CURRENT AS OF SEP 07

Supersedes GTA 90-10-046 dtd 6 Sep 06

IN IRAQ, NOTHING IS AS IT APPEARS.

GTA 90-10-046

MNC-I COUNTER IED SMART BOOK

UNCLASSIFIED // FOUO

REMAIN VIGILANT

BE AWARE, NOT A TARGET!

TF TROY MISSION

CJTF Troy exercises command and control of specialized counter-IED forces and coordinates / synchronizes defensive counter-IED efforts focused on IED intelligence collection / development, materiel solutions, and training throughout the Iraqi Theater of Operations (ITO) to defeat the IED System.

CIED TT MISSION

The C-IED Training Team's mission is to deliver a C-IED program (relevant to the in-country threat) in order to provide personnel with the knowledge required to identify IED's and IED indicators, apply CREW systems, Cache Search Awareness and the skills required to respond safely to threat situations.

PURPOSE

The purpose of this SMART BOOK is to provide IED recognition and information to Soldiers, Sailors, Airmen and Marines of the coalition forces in the ITO. This book also provides additional information on search techniques and reporting formats essential for the safe conduct of day-to-day missions.

For the latest information on the C-IED fight and TTPs visit the TF TROY website at:
http://sps.iraq.centcom.smil.mil/C1/IED/default.aspx

BE AWARE, NOT A TARGET!

COUNTER Improved Explosive Device SMART BOOK

TABLE OF CONTENTS

IED ATTACK TERMINOLOGY

Single IED Attacks: Describes the vast majority of IED related activity in Iraq. The most common type of IEDs employed by these groups are artillery projectiles or mortar rounds, surface laid and hastily emplaced beside roadways. Emplacement activity may occur in stages (whereby one insurgent delivers the munitions, while another connects the firing pack at a different time), or in one session.

Assessment: It is assessed that the cell boundaries for insurgents often mirror that of tribal boundaries, and that insurgent activity is often associated with power, status, or income with the family or community. Cell activity is decentralized. CF vehicles such as up–armored HMMWVs are reasonably adept in protecting vehicle occupants from this type of IED. CF TTPs in dealing with these types of devices are well developed and reasonably successful.

Coordinated IED Attacks: Describes more organized insurgents who carry out coordinated 'Complex' Attack. Complex Attacks (CA) are defined as an attack that involves more than one IED, or an IED in conjunction with direct or indirect SAF. Complex Attack scenarios often involve significant Anti-Iraqi Forces (AIF) planning and are often planned in order to position CF within the Kill Zones of different weapons systems. CA can often involve the use of secondary or tertiary IEDs placed to target first responders to an IED attack.

Assessment: These attacks pose a significant threat to CF however, such attacks also provide CF with the opportunity to close with and kill the enemy. Counter-ambush drills, TTPs for the employment of QRF and the flexibility of ISR assets are key elements in using CA to maximize CF advantage.

Catastrophic IED Attacks: Describes specialist IED cells which through the use of specific TTPs have been able to inflict disproportionate casualties amongst CF. Insurgents conducting these attacks operate as part of a centralized structure, with a significant increased range of operation which can span both BCT and Divisional boundaries. The discipline and training demonstrated by these insurgents is significantly higher than that of the other attacks. The weapon system employed by these cells include Explosively Formed Projectiles (EFPs) and 'Deep Buried IEDs'.

Assessment: CF can use the same C-IED techniques against insurgents attacks. Tier 1 hotspots or known attack locations are ripe for SKT operations.

Counter IED Principles

Maintain an Offensive Mindset

IED attacks are contact with the enemy. Every leader must be prepared to rapidly develop the situation in order to gain and maintain contact with the enemy and advance his unit by fire and maneuver to ultimately kill or capture his adversaries.

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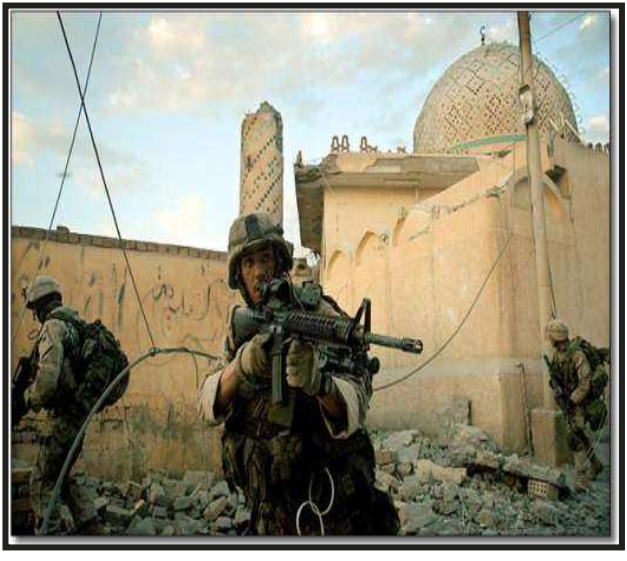
Counter IED Principles

Develop & Maintain Situational Awareness



The hidden and fleeting nature of insurgent tactics, along with the challenge of conducting military operations in urban terrain requires US ground forces to maintain a continual heightened state of situational awareness (SA). Good SA is key to seeing, understanding, and then acting on pre-attack indicators to deny the enemy's advantage of surprise.

BE AWARE, NOT A TARGET!

Counter IED Principles

Stay Observant

Most IEDs found before detonation are located by the naked eye. Every soldier should continuously scan their assigned sector in search of IED indicators. Be deliberate – speed greatly diminishes the likelihood of finding an IED before it finds you… know where/when to use speed.

BE AWARE, NOT A TARGET!

Counter IED Principles

Avoid Setting Patterns

Watching and waiting – the two tactical disciplines insurgents have mastered to target Coalition Forces. What are they watching and waiting for?...For you to reveal consistent/regular use of the same TTP. Vary your patterns frequently.

BE AWARE, NOT A TARGET!

Counter IED Principles

Maintain Standoff

When practical keep a safe distance, and wherever possible, maintain frontal and overhead protection from locations most likely to conceal an IED e.g. shoulders of roadways, medians, intersections, static vehicles along the route, etc. Keep all civilian traffic a safe distance away from the patrol.

BE AWARE, NOT A TARGET!

Counter IED Principles

360-Degree Security

Enemy activity that blends with the local populace is hard to detect and can threaten the unit from any direction. Therefore it is imperative that vigilant three dimensional 360 degree (3/360) security be maintained at all times, regardless of whether the patrol is mounted or dismounted.

BE AWARE, NOT A TARGET!

Counter IED Principles

Maintain Tactical Dispersion

As the situation dictates, and in order to reduce risk, patrols must maintain adequate separation between both vehicles and personnel. Leaders must fight the tendency to close formations during halts.

BE AWARE, NOT A TARGET!

Counter IED Principles

Utilize Blast / Fragmentation Protection

Armor saves lives – use it, but don't become tied to it. Do not be afraid to dismount when the situation allows, it is the most effective technique for patrolling and developing a rapport with local communities.

BE AWARE, NOT A TARGET!

Counter IED Principles

Utilize Technology

Know the capabilities and limitations of your CREW systems, their impact on other electronic systems, and tactical employment techniques. Regularly monitor your CREW system when on patrol to ensure it is operating correctly. Utilize devices, such as RHINO and Rollers when fitted to mitigate the threat of non-RCIEDs. Understand that there are limitations to all systems, and be aware that they only mitigate the threat, they do not remove it.

BE AWARE, NOT A TARGET!

THE FIVE Cs

CONFIRM- The presence of the suspect item should be confirmed. If a device has functioned it is confirmed. **This is to be done from a safe location with maximum use of distance, frontal and overhead protection.** Your safety should not be compromised for positive identification of an IED. You should not move closer to the device unless absolutely necessary as observation can be achieved with the use of spotting equipment such as binoculars and scopes. Ensure you are constantly aware of the possibility of secondary devices. Do not get tunnel vision, inform the rest of your call sign of the presence of the suspected item. **Call EOD using the SPOT report followed by an IED/UXO 9 line report.**

CLEAR- All personnel are to be moved away from the suspect item. **Mark your location and note the direction and distance to the device. Move to a minimum distance of 300 meters from the suspect item.** The Convoy Commander or Patrol Leader at the scene makes the decision on how large an area to clear based on METT-TC. Detonation may be imminent if the device was armed before being located. Personnel should make maximum use of hard cover, ensuring they are out of the direct Line of Site (LOS) from the suspect area to cleared positions. If cover cannot be obtained, maximize distance from the device.

