



IMPROVISED EXPLOSIVE DEVICES





OVERVIEW



- Types of IEDs
- Primary Indicators
- Common Employment Techniques
- Operating in an IED Environment
- React to an IED
- Rules of Engagement
- Escalation of Force
- React to a Suicide Bomber



LEARNING OBJECTIVES

Please Read Your

Terminal Learning Objectives

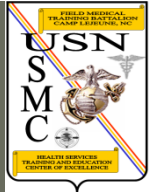
And

Enabling Learning Objectives





DEFINITIONS



Improvised Explosive Device

A device placed or fabricated in an improvised manner incorporating destructive, lethal, noxious, pyrotechnic, or incendiary chemicals and designed to destroy, incapacitate, harass, or distract. It may incorporate military stores, but is normally devised from nonmilitary components.

IED COMPONENTS

- Casing



IED COMPONENTS

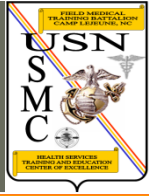
Initiating systems

- Time





IED COMPONENTS



- Initiating systems
 - Time
 - Command



IED COMPONENTS

- Initiating systems
 - Time
 - Command
 - Victim





IED COMPONENTS



- Main Charge
 - High Explosive
 - Most common and easiest to get a hold of
 - Usually 122mm or higher munitions
 - Provide ready made fragmentation
 - Easily made with the right training and elements



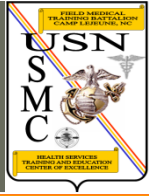
IED COMPONENTS



- Main Charge
 - Chemical
 - Any toxic chemical fabricated to kill or incapacitate
 - Types range from choking to biological
 - Possible recognition tips: odors and liquid on or near IED, dead animals and propane tanks



