
  - c. Seek all available manmade or natural frontal and overhead cover.
  - d. Avoid establishing a “reaction” pattern.
3. Forward information to Higher HQ using standard 9-line UXO Report (See Figure 1-6).
4. Continue mission IAW Higher HQ guidance.

**Evaluation Preparation:** Grade the soldiers as a “go” or “no-go” in each area. Explain the incorrect action for any “no-go”.

**Performance Measures (Go – No Go)**

1. Upon encountering a “Possible Improvised Explosive Device (IED)”:

**Appendix A React to a Possible Improvised Explosive Device (IED)...A-2**  
Common Task 093-401-5050

- a. Ensured all movement towards “Possible Improvised Explosive Device (IED)” stopped.
  - b. Established initial minimum 300 meter exclusion area.
  - c. Established security.
2. Submitted standard 9-line UXO Report to Higher HQ.
  3. Did not move “Possible Improvised Explosive Device (IED)”.
  4. Did not approach “Possible Improvised Explosive Device (IED)”.
  5. Did not use any communication or electronic devices within initial exclusion area.
  6. Continued mission IAW Higher HQ guidance.

**Evaluation Guidance:** Tell the soldier that; “Possible Improvised Explosive Device (IED)” are in use in the AOR. Place the Soldier in a scenario that will require them to encounter a “Possible Improvised Explosive Device (IED)”.

	Threat Description		Explosives Mass (TNT equivalent)	Building Evacuation Distance	Outdoor Evacuation Distance
High Explosives (TNT Equivalent)		Pipe Bomb	5 lbs 2.3 kg	70 ft 21 m	850 ft 259 m
		Suicide Belt	10 lbs 4.5 kg	90 ft 27 m	1,080 ft 330 m
		Suicide Vest	20 lbs 9 kg	110 ft 34 m	1,360 ft 415 m
		Briefcase/Suitcase Bomb	50 lbs 23 kg	150 ft 46 m	1,850 ft 564 m
		Compact Sedan	500 lbs 227 kg	320 ft 98 m	1,500 ft 457 m
		Sedan	1,000 lbs 454 kg	400 ft 122 m	1,750 ft 534 m
		Passenger/Cargo Van	4,000 lbs 1,814 kg	640 ft 195 m	2,750 ft 838 m
		Small Moving Van/ Delivery Truck	10,000 lbs 4,536 kg	860 ft 263 m	3,750 ft 1,143 m
		Moving Van/Water Truck	30,000 lbs 13,608 kg	1,240 ft 375 m	6,500 ft 1,982 m
		Semi trailer	60,000 lbs 27,216 kg	1,570 ft 475 m	7,000 ft 2,134 m

Figure 1

Appendix A React to a Possible Improvised Explosive Device (IED)...A-4  
 Common Task 093-401-5050

	Threat Description		LPG Mass/Volume	Fireball Diameter	Safe Distance
Liquefied Petroleum Gas (LPG - Butane or Propane)		Small LPG Tank	20 lbs/5 gal 9 kg/19 lb	40 ft 12 m	160 ft 48 m
		Large LPG Tank	100 lbs/25 gal 45 kg/95 lb	69 ft 21 m	276 ft 84 m
		Commercial/Residential LPG Tank	2,000 lbs/500 gal 907 kg/1,893 lb	184 ft 56 m	736 ft 224 m
		Small LPG Truck	8,000 lbs/2,000 gal 3,630 kg/7,570 lb	292 ft 89 m	1,168 ft 356 m
		Semi tanker LPG	40,000 lbs/10,000 gal 18,144 kg/37,850 lb	499 ft 152 m	1,996 ft 608 m

Figure 2

**Standard 9-line UXO Report**

**Line 1:** Date time group discovered: (Command policy will dictate *Local* or *Zulu* time).

**Line 2:** Reporting Activity (UIC / Unit designation). Location (8-digit grid): (*include: landmarks, reference points, or street addresses*).