CORDON- The established danger area is to be cordoned off and an Incident Control Point (ICP) is to be established for follow on agencies. The purpose of the cordon is to prevent unauthorized personnel from entering the site (for their own safety and the safety of the first responders), to preserve the scene for further exploitation, and to provide outward protection and security against command-initiated IEDs. When clearing personnel from the area, random individual checks should be carried out as potential exists in identifying a triggerman, cameraman, and/or insurgent personnel. Convoy personnel man the perimeter until additional assets arrive on scene. **Do not become distracted.**

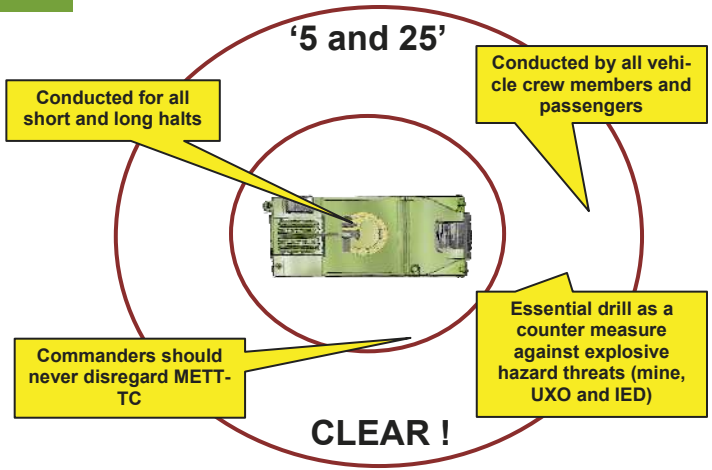
BE AWARE, NOT A TARGET!

THE FIVE Cs

CONTROL- The area inside the cordon is controlled to **ensure only authorized access**. Allow only first responders to breach the cordon through the ICP. All civilian traffic should be diverted away from the cordon. Maintain (from a safe distance) a visual/line of sight (binoculars and scopes) observation of the subject IED to ensure no tampering occurs. Immediately report any personnel observed approaching the IED according to the unit SOP. The cordon must be secure, ensuring no one enters the danger area until the EOD Team has given the all clear signal (NO RUBBERNECKING)! Remain alert and **look for a potential triggerman** from your position.

CHECK- All personnel should check their immediate area for **SECONDARY** devices by **conducting 5 and 25 meter** sweeps from their positions. Soldiers should look for IED materials and equipment (detonating cord, receivers, transmitters, cell phones, antennas etc.) that may lead to other IEDs flanking the unit. Any suspicious items should be reported to the Patrol Leader/Convoy Commander immediately, the area around the device marked as per a unit-designated marking system, and the cordon re-established to a safe area and the 5/25 procedure conducted again.

BE AWARE, NOT A TARGET!



5 and 25 meter check

Any patrol stopping for more than 5 minutes must consider itself vulnerable to attack. All stops must involve individual soldiers conducting 5 meter checks and teams conducting 25 meter checks.

5 meter checks: Identify the best position to stop. Carry out a visual check using binoculars or other optics. Check for disturbed earth and suspicious objects, loose bricks in walls and security ties on streetlights. Work from the ground and continue up above head height. Then conduct a physical check for a radius of 5 meters around your position. Be systematic, take your time and show curiosity as IEDs are generally well camouflaged. Use NVGs and IR if available, if not, use a white flashlight at night.

25 meter checks: Once 5 meter checks are completed, continue scanning out to 25 meters in your sector or area of responsibility checking for potential IED indicators and anything out of the ordinary. If searching off the hardball scan the area first with optics in the event of pressure switches, land mines etc. Be on the lookout for a potential triggerman observing your actions, remain calm, do not panic on finding the IED as any hasty actions may alert the triggerman to function the device. **Do not pick up or touch an IED! Call EOD.**

BE AWARE, NOT A TARGET!

IMPROVISED EXPLOSIVE DEVICES (IED)
GENERAL INFORMATION

IEDs are constructed with five basic components:

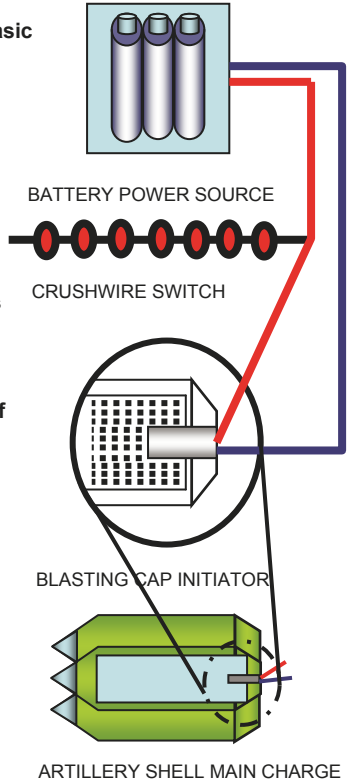
–Case or Containers
- •Suicide vests
- •Vehicles
- •Military ordnance
- •Propane tanks
- •Fire extinguishers
- •Metal containers

–Power Source
- •Common household batteries
- •Battery packs
- •Vehicle batteries
- •Capacitor banks

–Switch and Circuits (Method of Functioning)
- •Timed
- •Victim Operated
- •Command

–Initiator
- •Military blasting caps
- •Commercial blasting caps
- •Home made initiators

–Main Charge
- •Military Ordnance
- •Military Explosive
- •Home Made Explosives
- •Home Made Incendiaries



Remember, the construction of IED's is limited only to the creativity of the IED maker!

CASINGS OR CONTAINERS

Anything can be used as a case or container. As long as it holds the main charge. The most common casings encountered include standard military ordnance. However common domestic household and industrial items/ material is also prevalent. Casing material is limited only to one's imagination.

Suicide vests
Vehicles
Military ordnance
Propane tanks
Fire extinguishers
Metal containers

POWER SOURCES

IED power sources encountered may include common household batteries or battery packs, vehicle batteries, or capacitor banks.

SWITCHES AND CIRCUITS

Three Methods of Functioning IEDs

A firing switch will function a IED using one of the following methods of initiation. These types of switches may also be used to arm the IED

Time- Time IEDs are designed to function after a pre-set delay, allowing the insurgent to make his escape or to target Coalition Forces which have created or are following a set pattern. There are various types including: burning fuse, Mechanical and Electronic.

Command- Command initiated IEDs allow the insurgent to choose the optimum moment of initiation. They are normally used against targets that are in transit, or where a routine pattern has been established. The most common types include: Command Wire (CWIED) and Radio Controlled (RCIED).

Victim Operated- A Victim Operated IED (VOIED) is a means of attacking an individual, group of individuals or vehicles. An example is a 'come-on' scenario type of attack (e.g. Coalition forces reacting to a real or fabricated incident such as a hoax IED). There are various methods of initiation for VOIEDs, examples include: Pull/Trip, Pressure, Release of Pressure, Movement Sensitive, Light Sensitive and a range of electronic switches which include Passive Infra Red (PIR).

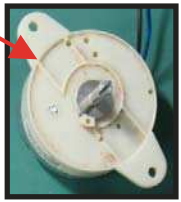
SWITCHES AND CIRCUITS

TIME

Time switches are designed to function an IED after some delay. Commonly used time switches in the ITO include:

–Mechanical
–Electronic
–Homemade circuits

Mechanical Time: Washing Machine Timers



Electronic Time Clocks

Homemade Time Circuits

SWITCHES AND CIRCUITS

COMMAND

Command initiated IEDs allow the insurgents to choose the optimum and precise time of detonation. Three common command initiated IEDs in the ITO are:

- Command Wire (long and short)
- Radio Controlled (LRCT and Mobile/Cell Phone)
- Suicide Devices

Command Wire

Command Wire IEDs require insurgents to position a trigger man in relative proximity to the main charge. Be on the look out for potential trigger men and other suspicious activity. A common enemy TTP is for insurgents to place a secondary IED near the primary device buried under the command wire. Tracing out the command wire may lead you to a kill zone where a secondary device is initiated.

- **DO NOT TRACE command wires** – Leave it to specifically trained personnel, proficient in the proper technique to do so.
- **DO NOT CUT command wires** – Collapsing circuits may be incorporated, resulting in detonation of the IED.
- **DO NOT PULL command wires** – Pull type initiators may be incorporated, resulting in detonation of the IED.

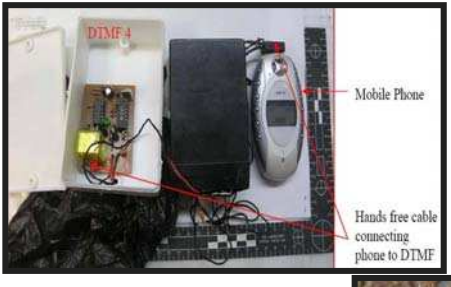
Remember to apply the 5 C's.
Allow EOD, CEXC or WIT to conduct exploitation!

SWITCHES AND CIRCUITS

Mobile telephones

Presently, Baghdad has the most developed cell phone structure in Iraq, making this AOR the ideal test bed for cell phone initiated IEDs.
As the cell phone network expands throughout the ITO so too will the use of this type of initiator.