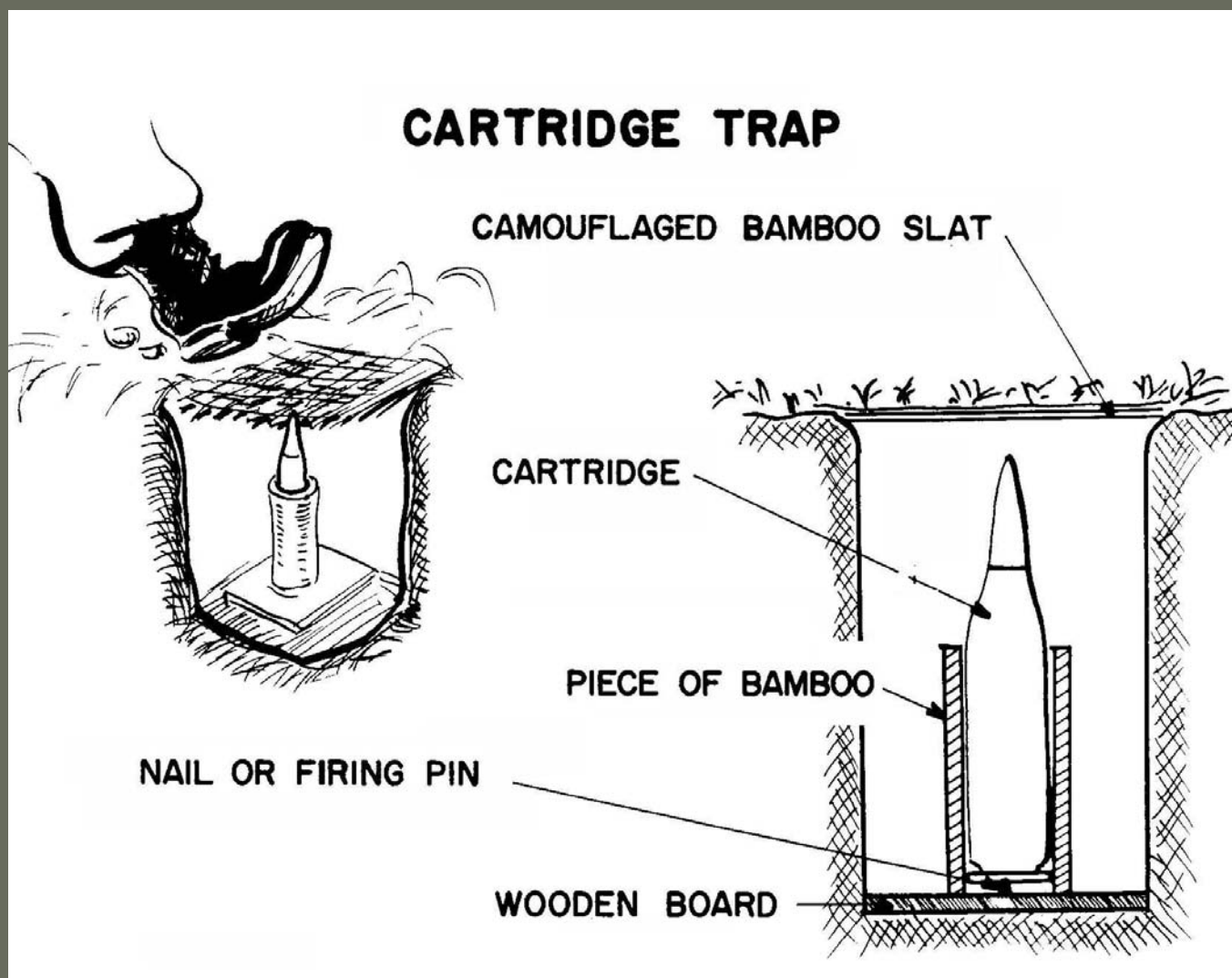
DEFINITION



Booby Trap

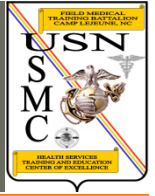
An explosive or non-explosive device or other material, deliberately placed to cause casualties when an apparently harmless object is disturbed or a normally safe act is performed

BOOBY TRAP





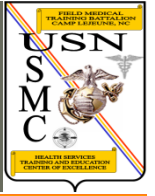
DEFINITION



Mine

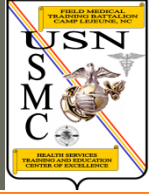
In land mine warfare, an explosive or material, normally encased, designed to destroy or damage ground vehicles, boats, or aircraft, or designed to wound, kill, or otherwise incapacitate personnel. It may be detonated by the action of its victim, by the passage of time, or by controlled means.







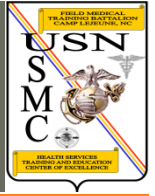
IED DETECTION



There are numerous means of detection that can assist in locating IEDs, however the best means of detection is your personal awareness of what is going on around you.

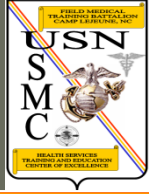


IED DETECTION



- Primary Indicators
 - Variations in base-line (marketplace empty)

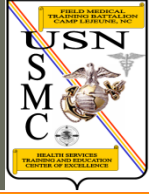




IED DETECTION

- Primary Indicators
 - Vehicles following a convoy
 - Personnel on overpasses

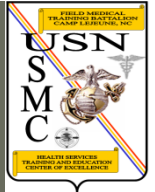




IED DETECTION

- Primary Indicators
 - Signals from vehicles or bystanders





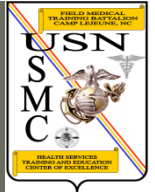
IED DETECTION

- Primary Indicators
 - People videotaping ordinary activities or military actions.