**Line 3:** Contact Method: Radio Freq / Call Sign or Telephone Number. (If using phone number, provide name).

**Line 4:** Type of Munition: (Dropped, Projected, Placed, or Thrown).

**Line 5:** NBC Contamination: Yes or No, known or suspected NBC Contamination. If yes, report type of agent if known / identified.

**Line 6:** Resources Threatened: (What resource is threatened - is it a critical asset?).

**Line 7:** Impact on Mission: (How the UXO is affecting the mission).

**Line 8:** Protective Measures Taken: (Unit emplaced protective measures).

**Line 9:** Recommended Priority: (Immediate, Indirect, Minor, or No Threat).

**Appendix A React to a Possible Improvised Explosive Device (IED)...A-5**  
 Common Task 093-401-5050

**Sample Report:**

**Line 1:** 121300LMAR98

**Line 2:** 1-75<sup>th</sup> Infantry Bn, C-Co, EP2134567891, 150 meters South of the grid referenced road junction.

**Line 3:** 49.7000, Tripwire 60 or 1-800-435-6789, SFC Snuffy

**Line 4:** Placed, Possible Improvised Explosive Device (IED)

**Line 5:** None

**Line 6:** MSR Speedway

**Line 7:** Unit cannot conduct re-supply operations, MSR is in passable

**Line 8:** Constructed sandbag barricade and evacuated non-essential personnel 300 meters. Mission essential personnel are in protective gear, all are utilizing frontal and overhead cover

**Line 9:** Immediate

**Minimum Required Reporting Information:** At a minimum the report must contain:

Proper format is not as important as getting the information to the higher HQ.

- (a) "Who" discovered the item (Point of Contact)
- (b) "What" item is (type / Sub-group)
- (c) "Where" the UXO is (Location / 8-digit Grid)
- (d) "When" the item was discovered
- (e) Recommended priority (Immediate, Indirect, Minor, or No Threat)

**Appendix A React to a Possible Improvised Explosive Device (IED)....A-6**  
Common Task 093-401-5050

**Glossary**

<b>AT</b>	<b>anti-tank</b>
<b>CEA</b>	<b>captured enemy ammunition</b>
<b>EOD</b>	<b>explosive ordnance disposal</b>
<b>HE</b>	<b>high explosive</b>
<b>HQ</b>	<b>head quarters</b>
<b>IAW</b>	<b>in accordance with</b>
<b>IED</b>	<b>improvised explosive device</b>
<b>LBS</b>	<b>pounds</b>
<b>METT-TC</b>	<b>mission, enemy, terrain and weather, troops and support available, and civil considerations.</b>
<b>MM</b>	<b>millimeters</b>
<b>OEF</b>	<b>Operation Enduring Freedom</b>
<b>OIF</b>	<b>Operation Iraqi Freedom</b>
<b>POP</b>	<b>Plaster of Paris</b>
<b>SOP</b>	<b>Standing Operating Procedures</b>
<b>TO</b>	<b>Theater of Operation</b>
<b>TTP</b>	<b>Tactics Techniques and Procedures</b>
<b>UXO</b>	<b>Unexploded Ordnance</b>

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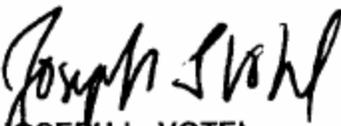
TC 9-21-01 (093-89D-01)  
09 February 2004

By Order of the Chief of Ordnance, US Army Ordnance Corp:



**WILLIAM M. LENAERS**  
Brigadier General, United States Army  
Chief of Ordnance

Official:



**JOSEPH L. VOTEL**  
Colonel, United States Army, IN  
Director, Army Improvised Explosive Device Task Force

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

**PETER J. SCHOOMAKER**  
General, United States Army  
Chief of Staff

Official:



**JOEL B. HUDSON**

*Administrative Assistant to the  
Secretary of the Army*

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