- **Do not** answer a ringing phone
- **Do not** remove the battery
- **Do not** remove the SIM card
- **Do not** manipulate the buttons
- **Do not** attempt to access the phone book



SWITCHES AND CIRCUITS

Long range cordless telephones (LRCT)

Insurgent TTPs include using the handset or base station of cordless telephones and long range cordless telephones as the IED switch near the main charge. **Be on the look-out for both!**

SWITCHES AND CIRCUITS

Long range cordless telephones (LRCT)

EOD and CEXC personnel have found base stations and hand sets booby trapped with small explosive charges at IED sites. Be aware of this enemy TTP and **do not touch it, CALL EOD!**

SWITCHES AND CIRCUITS

APPLIANCE CONTROLLERS

CAR ALARMS

KEYLESS ENTRY SYSTEMS

SWITCHES AND CIRCUITS

RADIO CONTROLLED DEVICES

Radio Controlled devices are a common switch used to initiate IEDs in the ITO. They provide increased stand off for the triggerman as well as accurate timing. Some of the most commonly used RC devices are:

- Two-way radios / Personal Mobile Radios
- Long range cordless telephones
- Mobile Telephones
- Cordless Telephones
- Wireless doorbells
- Keyless entry systems
- Car alarms
- Radio controlled toys

RADIO CONTROLLED TOYS

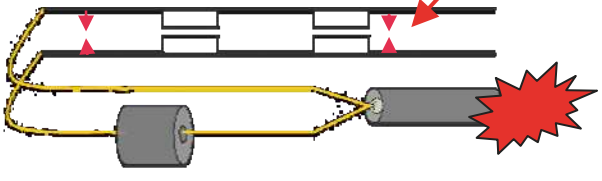
WIRELESS DOORBELLS

SWITCHES AND CIRCUITS

VICTIM OPERATED

Victim Operated switches are designed to target an individual or group of individuals and require some interaction with the device from the target. As well as being employed along Coalition Force supply and patrol routes, these mechanisms may also be employed within a booby trapped house or arms cache. The most common types are:

- Pull/Trip
- Pressure
- Pressure Release
- Tension Release



SWITCHES AND CIRCUITS

VICTIM OPERATED PRESSURE PLATES

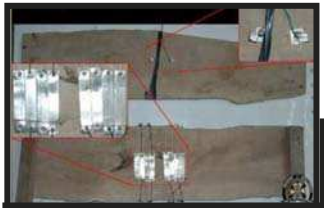
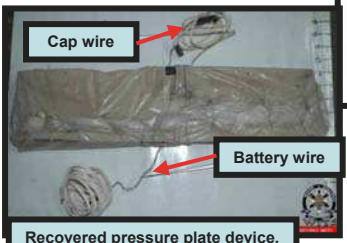


Photo of pressure plate terminals that close the circuit & fire the device. Terminals are sheet metal held in place by wire & screws.

Figure 13: Homemade pressure plate (CEXC 321/05)

Home made pressure plate wrapped inside a tire inner tube



Recovered pressure plate device.

Two Homemade pressure plate devices

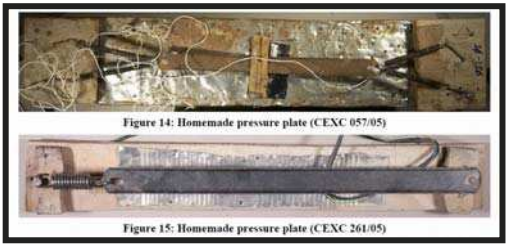


Figure 14: Homemade pressure plate (CEXC 057/05)

Figure 15: Homemade pressure plate (CEXC 261/05)

SWITCHES AND CIRCUITS

TWO-WAY / PERSONAL MOBILE RADIOS (PMR)

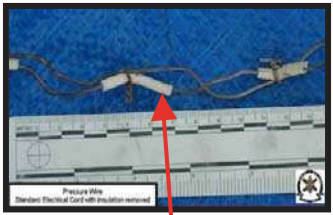
Two-way radios are a common method of command initiation incorporated in IEDs within the ITO. Worth noting, is that they are the same unsecured/uncontrolled radios that have previously been employed by Coalition forces for intra-squad or platoon communications.

Do not use them! Rely on your secure handheld and vehicle mounted communication network.

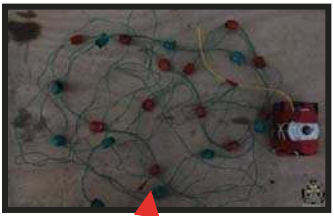
Like cordless telephones and long range cordless telephones, AIF have booby trapped two-way radios in the past, **so if found do not touch them, CALL EOD!**

SWITCHES AND CIRCUITS

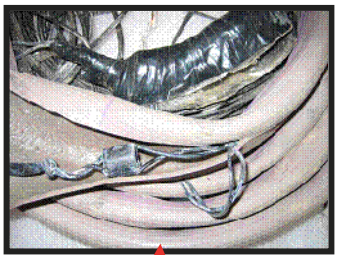
VICTIM OPERATED SWITCHES



Crush wire. Electrical cord with insulation removed



Crush wire



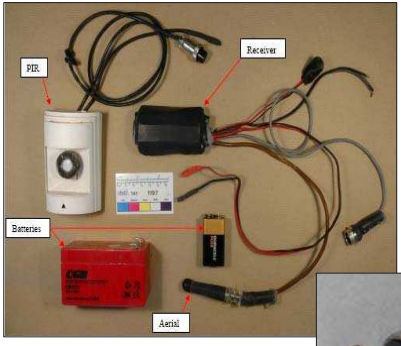
Crushed Wire placed inside rubber hose

Hose switch pressure activated

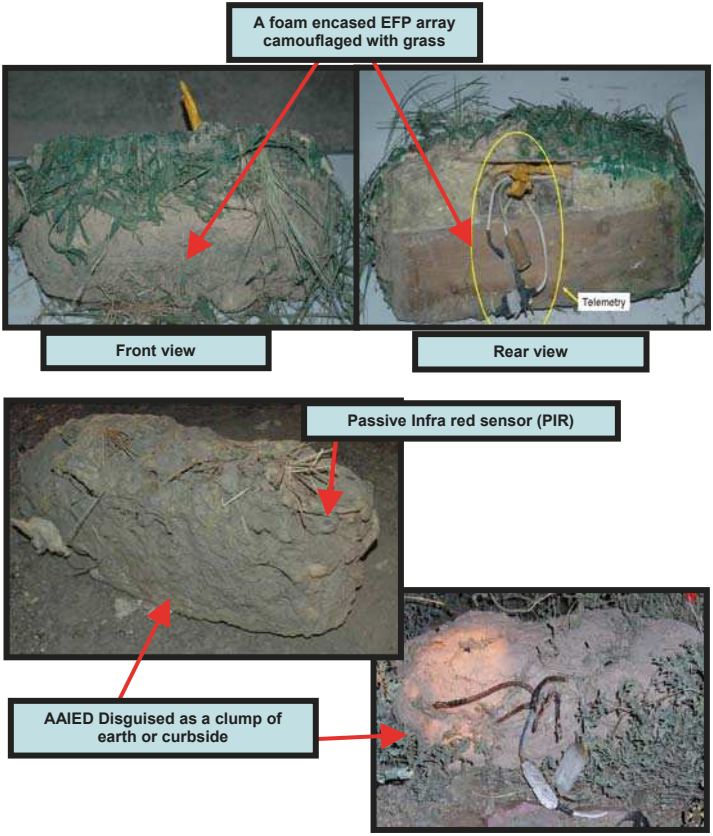
SWITCHES AND CIRCUITS

Victim Operated (VO) – Passive Infra Red (PIR)

Passive Infra Red (PIR) Technology works by dividing its “observation area” into a grid system, then looking for the changes (from one grid to another) caused by the transient motion of a heat source (infrared energy). These sensors are normally associated with Explosively Formed Projectiles (EFPs), currently the most lethal IED in theater!



ANTI-ARMOR IED (AAIED) SHAPE CHARGE & EFP

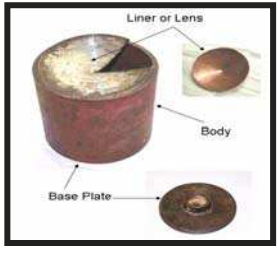


IED INFORMATION

Explosively Formed Projectiles (EFPs) and deeply buried (underbelly) IEDs are currently the most effective types of IED employed in the ITO.

EFP

EFPs are directional devices that can penetrate armored vehicles. They work by having an explosive-filled container (usually a cylinder), with the forward end closed by a concave metal disk. When the EFP functions, the metal disc forms a projectile that can reach speeds of up to 2 kilometers per second. EFPs can be triggered by Command or are Victim Operated.



UNDERBELLY

These IEDs are pre-positioned below the surface of the roadway with the intent to target the underbelly of the vehicle. This is done by digging under the roadway or digging up the road surface and repairing it with the explosives emplaced. This also allows the insurgent to pre-position bulk munitions or HME and it will lay dormant until it is required to be fired.

INDIRECT FIRE – Improvised Weapon Systems-

These weapon systems offer the insurgent the ability to deliver an explosive charge to a target with a stand off between the Firing Point and the Contact Point. They may be initiated by Command or Mechanical Time. These include Mortars, Rockets and improvised Manpads.

Potential IED Indicators

• **Changes in patterns of life-** Be alert to fewer people or vehicles in a normally busy area, open windows, and the absence of children playing.

• **Colors-** Notice clues unwittingly provided by the enemy such as exposed DETCORD or other parts of the IED. Look for contrasting colors, freshly disturbed earth (it will be darker in color) or concrete that doesn't match the surrounding areas.

• **Markers-** Watch for indicators by the side of the road such as tires, rock piles, ribbon or tape that may identify an IED location, or serve as an aiming reference.

• **Shapes-** Take note of object outlines that seem out of place for the environment that you are in.

• **Graffiti-** Be aware of symbols or writing on buildings and walls that might serve as a warning to locals (interpreters usually needed).

• **Signs-** Pay attention to newly erected placards and signs that seem out of place or might serve as warning to locals and messages to insurgents.