IED DETECTION

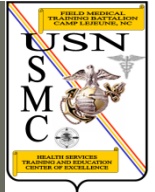


- Primary Indicators
 - Suspicious objects



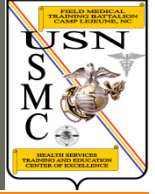


IED DETECTION



- Primary Indicators
 - Markers by the side of the road





IED DETECTION

- Primary Indicators
 - New or out of place objects



IED DETECTION

- Primary Indicators
 - Graffiti symbols



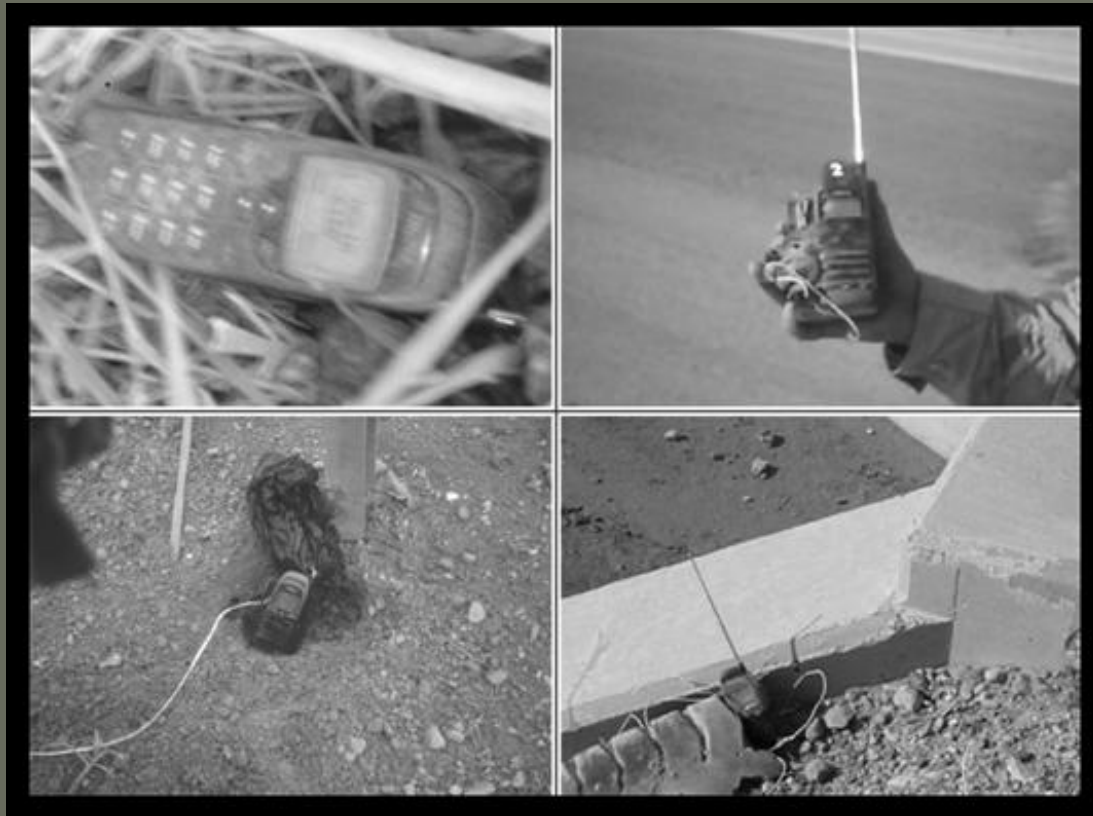
IED DETECTION

- Primary Indicators
 - Signs that are new or out of place



IED DETECTION

- Primary Indicators
 - Exposed antennas



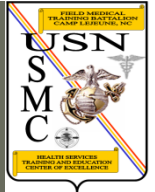
IED DETECTION

- Primary Indicators
- Wires laid out in plain site





LOCATIONS OF IEDs

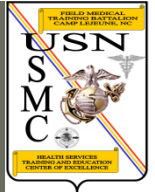


- Previous IED sites





LOCATIONS OF IEDs

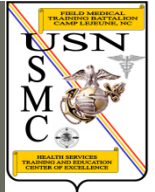


- Frequently traveled roads





LOCATIONS OF IEDs

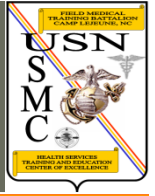


- Boundary turnaround points



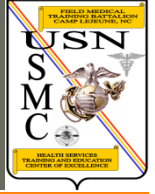


LOCATIONS OF IEDs



- Medians, by the roadside, or buried under the surface of any type of road





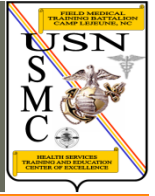
LOCATIONS OF IEDs

- Trees, light posts, signs, overpasses, and elevated bridge spans





LOCATIONS OF IEDs

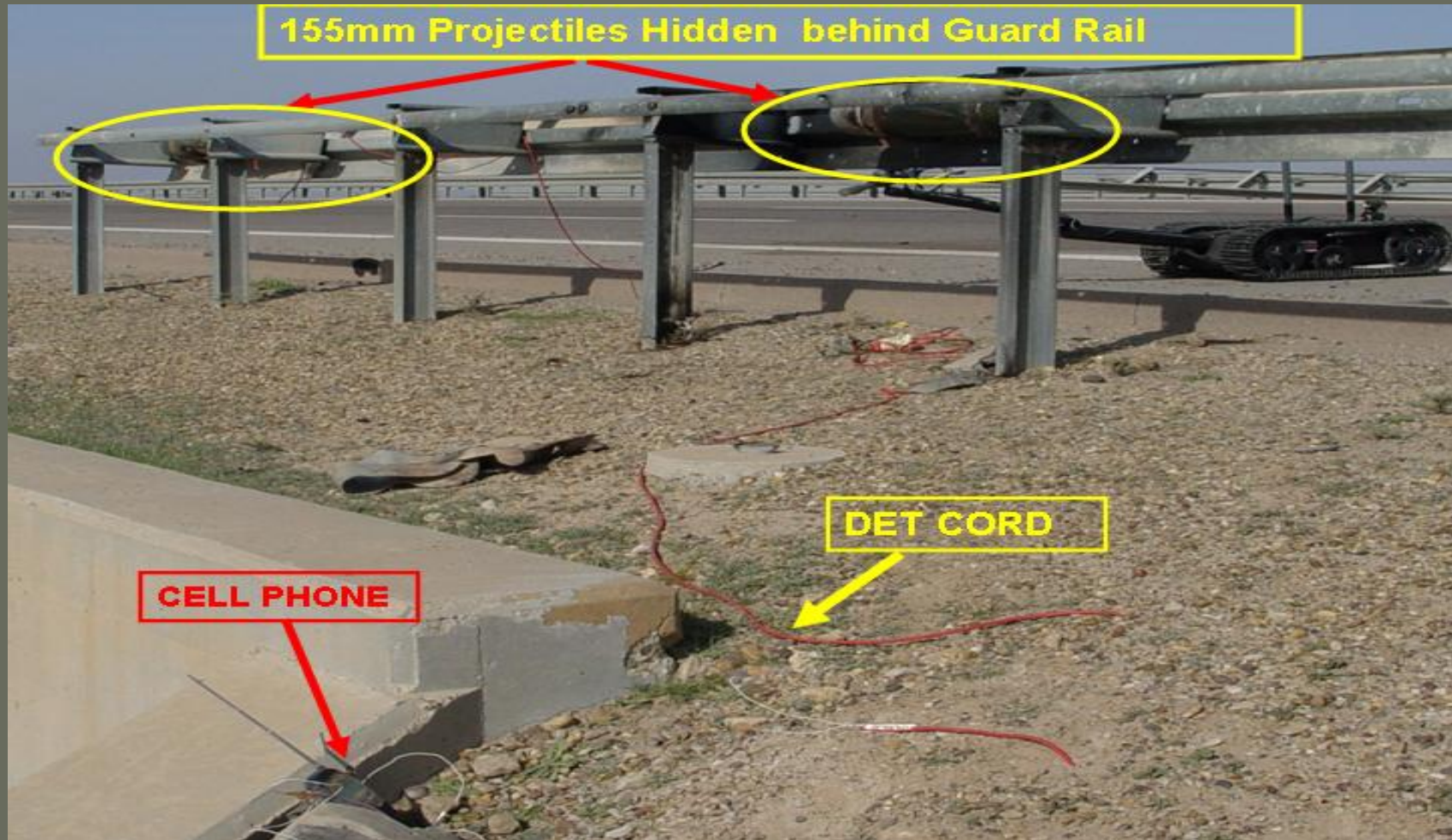


- Unattended vehicles



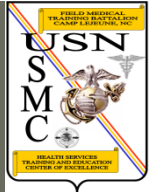
LOCATIONS OF IEDs

- Guardrails





LOCATIONS OF IEDs



- Potential incident control points



LOCATIONS OF IEDs

- Abandoned structures



LOCATIONS OF IEDs

- Cinder blocks





LOCATIONS OF IEDs

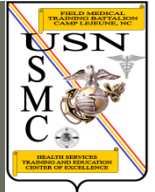


- Animal carcasses





LOCATIONS OF IEDs

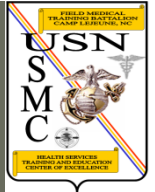


- Fake bodies/scarecrows in coalitions uniforms





LOCATIONS OF IEDs



- Edges of towns





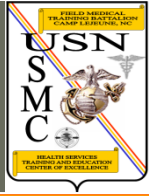
VBIEDs



- IED delivered by any ground-based vehicle
- Typically an unattended vehicle placed in an area to cause the most damage
- Usually compromised of large amounts of explosives - 100 to 7000 pounds