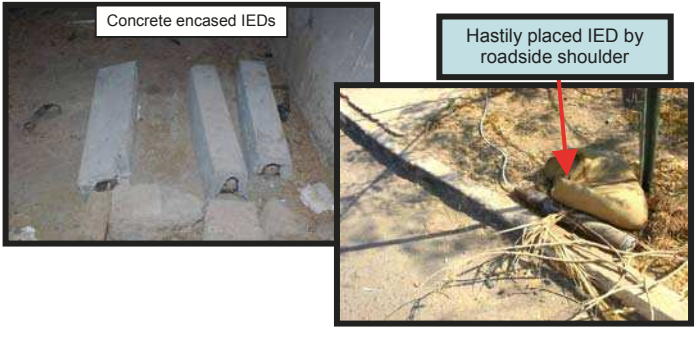
Be alert to:

- Vehicles following or ahead of your convoy for a long distance and then pulling off the side of the road.
- Dead animals along the roadways.
- Freshly dug holes or pavement patching on or along the road that may serve as possible IED emplacement sites.
- New dirt, rock or gravel piles.
- Obstacles and craters in the roadway used to channel the convoy.
- Personnel on overpasses.
- Signals with flare or city lights (switched off/on) as convoy approaches.
- People video taping ordinary activities or military movements.
- Wires laid out in plain sight.

IED EMPLACEMENT

IEDs may be emplaced in the following areas

- In the median, by the shoulder or buried under the surface of any sealed or unsealed road.
- Elevated, in trees, light posts, road signs, guard rails, overpasses and bridge spans.
- Inside, by or under any type of material or packaging.
- Concealed in cars, trucks, motorcycles, dead animals, humans and carts.
- As secondary or tertiary IEDs near the subject IED or in the vicinity of Point of Origin (POO) sites.
- Especially designed to target QRFs, first responders, cordons, checkpoints and Incident Control Point (ICP).
- In a daisy-chained configuration- meaning there may be more than one in the vicinity connected together to create a chain reaction if one is tampered with or detonated.



Tactics, Techniques and Procedures
ENEMY TTP's

IED's

- **Are the preferred method** of attacking CF convoys, mounted and dismounted patrols.
- **Combined with follow on small-arms** and RPG fire.
- **Have been dropped from highway overpasses**, thrown in front of approaching vehicles and from roadsides.
- **Are placed in areas that slow, stop, or position** CF within the IED's blast radius.
- **Are often placed in a manner that directs the blast** into the kill zone (i.e. placed against curbs, rock piles, sand/dirt piles, etc).
- **Are typically placed in areas with built-up and/or restrictive terrain** in order to cover and conceal AIF during attacks.
- **Frequently use military explosive** components and/or stores such as 120mm, 122mm, 130mm and 155mm artillery projectiles.

AIF

- **Usually survey and prepare** an IED site in stages, prior to emplacement.
- **Often place IEDs in previously used IED sites**, i.e. potholes that are covered with dirt or sand.
- **Position hoax or decoy IEDs** to draw and position CF into a particular area or the "kill box" of a real IED, and/or to observe CF reaction times and TTPs.
- **Regularly use secondary IEDs** to target a convoy or cordon area as it regroups after an initial IED attack.
- **Conceal IEDs** as damaged highway infrastructure.
- **Employ VOIEDs** such as pressure plates, PIR EFPs and crush wires.

Tactics, Techniques and Procedures
ENEMY TTP's Cont.

AIF

- **Use a stooge,** generally children to conduct reconnaissance and in some cases, place IEDs.
- **Camouflage command wires** between pole strung power lines. IED command wires are being found attached to overhead power lines, running from power pole to power pole, following the pole down to the IED device.
- **Phone in bogus reports** of dead bodies in vehicle/s as a means to lure CF, IA, ISF into the kill zone of a VBIED.
- **Use normal activity as a cover** to disguise their actions after an IED event in order to avoid being apprehended i.e. sheep herding or fishing.
- **Attack from overhead** by suspending IEDs from overpasses, trees, light/telephone poles or overhead wires.
- **Use multiple IEDs** daisy-chained together.
- **Use dominating features** to detonate IEDs such as rooftops, windows, dirt mounds, vehicles (moving or stationary) vegetation, canals, alleyways etc.
- **Use culverts to conceal** large IEDs.
- **Use aiming stakes as trigger points** (i.e. rock piles, garbage, paint markings, light poles, telephone poles, cloth or plastic strips tied to tree branches or natural vegetation etc).
- **Use any means available to conceal** IEDs (i.e. boxes, bags, trash/debris, soda cans, milk cartons, dead humans, dead animals, MRE sleeves, paint cans, cinder blocks, tires, broken-down vehicles etc).

REMAIN VIGILANT

UXO AWARENESS AND IDENTIFICATION

DEFINITION UXO

UXO is explosive ordnance, which has been primed, fused or otherwise prepared for action, and which has been fired, dropped, launched, projected or placed in such a manner as to constitute a hazard to operations, installations, personnel or material and remains unexploded either by malfunction or design or for any other cause. (NATO Definition)

Explosive ordnance, which does not fit into the category described above, but has been made unstable due exposure to fire, neighboring explosions, extremes of climatic conditions, or excessive weathering, may also be considered as UXO!

SAFETY WARNING

Only those personnel specifically qualified to do so are to handle UXO!
Explosive ordnance will KILL you.

THIS SECTION IS TO ASSIST IN IDENTIFICATION ONLY

UXO AWARENESS AND IDENTIFICATION

UXO Hazard Safety

- Avoid the area where a UXO is located.
- Never approach a suspected UXO.
- Never transmit near a UXO.
- Never attempt to remove any part of a UXO.
- Never attempt to move or disturb an UXO.
- Clearly mark the UXO/area.

Remember that UXO's can be used as a component in the design of IEDs.

Tactics, Techniques, & Procedures

- Employ the SANDI principles

STOP,
ASSESS,
NOTE,
DRAWBACK, and
INFORM.

- Complete an EOD 9 Line Report and relay it back through your HQ.
- Clearly mark the area (place marker/s between waist and head level) using improvised or official markers.
- Evacuate the area and establish a cordon (if appropriate).

UXO AWARENESS AND IDENTIFICATION

HAZARDS

These are some of the common hazards associated with UXO

EXPLOSIVES

Military
Commercial
Homemade

TOXIC INDUSTRIAL SUBSTANCES

Mercury Thallium
Compressed Gases
IRFNA- Inhibited Red Fuming Nitric Acid – Fuel for liquid fueled missile engines
LOX – Liquid Oxygen – The Oxidizer for the above
Carbon Fiber, etc.

NUCLEAR, BIOLOGICAL, CHEMICAL AND RADIOLOGICAL MATERIAL

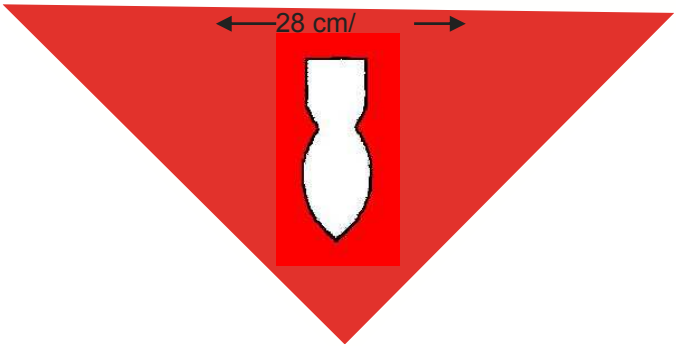
Depleted Uranium
Old Chemical weapons
Old Biological weapons

UXO AWARENESS AND IDENTIFICATION

UXO MARKING

This is the official UXO marker, which should be recognized by military forces worldwide.

This marker is only painted on one side to show direction of the threat.



UXO AWARENESS AND IDENTIFICATION

EVACUATION DISTANCES

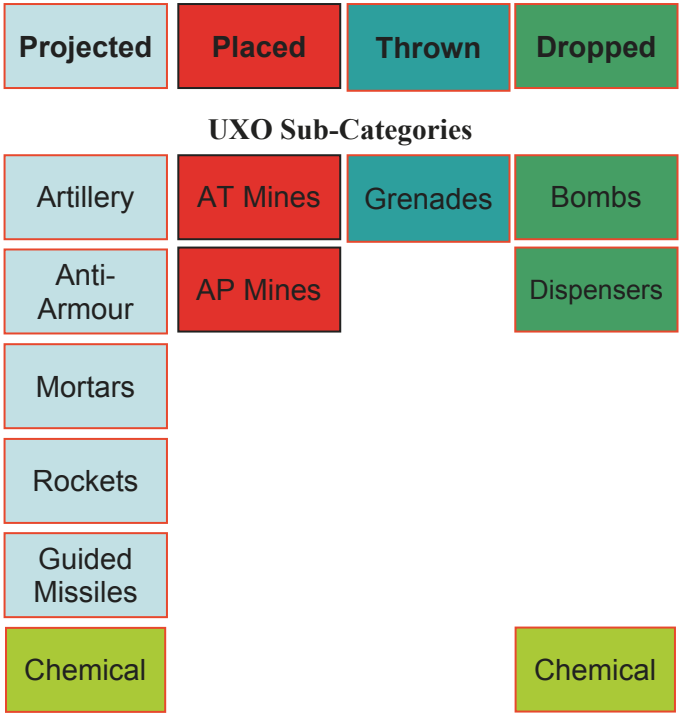
•Mines:	**150m**
•Up to 105mm Projectile:	**300m**
•Bigger than 105mm Projectile:	**600m**
•Aircraft bombs:	**800m**
•Unknown	**300m**

SEEK FRONTAL AND OVERHEAD PROTECTION

MINIMIZE EXPOSURE TIME WITHIN LINE OF SITE OF UNEXPLODED ORDNANCE

UXO AWARENESS AND IDENTIFICATION

9 Line UXO spot report categories



UXO AWARENESS AND IDENTIFICATION
UXO RECOGNITION

Projected Munitions
ARTILLERY

Characteristics: e.g. 152mm HE projectile

- Bullet like shape.
- Driving bands/Rotating Bands.
- May have fins.
- May be nose or base fused.
- They may be filled with chemical agent

UXO AWARENESS AND IDENTIFICATION
UXO RECOGNITION

Projected Munitions
ANTI-ARMOUR

e.g. 100mm HVAPDS-T

Characteristics:

- Armour Piercing (penetrators) Fin Stabilised Discarding Sabot with tracer (APFSDS –T).
- Penetrator may be Depleted Uranium (DU).
- No high explosives, may have tracer, Sabot element relies on kinetic energy.
- High Explosive Anti-Tank (HEAT).