SVBIED



- Driver Indicators
 - Lone male (*usually*)
 - Ignoring orders to stop, bypass checkpoint, or attempting to maneuver too close to coalition vehicles
 - Unusual appearance
 - Mid-twenties
 - Driving erratically



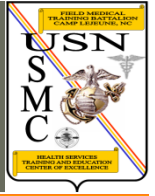
SVBIED



- **Vehicle Indicators**
 - Noticeable sagging
 - Additional antenna
 - Darkened or covered windows
 - Recent paint to cover alterations
 - Crudely covered holes
 - New welding marks
 - No license plates
 - Escorted security detail for type vehicle



SVBIED



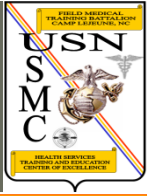
- **Vehicle Indicators**
 - New tires on an old vehicle
 - Anything unusual in factory compartments
 - New or shiny bolts and or screws
 - Unusual scratches
 - Signs of tampering
 - Areas and components cleaner or dirtier than surroundings
 - Wire and tape stored in vehicle



SITUATION INDICATORS

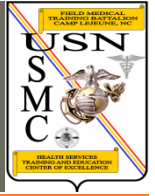


- Camera crew “hanging out” near your area.
- Vehicle observed more than once.
- Absence of normal routine for that area of operations (AO).
- Odd traffic patterns.
- Person or persons observed conducting reconnaissance.
- Vehicle testing local defenses, i.e., drives at a high speed towards traffic control point (TCP) and then breaks off.





EMPLOYMENT TECHNIQUES



- Ever-changing
-
- Might not be set patterns
- Only limited by the imagination of enemy
- Different in any given area

EMPLOYMENT TECHNIQUES

Disguised static IEDs

- Tires, Boxes, MRE Trash, Etc..



EMPLOYMENT TECHNIQUES

Thrown or projected IEDs

- Improvised Grenades or Mortars





EMPLOYMENT TECHNIQUES



Hoax IEDs

- Include something resembling an actual IED, but have no charge or a fully functioning initiator device.

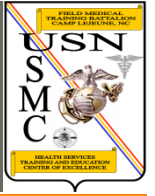




EMPLOYMENT TECHNIQUES



- More examples of attacks
 - Basic IED attack
 - “Broken down vehicle” attack
 - Coordinated attack
 - Ramming convoys
 - Motorcycles





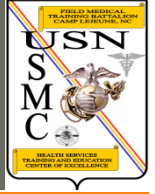
OPERATIONS IN AN IED ENVIRONMENT



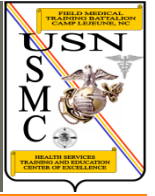
- Rehearsals Rehearsals Rehearsals
 - Base the Rehearsals off of most current intel
 - Vary Tactics, Techniques, Procedures. (TTP)
 - Updated Maps
 - Be On look out's (BOLO's)
 - Rotate Responsibilities
 - Practice Immediate Action Drills



OPERATIONS IN AN IED ENVIRONMENT

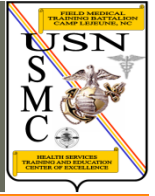


- Patrolling
 - Limit your predictability
 - Varying routes
 - Varying times of movement
 - Varying entry and exit points
 - Vary rate of march
 - Varying Movement Techniques

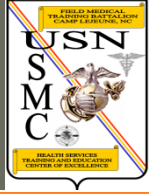




REACTING TO AN IED



- Counter VBIED/SVBIED techniques
 - Gunners/security: Constant awareness of approaching vehicles
 - Do not allow suspicious vehicles to approach you.
 - Know escalation of force procedures
 - Be aware of danger areas
 - Watch merging traffic
 - If **Allowing** cars to pass- Develop a technique to visually check passing cars
 - If **NOT Allowing** cars to pass- have a plan to inform civilians and know your EOF



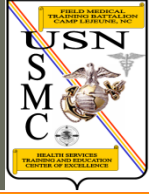
MAINTAINING STANDOFF

(Counter VBIED/SVBIED)

- Mobile
 - Non-lethal warnings
 - Aggressive/defensive vehicle maneuvers
 - Signs in the local language on the rear of vehicle
("Stay Back, Do Not Pass")
 - Hand and arm signals with flags
 - Spotlight (nighttime)
 - Use of pen flares



MAINTAINING STANDOFF

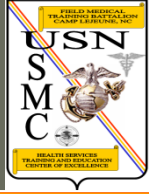


(Counter VBIED/ SVBIED)

- Mobile
 - Lethal Warnings
 - Warning shots in a safe direction.
 - Engage vehicle with weapon, if necessary (ROE).
 - Engage the driver/occupants, if necessary (ROE).

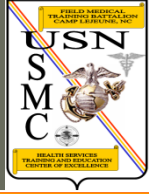


MAINTAINING STANDOFF



(Counter VBIED/SVBIED)

- Stationary
 - Recon site prior to occupation.
 - Perform 5 to 25 meter checks upon halt.
 - Maximize distance from roadway (mine and buried IEDs may present a threat)
 - Make use of natural barriers
 - Maintain good dispersion



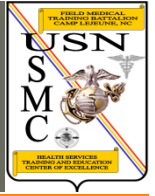
MAINTAINING STANDOFF

(Counter VBIED/SVBIED)

- Stationary
 - Quickly establish overt perimeter:
 - Cones
 - Barbed wire
 - Signs
 - Road spikes

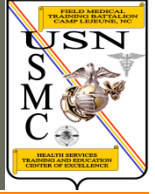


MAINTAINING STANDOFF



(Counter VBIED/SVBIED)

- Stationary
 - Establish overwatch of primary position
 - Defend in depth
 - Position electronic countermeasure (ECM) devices for maximum coverage
 - Keep roads clear of civilian vehicles



ACTIONS TAKEN AT HALTS

- Maintain dispersion
 - Avoid clustering vehicles
 - Vary the vehicle interval between elements
 - Improve your position

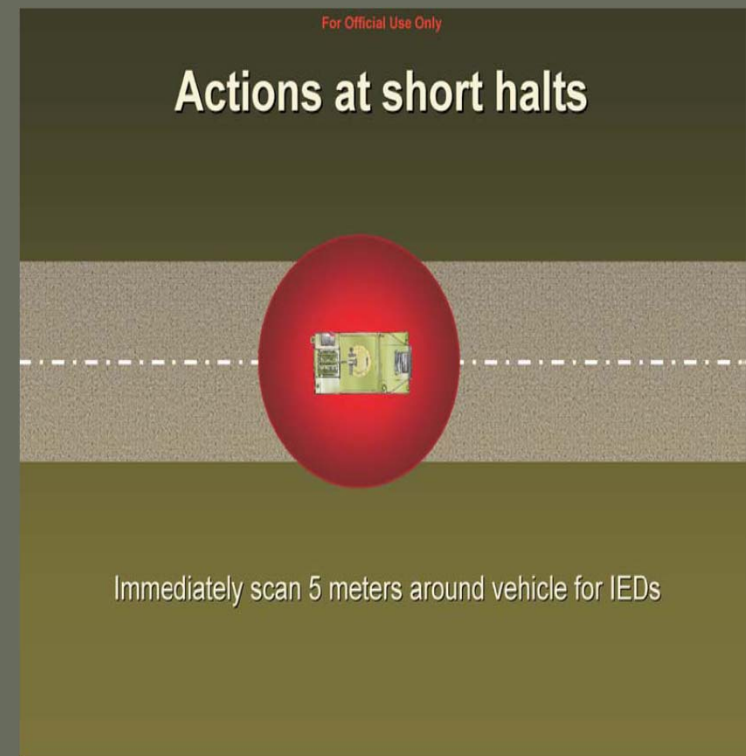
Most importantly, DO NOT
remain at one site too long