UXO AWARENESS AND IDENTIFICATION
UXO RECOGNITION

Projected Munitions
MORTARS

e.g. 60mm HE mortar

Characteristics:

- Fusing in the nose
- Normally tear drop shaped, however can be parallel sided
- Spigot (flash) holes on the tail body
- Fins same diameter as body
- Percussion primer in rear of tail boom

UXO AWARENESS AND IDENTIFICATION
UXO RECOGNITION

Projected Munitions
ROCKETS

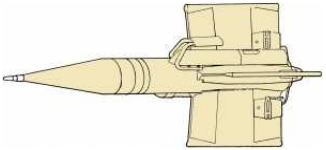
e.g. S-5 57mm Air-to-Ground

Characteristics:

- One or more venturi.
- Long & cylindrical in shape.
- May be fin or spin stabilized.
- Will not have movable control surfaces.

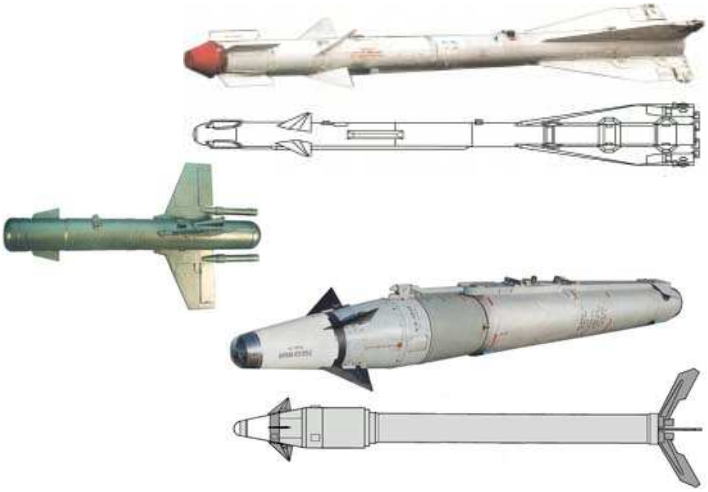
UXO AWARENESS AND IDENTIFICATION
UXO RECOGNITION

Projected Munitions



Characteristics:

- One or more venturi.
- Usually has moveable control surfaces, or guidance unit.
- May be optical, command wire, or radar guided.
- May have clear nose cone.
- Warning damaged missiles are highly susceptible to Electro Magnetic Radiation (EMR).



UXO AWARENESS AND IDENTIFICATION
UXO RECOGNITION

PLACED MUNITIONS

LAND MINES – Anti-Personnel

Characteristics:

- Small in size (approximately fist sized and 2-16 ozs).
- Relies on the explosive blast and/or fragmentation to cause casualties (1.5 8 ozs of explosive).
- Normally operated by pressure (10-20lbs).

UXO AWARENESS AND IDENTIFICATION
UXO RECOGNITION

PLACED MUNITIONS
Land Mines - ANTI-TANK

Blast

Characteristics:

- Larger than AP mines
- Usually has pressure plate or tilt rod
- May be plastic, glass, metal or wood
- Can be blast or Anti Armor

Anti-Armor

UXO AWARENESS AND IDENTIFICATION
UXO RECOGNITION

GRENADES (Hand thrown)

Characteristics:

Grenades are commonly small (fist-sized), metallic looking, and generally cylindrical or spherical in shape. Some variants do have a throwing handle of some nature.
Variants include fragmentation, smoke, anti-armor, blast/ concussion and incendiary.

UXO AWARENESS AND IDENTIFICATION
UXO RECOGNITION

GRENADES (Rifle)

Characteristics:

- Light weight construction
- No flash holes in tail boom, attaches to the end of a rifle barrel.
- Can be fragmentation, smoke, illumination, or anti armor

UXO AWARENESS AND IDENTIFICATION
UXO RECOGNITION

DROPPED - Bombs

Characteristics:

- May contain fuses in nose, tail and/or sides
- Cigar shaped solid construction
- Have suspension lugs
- Separate add-on options such as fins, guidance sections, rocket motors etc.

Unguided or “Dumb” bombs

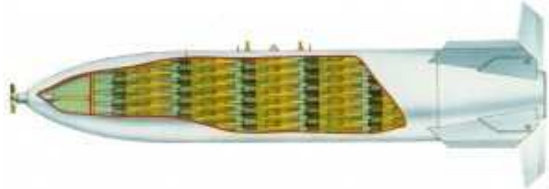
Guided or “Smart” bombs

UXO AWARENESS AND IDENTIFICATION
UXO RECOGNITION

DROPPED - Dispensers

Characteristics:

- Similar shape to bombs
- Have suspension lugs
- Light weight material construction
- May have seam (allows opening to dispense munitions)



UXO AWARENESS AND IDENTIFICATION
UXO RECOGNITION

Dropped SUB-MUNITIONS

Characteristics:

- Manufactured in numerous shapes and sizes
- Seldom found as single items
- Dropped generally by a dispenser
- Calculated failure rate typically 15 + %

UXO AWARENESS AND IDENTIFICATION
UXO RECOGNITION

Chemical Munitions
Rockets/Artillery Rounds/ Dropped

Characteristics:
- Often in a corroded state
- Artillery Rounds
  - –May have a white or yellow band
  - –A screw-on base
  - –Filler plug
  - –Welded base plate
  - –Round often split open, a central burster may be visible

If a chemical munition is suspected then move upwind and call EOD

Example – Welded base plate

Example -Central burster visible

Liquid may be seen coming from the munition

WARNING – While the chemical residue may not register on detectors/detection equipment it can still be very toxic!

UXO AWARENESS AND IDENTIFICATION

REMEMBER THAT ALL UXOs ARE DESIGNED BY FUNCTION TO KILL OR INJURE

IF YOU ONLY REMEMBER ONE THING

If you did not drop it or place it then do not pick it up!

VEHICLE SEARCH PROCEDURES
IED INDICATORS

Initial TCP
- Must maintain standoff.
- While still inside vehicles use megaphone to order driver and occupants to exit their vehicle.
- Have the driver open all doors and storage areas and move away from the vehicle.
- When completed, driver and occupants turn and face away from the vehicle.
- Establish a trigger point for gunners monitoring approaching vehicles.

Basic Principles
- Conduct a physical search of the driver for the presence of an initiating device.
- Make the vehicle owner/driver open and move all moving parts - do not open or move anything!.
- Check load carrying areas first (trunk, back Seat) for IEDs.
- Have the owner move the vehicle one car length to check for devices that the vehicle may be covering.

General
- Anything unusual in factory-built compartments.
- New or shiny bolts and/or screws.
- Unusual scratches, possibly made by screwdrivers, wrenches, or similar tools.
- Signs of tampering, such as broken parts or bent sheet metal.
- Areas and components cleaner or dirtier than surrounding areas.
- Wire and tape stored in vehicle.

VEHICLE SEARCH PROCEDURES
IED INDICATORS (Cont.)

- New or broken welds.
- Unusual fingerprints of grease and/or oil in otherwise clean areas.
- Fresh body work (fresh fiberglass, fresh paint, etc.).
- Fresh undercoating, particularly on older vehicles.
- New caulking found by smell or touch.
- No vehicle identification number.
- False compartments that are not part of vehicle design.

1. EXTERIOR
- Tail lights not working.
- No access to rear bumper cavity.

Front
- Headlights not working.
- No access to front bumper cavity.
- Front grill modified or has false compartments.

Sides
- Compartments, new welds, taped items, or fresh paint in front fender wells.
- Doors feel heavy when swung.
- Inconsistent or non-hollow sounds when tapping on vehicle sides or in fender wells.
- Foreign items in gas tank tube (open for inspection).

Tires
- Sound solid and are inflated.
- Strange odor from air valve.
- New.
- Unusually clean or dirty lug nuts or hubcaps compared to other wheels.

VEHICLE SEARCH PROCEDURES
IED INDICATORS (Cont.)