5 TO 25 METER HALTS

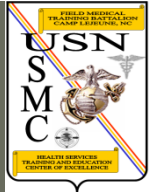


- 5 meter checks
 - Visually ID position to halt
 - Visually check 5 meters out
 - Look for anything suspicious
 - Start at ground level
 - Armored vehicle-stay mounted
 - Conducted whenever stopped





5 TO 25 METER HALTS

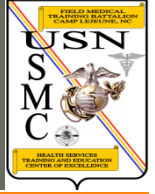


- 25 meter check
 - Once 5 meter checks are done
continue out to 25
 - Conduct physical search for
25 meter radius
 - Look for anything out of the
ordinary





ACTIONS ON CONTACT

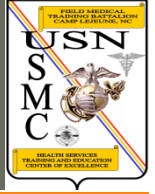


(Before Detonation)

- You have just disrupted the enemy's attack
- Do not forget about the enemy's other forms of attack, RPGs, small arms fire, mortars, and secondary IED
- IED site = Enemy ambush site



ACTIONS ON CONTACT



- Training on basic tactics, techniques, and procedures (TTP) will enable you and your unit to win an engagement
- **The Five "C's"**
 - Confirm
 - Clear
 - Call/check
 - Cordon
 - Control



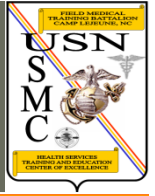
ACTIONS ON CONTACT



- The Five "C's"
 - Confirm
 - Confirm suspicion of device
 - Maintain safe distance
 - Use cover/defilade
 - Use all tools at your disposal
 - OPTICS
 - WHEN IN DOUBT- back away



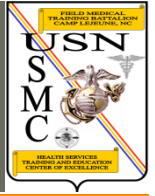
ACTIONS ON CONTACT



- The Five "C's"
 - Confirm
 - Clear
 - Clear the area
 - Evacuate to 300 meters (minimum)
 - Sweep
 - Question anyone in the area



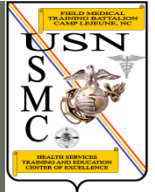
ACTIONS ON CONTACT



- The Five "C's"
 - Confirm
 - Clear
 - Call/check
 - Explosive Hazard 9 Line Report
 - Look for secondary devices



ACTIONS ON CONTACT



- Explosive Hazard 9 Line Report
 - LINE 1. DTG
 - LINE 2. location: Unit and 10 digit grid location of the IED/UXO.
 - LINE 3. Contact method:
 - LINE 4. Type of ordinance:
 - LINE 5. NBC contaminations:
 - LINE 6. Resources threatened:
 - LINE 7. Impact on mission
 - LINE 8. Protective measures:
 - LINE 9. Recommended priority: Immediate, indirect, minor, no threat.



ACTIONS ON CONTACT



- The Five "C's"
 - Confirm
 - Clear
 - Call/check
 - Cordon
 - 360 degree security around site
 - Check again for secondary devices
 - Check people leaving the area
 - Establish obstacles



ACTIONS ON CONTACT



- The Five "C's"
 - Confirm
 - Clear
 - Call/check
 - Cordon
 - Control
 - Control the site until EOD arrives
 - Don't allow people to "inspect" the IED
 - Contingency plans in case of ambush



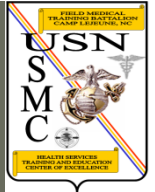
IED DETONATION



- Team members should be cross-trained on other patrol member's duties
- Units should be proficient in actions on contact
- Focus on Five C's (They still apply)



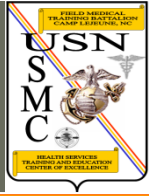
IED DETONATION



- Quick, lethal and aggressive response → (ROE)
- Immediately scan outward.
- Move out of kill zone
- Report situation
- Treat/Evacuate casualties
- Search for/Clear additional IEDs (5 to 25)
 - At the new location (5 to 25)
 - At the location where the vehicle is disabled (5 to 25)
- Expect follow on attacks



IED DETONATION



- Report contact to personnel internal to patrol/convoy; gain situational awareness
- Evacuate disabled vehicles and personnel clear kill zone
- Area, Secure the area
- Clear the kill zone
- Treat casualties
- Establish CCP and LZ away from kill zone
- Report/recover : as required



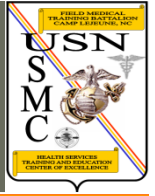
CHEMICAL IED



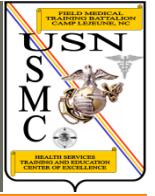
- Move upwind
- Assume proper MOPP level
- Conduct all necessary NBC reports and procedures.
- Best indicators come from Marines' sense of sight and smell.



WHAT NOT TO DO

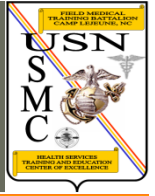


- NEVER approach a suspected IED
- DO NOT pick up detonating cord
- DO NOT directly trace command wires
 - Use the “S” pattern

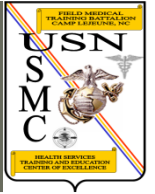




RULES OF ENGAGEMENT

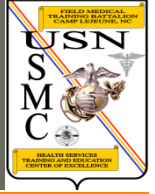


- Directives issued by competent military authority that delineate the circumstances and limitations under which United States forces will initiate and/or continue combat engagements with other forces encountered.





ESCALATION OF FORCE



- Assist Marines and Sailors in the application of force consistent with the ROE
- EoF principles leverage available force options (lethal and non-lethal) to set the conditions for desired outcomes
- Are NOT limitations of self-defense, and do NOT apply to Declared Hostile Forces



ESCALATION OF FORCE



- Is not a step-by-step process, but provides a range of options
- Unit Commanders have the inherent right to apply self-defense in response to a hostile act or demonstrated hostile intent to protect his Marines and Sailors



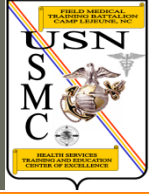
ESCALATION OF FORCE



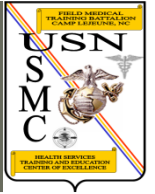
- Daylight signaling procedures
 - Signs in local language
 - Bullhorn
 - Colored flags or paddles
 - Pop-up flares
 - Warning shots
 - Disabling shots
 - Lethal shots



ESCALATION OF FORCE

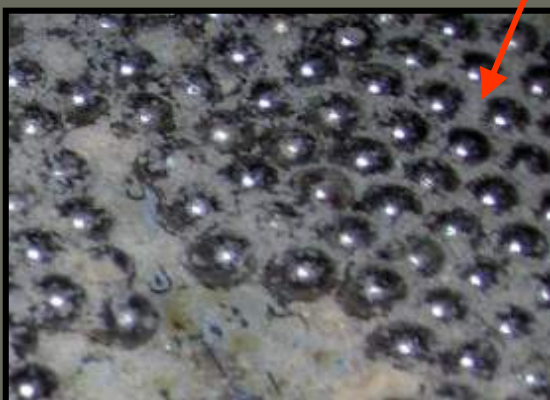


- Night and limited visibility signaling procedures
 - Spotlights
 - Pop-up flares
 - Warning shots
 - Disabling shots
 - Lethal shots



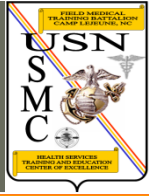


SUICIDE BOMBERS (PBIED)





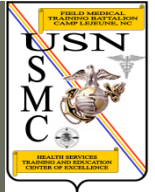
SUICIDE BOMBERS (PBIED)



- Amount of explosives vary, usually will be 12 pounds but can be as much as 45
- Fragmentation producing materials are often incorporated into the design of the belts



SUICIDE BOMBERS (PBIED)



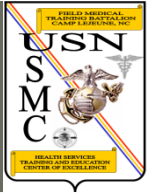
- Indicators
 - Deliberately ignores orders to stop or attempts to bypass security
 - Too much clothing for the weather
 - Suspicious bulges in clothing or carrying bags/cases
 - Handling wires, switches, actuators, or a “dead man’s” switch



SUICIDE BOMBERS (PBIED)



- Defensive Actions
 - Evacuate the area immediately
 - Do NOT attempt to “close and negotiate”
 - Be aware of potential “fail safe” devices
 - Know the dangers of shooting at a suicide bomber
 - If suspect is neutralized and there is no explosion, do not administer first aid





IMPROVISED EXPLOSIVE DEVICES