2. ENGINE COMPARTMENT
- Large battery box or extra battery.
- Odd and/or clean wires.
- Cold spots on radiator.
- False compartment in windshield washer container or contents smells like fuel.
- Foreign object in air filter cavity.
- Cold oil filter.
- Freshly painted areas, new welds, shiny bolts, or sheet metal work on firewalls.
- Clean engine in dirty car.
- Hood feels heavy when opened and closed (see note).
- False wall or modified fender compartment.
- Clean or wiped areas.

Note: Have the driver open the hood and when fully opened, feel the weight of the hood yourself.

3. UNDER VEHICLE
- Unusual or inconsistent sounds when tapping on fuel tank.
- New frame welds.
- Items taped or attached to frame.
- Cold oil pan.
- Cold or unusual muffler (vehicle may be loud).
- Signs of recent installation of components such as fuel tank, muffler, etc.

Note: Ask driver about details of repair.

VEHICLE SEARCH PROCEDURES
IED INDICATORS (cont.)

4. INSIDE VEHICLE

Dash

•Electrical components function or LEDs are on when vehicle power is off.
•New, damaged, or scratched screws.
•Plugged air vents.
•Broken or missing blower.
•False compartment in glove box.
•Rigid front and/or rear seats.
•False or modified ceiling.
•Unusually thick floor.
•Unusual lumps or bulges in front and/or rear seats.
•Stress cracks in windshield (no stone impact mark).

Trunk

•Check for spare tire, jack and tool bag.
•Inspect spare tire for tampering.
•Remove mats and carpeting.
•False walls/compartments.
•New welds, paint or repaired seams and gaskets.

CACHE SEARCHES

WHAT THE ENEMY IS DOING:

The enemy will want his cache to fit certain criteria to make it as effective as possible. Key points are:

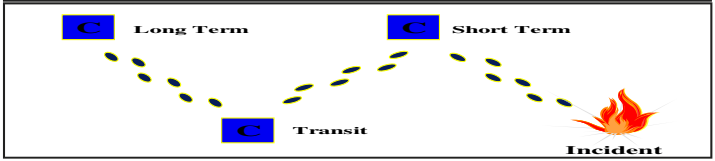
Available for immediate use,
Accessible,
Concealed,
Non-attributable to an individual,
Easily located by day or night

The enemy will often use a storage and movement similar to the military stores system. Due to this the caches are broken down into three different types:

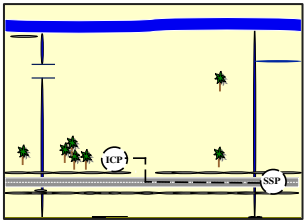
Long Term - Large store type, normally away from the contact point to avoid detection by follow up action. The location of this type of cache will only be known by a small number of people.

Transit - This cache will be smaller and closer to the contact point and will be used as a drop off to get the equipment / munitions to the triggerman.

Short Term - This will be used by the triggerman and will be very close to the contact point to allow the triggerman to deploy the items very quickly



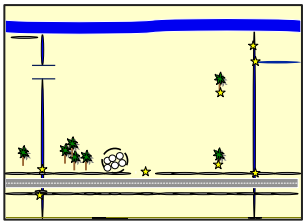
Phase 1



Establish CP:

1. Stop short of the CP and conduct 25 meter check.
2. Two persons move forward to the CP to do 25m check.
3. When this is done move to the CP to start the mission.

Phase 2

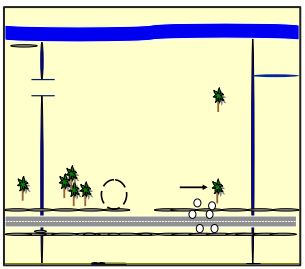


Select reference points:

1. All personnel select reference points using the reference points selection criteria which may include:

- Trees.
- Bushes.
- Gaps in walls, bunds, fences.
- Telegraph poles.
- Electricity pylons.
- Ends/corners of walls.
- Road signs.
- Gates, barriers.

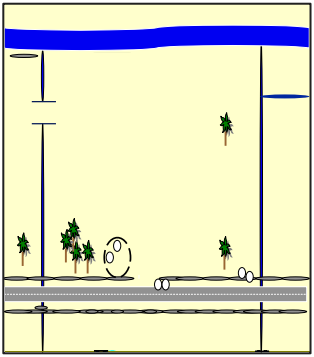
Phase 3



Walk the boundary (all persons walk except for Commander with a vehicle for ECM protection):

1. If a Military Working Dog is available the dog walks the boundary in front of the team and any areas of interest are noted by the handler. These are not searched at this time.
2. Look for more reference points and access areas that could not be seen from the CP.
3. The boundary walk also shows the extent of the mission area. (Limit of exploitation)

Phase 4

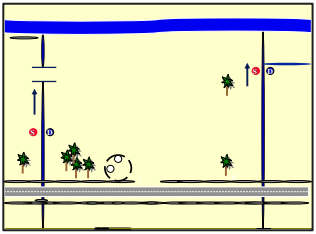


Search of the reference points:

1. Prioritize the reference points and start searching the most likely points first.
2. Searches are done by two people together, one with metal detector and one with a digging tool.
3. Use the systematic approach. Before searching the reference point, stand back and observe for disturbance or ground signs.
4. Then search the reference point remembering to search up if required, and search out from center of the reference point to 15 meters.

Note: The dog can be used to search reference points.

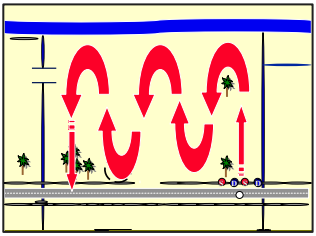
Phase 5



Search of the boundary:

1. Send two search pairs in opposite directions around the boundary.
2. Each pair carries a metal detector and each person will have a digging tool.
3. One pair has the detector inside the boundary and the other pair with the detector outside the boundary.

Phase 6



Search open area:

1. All persons move into extended line, alternate detector and digging tool and sweep through the entire search area.

BURIED CACHES - EXAMPLES

Buried Caches may utilize the following items as the storage container:

Industrial barrels
Fridges
Freezers

HOUSE CACHES - EXAMPLES

Remember the insurgent is only limited by his imagination for places to hide weapons

ACTIONS ON A CACHE FIND

Actions on threat

LIFE-THREATENING (Booby Trapped) DO NOT TOUCH
Mark and make mental note. Return to CP
All searching stops
Inform cordon
Task EOD

NON-LIFE THREATENING
Mark and make mental note
Return to CP, searching may continue
Inform cordon Cdr
Task relevant agencies

MILITARY OR ATTRACTIVE ITEMS
Mark and make a mental note. Return to CP
Inform cordon
Task relevant agencies

Planning Considerations

Use five paragraph field order.
EOD embedded or response time.
Use of Search dogs.
Female searchers/terps
Search elements weapons
Availability of Technical Spt. ie. BATS, Metal Detectors, etc
Physical layout for detainee flow
Is Building occupied, unoccupied, derelict
Has building been previously searched by CF
Are there other known AIF in area
Is building over watched by unsecured buildings
Have mission patterns been set
Does building have electricity
How many occupants are expected
Are dogs expected

Cache Identification

The following are things that you should think of to help identify future caches:

How was it located?	Why is it there ?
Has it got any marking system ?	What sort of cache is it ?
How was it concealed ?	Is there a route to it ?
How well maintained are the contents ?	Route for foot/vehicle?

Has it been put there recently 1 week, 1 month, longer ?

Military Working Dogs (MWD)

SSD **Specialized Search Dog**	Will work on and off leash, under the direct control of the handler.
	Trained to search for weapons, ammunition, and explosives in urban and rural areas, buildings and vehicles.
MDD **Mine Detection Dog**	The MDD works on a short lead or long line under direct control of the handler.
	Trained to perform military mine detection missions in a hostile environment.
PEDD **Patrol Explosive Detection Dog**	Trained to find 9 different explosives in open areas, vehicles, and in buildings as well as aircraft
	Also an attack dog trained to find an individual and chase, bite, hold and release upon command.
EDD **Explosive Detection Dog**	Same as PEDD except not trained as attack dog.

The SSD mirrors the capabilities of the EDD and the Patrol/Explosive Detector Dog (P/EDD) in that they are trained to detect the presence of weapons, ammunition, and explosives in a variety of environments. The SSD however has the ability to work off-leash ahead of the handler.

The operational environment and mission requirements will dictate the type of dog for success.

Specialized Search Dog Facts

- The SSD Team provides a quick, mobile and versatile aid to search operations.
- Uses include minefield extractions, area clearance, lane clearance, cave search, route clearance and cache searches.
- The SSD Team can considerably reduce the time spent on a search.
- It is an excellent tool to search in high metal content areas such as railways.
- SSD's are best employed in offensive types of searches (i.e. weapon cache searches) to disrupt enemy activity.

LIMITATIONS:
Dogs require a minimum of 6 hours undisturbed rest in every 24 hour period. Effectively employed for period of 30 minutes at a time. > 30 minutes, dogs become distracted

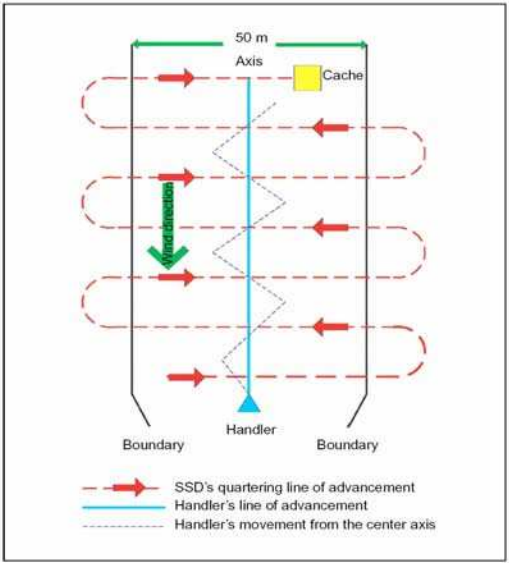
The handler will find out if there are areas of special interest, a time limit to the search, who his escorts will be, and what actions are to be taken upon a find.

• SSD are used to search ***BEFORE*** a suspected IED or VBIED is found. They ***DO NOT*** confirm the presence of a suspicious device (*Report to EOD immediately)*.

• Under no circumstances will the SSD handler remove or tamper with any object that the SSD has indicated on.

• Upon completion of the mission the SSD handler will submit an SSD Closure report and submit the information to the search commander.

OPERATIONAL QUARTERING SSD SEARCH



The SSD team should not enter an area until the entry point has first been searched.

OPERATIONAL QUARTERING: This is the most effective method for a cache search. Because the terrorist relies on markers to locate his hides, it is unlikely that munitions will be hidden in an open area, but an IED may be placed in an open area to try to compromise the military operations. If there is a high IED threat, the open areas on an open-area search should be quartered. Quartering is an effective way of covering an open area that has no boundaries and only several markers. See diagram above

Refer to: **TAB B TO APPENDIX 4 TO ANNEX AA TO MNC-I STANDARD OPERATING PROCEDURE**

WEAPONS TECHNICAL INTELLIGENCE

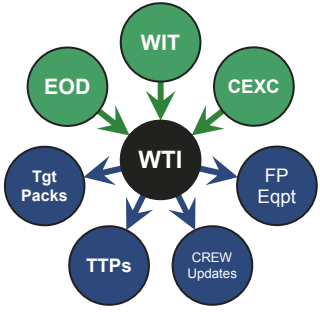
IED components are a great source of technical intelligence.

This technical intelligence is easily corrupted and therefore it is vital that items are handled correctly and where possible items are recovered by and turned over to the appropriately trained units (EOD, WIT and CEXC).

This intelligence includes electronic and fingerprint analysis as well as an assessment of how the device was constructed, and how it was intended to target CF forces.

WTI OUTPUTS

- Fingerprint matching of detainees to IEDs
- Improved force protection equipment
- Actionable intelligence
- Blue force TTPs



SAFETY SHOULD NEVER BE COMPROMISED FOR EVIDENCE

WEAPONS TECHNICAL INTELLIGENCE

EOD Teams

EOD Teams identify and eliminate explosive hazards and collect IED related technical intelligence from the battlefield.

EOD personnel should be embedded into the planning process and execution of:

- Raids on IED related HVIs
- Searches for large scale caches
- Raids on bomb/VBIED factories

WEAPONS TECHNICAL INTELLIGENCE

Weapons Intelligence Teams (WITs)

WITs are based with BCTs and provide the first line Weapon Technical Intelligence capability. Not only do they collect technical intelligence but they can also:

- Assist with TQ and fingerprinting of IED related detainees.
- Make assessments of enemy TTPs.
- Conduct all source intel fusion to assist with attacking the IED network.
- Coordinate transportation of items to CEXC.

WITs are a scarce resource so make sure you know when to call them

EXAMPLE WIT DEPLOYMENTS

Focused QRF

- KIAs/multiple WIA
- New TTPs
- Caches
- Potentially new technology

Pre planned

- IED related HVIs
- Raids on IED caches
- Raids on IED network targets

This list is not exhaustive if in doubt contact you local WIT!

WEAPONS TECHNICAL INTELLIGENCE

CEXC

The Combined Explosives Exploitation Cell (CEXC) based at VBC provides a second line WTI capability as well as two investigation response teams for high profile events. Each team can deploy either by air or road convoy though a security escort is required.

These response teams can be forward based at your location if required.

CEXC TRIGGERS

CEXC should be requested in the following events:

- Numerous deaths/casualties.
- Intelligence driven raids on IED cells or bomb-making facilities.
- Significant damage to CF high value targets.
- Significant damage to IZ high value targets (govt buildings, pipelines, electricity grids, etc.).
- Death of an EOD operator/ first responder.
- Large caches or finds of bomb-making equipment.
- Incidents where ECM equipment is suspected of being defeated.

Consult OPORD 07-01 for more details

SVOIP: 243-4092 DSN: 822-1642
http://cexc.s-iraq.centcom.smil.mil/

WEAPONS TECHNICAL INTELLIGENCE

CEXC

The Combined Explosives Exploitation Cell (CEXC) labs based at VBC provides a high end analytical capability to process submissions and extract technical intelligence.

Their capabilities include:

- Electronic and Mechanical analysis
- IED related cell phone exploitation
- Latent fingerprint identification
- Profiling
- Explosives analysis
- Production of in-depth technical assessment reports

REMEMBER

- Fingerprints are fragile, so make sure items are correctly recovered
- Safety should never be comprised for evidence

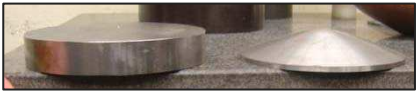
WEAPONS TECHNICAL INTELLIGENCE

EFP Production

EFP liners are constructed from steel, copper or other malleable metals using light engineering equipment.
If encountered then inform EOD/WIT.

Don't just blow the factory!

Copper liner process



Steel liner process

THESE ARE KEY TOOLS AND MUST BE RE-TAINED FOR EXPLOITATION

Example EFP Press

EVIDENCE HANDLING PROCEDURES

Never sacrifice safety for evidence collection!

Do not handle evidence with bare hands, if necessary document physical contact on evidence log.

Take all possible steps to prevent the unnecessary loss or damage to evidence. Wear gloves when handling evidence.

Touch only those areas where you would not normally handle the item. Only allow those personnel who have a legitimate reason for handling evidence to do so.

Do not change evidence condition. Do not move switches or turn dials, disassociate components, or mistakenly associate components.

Do not disassemble devices. Do not take components apart, or unwrap tape which could provide useable biometric data. The only exception to this are those steps necessary for EOD to verify the item is free from explosive hazards.

Photograph all items at the scene in its original location when possible and ensure photos accompany items as they are passed along. Include photos of overall scene, victims, and crowd.

In order to aid successful prosecution photograph the detainee with the evidence found in the background.

EVIDENCE HANDLING PROCEDURES CONTINUED

If evidence is wet do not wipe it dry. If possible air dry item, otherwise place in a box, paper bag, or open plastic bag.

If evidence contains non toxic liquids and it cannot be sealed, empty the liquid prior to packaging.

Place each item into an individual evidence bag or box, if possible. If placed in a box (preferred method) secure item to box using string, flex cuff, twist ties, etc. to minimize movement during shipment. Limit contact with evidence once boxed/bagged.

Label box/bag with:

- DTG
- Collector's name
- Contact information
- Where it was located at scene.

Notify person taking over custody of any special concerns:

- Hazardous material
- Battery leaking
- Blood/fluid contamination

Sign over evidence using a chain of custody form. Make sure both parties have a copy.

CONSEQUENCE MANAGEMENT
IED SPOT REPORT

- **PURPOSE:** A reporting format that focuses and standardizes IED reporting information to allow accurate retrieval of vital IED information to develop trends and provide analysis. The DTG and grid coordinates of this report will be used to associate all follow on IED reporting, i.e. EOD, Weapons Intelligence Teams, and Combined Explosives Exploitation (CEXC), to the same event. This report is in addition to the EOD 9 Line Report used to request EOD support.

- **INTENT:** To create a simple, disciplined reporting of critical information on IED events via voice/data transmission.

- **Additional technical information**: EOD, WIT, and CEXC information such as IED tactical employment, device composition, and forensics, will be added to this initial report using the same DTG of the event as the common key.

CONSEQUENCE MANAGEMENT
EXAMPLE IED SPOT REPORT

Line	Field	Data
1	Unit	
2	Unit Activity	Combat Logistics Patrol, Mounted Patrol, Dismounted Patrol, QRF/EOD Response, Personal Security Detachment (PSD), Check Point, Other
3	DTG of Incident (Local Time)	Example: 10 1200 APR 06
4	Location (MGRS) & Route	Example: 38S MB 1234 5678; MSR TAMPA
5	Type of IED Event	Found, Detonation, Cache, Hoax
6	Type of IED	Single IED, Multiple IEDs, Complex Attack, VBIED, SVBIED, Suicide Vest, Other (Use Comments Below)
7	Initial BDA	WIA (CF/ISF/CIV); KIA (CF/ISF/CIV)
8	Optional – determined by unit	Other information, such as vehicle type and status (i.e. 1x M114 destroyed), IED information (i.e. 1x130mm with RC initiator), or CREW information, such as type of CREW device and blast distance from CREW device (i.e. Red/ Green Combo, 100m)

CONSEQUENCE MANAGEMENT SPOT REPORT

Line Number	Item	Information
1	Unit Reporting	
2	Unit Activity	
3	DTG of Incident (Local Time)	
4	Location and Route (Grid Zone designator + 8 Digits)	
5	Type of IED Event	
6	Type of IED	
7	Initial BDA	
8	Optional information determined by unit	

POST IED PATROL DEBRIEF

Line Number	Field	Data
	Correlation	
1	DTG of Incident (Local Time) as reported in SPOTREP	
2	Location (MGRS) as reported in SPOTREP	
	Vehicle Data	
3	Number of Vehicles in Convoy/ Patrol	
4	Average Distance Between Vehicles	10, 15, 20, 25, 30, 40, 50, 75, 100, >100, Unknown
5	Average Speed Of Vehicles	
6	Position in convoy of Vehicle Hit	
7	Type of Vehicle Hit (Nomenclature)	
8	IED Impact Point	Underneath, Right side, Left side, Front of vehicle, Rear, Top of vehicle, N/A, other
9	Vehicle Armor Type(s)	Level I, Level II, other
10	Vehicle Status?	Destroyed, Disabled, Operational
11	ECM type on vehicle hit	NA, Red, R/G Combo, LX, ICE, SSVJ, MMBJ, mICE, Duke, Unknown, Other

POST IED PATROL DEBRIEF
Continued

12	ECM Loadset Date	
13	ECM Status	On / Off / NA
14	If ECM Off, Why?	NA, Commo interference, CREW NMC, Interference with other CREW
15	Other countermeasures on Vehicle Hit	Rhino, Dragonspike, Other
16	Preceding Vehicle ECM Type	Red, R/G Combo, LX, ICE, SSVJ, MMBJ, mICE, Duke, Unknown, NA, Other
17	ECM Loadset Date	
18	Preceding Vehicle ECM Status	On / Off / NA
19	If ECM Off, Why?	NA, Commo interference, CREW NMC, Interference with other CREW
20	Trailing Vehicle ECM On or off	NA, Red, R/G Combo, LX, ICE, SSVJ, MMBJ, mICE, Duke, Unknown, Other
21	ECM Loadset Date	
22	Trailing Vehicle ECM Status	On / Off / NA
23	If ECM Off, Why?	NA, Commo interference, CREW NMC, Interference with other CREW
24	Nearest ECM distance from IED (Mtrs)	
25	Nearest ECM distance from Vehicle hit (Mtrs)	

POST IED PATROL DEBRIEF
Continued

EFFECTS DATA		
26	Number / Type of WIA	___CF,___IA,___IP,___Civilian
27	WIA Category	Urgent, Routine
28	WIA Position/Location	Driver, Right Front, Left Rear, Right Rear, Gunner, Dismount, Other
29	WIA type of injury	Head, Eye, Torso, Upper extremity, lower extremity or Other
30	Number / Type of KIA	___CF,___IA,___IP,___Civilian
31	KIA Position/Location	Driver, Right Front, Left Rear, Right Rear, Gunner, Dismount, Other
32	KIA type of injury	Head, Eye, Torso, Upper extremity, lower extremity or Other
SITE DATA		
33	IED Placement	Buried, Surface of Road or Elevated
34	IED Location	Left side of road, Median, Right side of road
35	Method of Concealment	Bag, Dirt, Concrete, Animal Carcass, Blast Crater, Foam Concealed, Garbage Pile, Guard Rail, Inner Tube, Light Pole, Road Side Barrier, Road Sign, Tire, Tree, Vegetable Oil Can, Vehicle Concealed, Water boxes, Mannequin, Unknown, None or Other
36	How was the IED Spotted?	Visual, Thermal, LN Tip, Mechanical (Metal Detector), NA, Other

POST IED PATROL DEBRIEF
Continued

37	Who found the IED?	Driver, Passenger, Vehicle Gunner, UAV, LN, Dismounts, Unknown or Other
38	Site Marked (Indicator to locals that IED is present)	Yes / No / Unknown
39	If Site Marked, describe	
40	Civilian Activity in Area	Unknown, N/A, Normal activity, Crowds, Taking cover, Area vacated (normally civilians present), No civilians present in area (civilians not normally present)
41	Was there an aiming point or reference point	Yes / No / Unknown
42	Describe aiming point or reference point	
43	Light Conditions	Daytime / Twilight / Night
44	Weather	Sunny / Clear / Rain / Fog / Reduced Visibility / Dust
45	How often is the route patrolled if known	Hourly / Twice per day / Daily / Weekly / Monthly / Unknown / NA
46	When was the route last cleared (if known)	
IED DEVICE DATA		
47	Type of IED Initiation (if known)	Command, Victim Operated (VO), Time, none, unknown
48	Type of ***Command*** initiator	***Radio Control:*** LRCT – BS / LRCT – HS / PMR / Dual PMR / Telemetry Device / Wireless Doorbell / RC Car / Appliance Controller / Keyless Entry / Car Alarm / Pager / Other / Unknown

POST IED PATROL DEBRIEF
Continued

48 (Cont.)	Type of ***Command*** initiator (Cont.)	***Command Wire:*** Battery / Blasting Machine / Other ***Pull Switch*** ***Hand Grenade Fuse Switch*** (Electrical, any type) / Other
49	Type of ***Time*** Initiator	Time Fuse / Electric / Electronic Time / Mech Time / Chemical Delay / Other
50	Type of ***Victim Operated*** Initiator	Tension Release / Pressure Release / Pressure / Pull Switch / Passive Infrared / Other
51	Type of Initiator	None
52	Type of Initiator	Hoax
53	Make of Initiator	
54	Model of Initiator	
55	Munitions / Explosive Type Unknown	
56	Munitions / Explosive Type Container	Propane Tank / Fire Extinguisher / Directional Blast Charge / Shape Charge / EFP / Drum / Bag / Other
57	Munitions / Explosive Type Commercial	
58	Munitions Type Container	
59	Type of Explosive HME	
60	Type of Container	Propane Tank / Fire Extinguisher / Directional Blast Charge / Shape Charge / EFP / Drum / Bag / Other

POST IED PATROL DEBRIEF
Continued

61	Munitions Type Military Ordnance (MM)	57 / 60 / 82 / 105 / 107 / 115 / 120 / 122 / 125 / 130 / 155 / White Phosphorous / Illumination / Other
62	Munitions Type Raw Components	Unknown
63	Munitions Type Raw Components	Drum / Bag / Other
64	Munitions ***NEW*** in Pounds (NET Explosive Weight)	
65	Narrative / Notes *Anything out of the ordinary observed during this incident* *Comments on TTPs*	

CONSEQUENCE MANAGEMENT
IED / UXO Report (EOD 9 Line)

LINE 1. DATE-TIME GROUP: When the item was discovered.

_____

LINE 2. REPORT ACTIVITY AND LOCATION: Unit and grid location of the IED/UXO.

_____

LINE 3. CONTACT METHOD: Radio frequency, call sign, POC, and telephone number.

_____

_____

LINE 4. TYPE OF IED / ORDNANCE: Describe the IED/UXO, whether it was dropped, projected, placed, or thrown. Give the number of items, if more than one.

_____

_____

_____

LINE 5. NBC CONTAMINATIONS: Be as specific as possible.

_____

_____

LINE 6. TARGET / RESOURCES THREATENED: Personnel (Coalition Forces, IPS, ING, civilian), equipment, facilities, or other assets that are targeted or threatened.

_____

_____

LINE 7. IMPACT ON MISSION: Short description of current tactical situation and how the IED/UXO affects the status of the mission.

_____

_____

_____

LINE 8. PROTECTIVE MEASURES / EVACUATION: Any measures taken to protect or evacuate personnel and equipment.

_____

_____

LINE 9. RECOMMENDED PRIORITY: Immediate, Indirect, Minor, No Threat.

_____

CONSEQUENCE MANAGEMENT
NATO 9-Line MEDEVAC Request

Line 1: **Location of Pickup Site:** (6-digit grid or Latitude/Longitude)

Line 2: **Radio frequency, call sign** and suffix of requesting personnel, encrypt the frequency

_____

Line 3: **Number of patients by precedence:** _____
Urgent (Non-surgical)=evacuate within 2 hrs _____
Urgent-Surgical (All Trauma)=need immediate surgical care _____
Priority=evacuate within 4 hrs _____
Routine= evacuate within 24 hrs _____

Line 4: **Special equipment required.**
As applicable express either none, hoist, stokes, jungle penetrator

_____

Line 5: **Number of patients by type:** (L + # of Litter A + # of Ambulatory)
L_____ **A**_____

Line 6: **Security of pick-up site:**
N – NO Enemy Troops
P – POSSIBLE Enemy Troops
E – CONFIRMED Enemy Troops in Area (Use Caution)
X – ENGAGED with Enemy Troops (Armed Escort Recommended)

Line 7: **Method of marking pick-up site**:
(branches/woods/stones, panels/signal lamp/flashlight, pyrotechnic signal, vehicle lights, smoke, open flame, signal person, fabric strips)

_____

Line 8: **Patient Status and Nationality (If Known)**
A= US / Coalition Military, Nationality _____
B= US / Coalition Force Civilian, Nationality _____
C= Non Coalition force Soldier, Nationality _____
D= Non-US / Coalition civilian, Nationality _____
E= Enemy Prisoner of War _____
F= High Value Target (Armed Escort Required) _____

Line 9: **Wartime** NBC contamination (nuclear, biological, chemical)

_____

For the latest information on the C-IED fight and TTPs visit the TF TROY website at:

http://sps.iraq.centcom.smil.mil/C1/IED/default.aspx

MNC-I Counter IED Smart Book
GTA 90-10-046
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