

USAFRICOM IMPROVISED EXPLOSIVE DEVICE RECOGNITION GUIDE



ATTACK THE NETWORK • DEFEAT THE DEVICE • TRAIN THE FORCE

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USAFRICOM - Improvised Explosive Device Recognition Guide

Unless otherwise stated, the images of IEDs and IED components in this guide are representative of open-source reporting from USAFRICOM AOR.

- This recognition guide provides photographs and descriptions of IEDs and IED components, descriptions of sensory observables (indicators), and tactics, techniques, and procedures (TTP) the enemy engages in to manufacture and employ IEDs.
- The images within this guide are presented by IED component categories: power sources, initiators, explosives (main charges), switches, containers, supplies & materials, and emplacement. Common IED observables (indicators) are listed, when they are found and whether they indicate a high probability of IED activity. Refer to this material if something looks suspicious, out of place, or out of character.
- Materials used to construct IEDs and IED components, their configurations and complexity change overtime. Ordinary household products and trash are used to construct and conceal IEDs. **Be careful what you discard, it may be used against you.**

WARNING!!!!

If potential improvised explosive devices are discovered, execute the following:

1. Remove all personnel from the potential threat.
2. CORDON – Establish a perimeter of considerable distance (refer to training prior to or in theater).
3. CONTROL – Maintain visual observation and prevent anyone from tampering with the device.
4. CALL – Request EOD assistance immediately; use standard operating procedures as taught in pre-deployment / in-theater training.

- EOD response (vice using combat engineers or other units to destroy the IED) ensures the proper and safe disposal of the immediate threat. More importantly, the ability to do forensic analysis helps gather intelligence that may help disrupt the IED network and possibly prevent future IED attacks!
- Handling of IED devices, components, and / or materials may contaminate forensic evidence.
- Potassium chlorate-based explosives are sensitive to impact, shock, or friction and may self-detonate. Handle with extreme caution!
- Mishandling of IED devices, components and / or main charges may result in bodily harm or death.

Power Sources

The Predominant Power Sources in the USAFRICOM AOR are 6v & 12v Vehicle Batteries



6v Vehicle
Battery - Somalia



6v and 12v Vehicle Batteries
are the Predominant Power
Source for IEDs in the
USAFRICOM AOR



12v Vehicle Batteries - Somalia



6v Vehicle Battery – Taped to BM-518
Motorcycle Alarm Receiver - Somalia



Power Sources & Indicators

The Predominant Power Source in the USAFRICOM AOR are 6v & 12v Vehicle Batteries



Cache - Large Supply of Loose Batteries*



Batteries Taped / Connected Together or Wires Soldered to Terminals*



9v Battery Holders -Rwanda



9v Wired & Taped - Somalia

Indicators (Observables): Any of the Following are Potential Indicators for IED Use

Batteries (6v & 12v) – Motor Vehicle Batteries; Color is Predominantly Black (Orange, Blue, & White Found in Other AORs)

Battery Terminals - Wires May be Attached to Terminals

Batteries May be Wrapped in Plastic or Cloth to Conceal them, and Sealed in Tape to Protect from Dirt and Moisture

Batteries Contained within Battery Cradles (Holders), Battery Boxes, etc.

Multiple Batteries May be Wired in Series or Parallel and Taped Together

Unusual Quantity of Batteries, or Batteries Uncharacteristic for Location (e.g. Cache)

Enemy Tactics, Techniques, and Procedures (TTP)

Enemy May Deep Bury Power Source (Batteries) and Place Under Main Charge in an Attempt to Avoid Detection

It is Common in the USAFRICOM AOR to Tape the Switch to the Power Source and / or Main Charge

Power Sources (Batteries) May be Offset from Other IED Components to Avoid Detection by Metal Detectors

Initiators – Commercial & Military

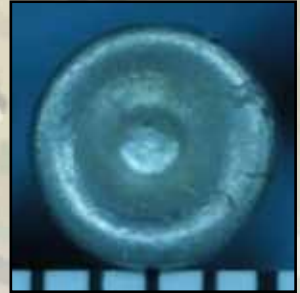
The Predominant Initiator Type in the USAFRICOM AOR is the Electric Blasting Cap



Electric Blasting Caps - Somalia



Electric Blasting Caps -
Somalia

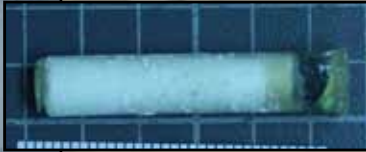


Electric Blasting Cap Ends
- Somalia

Initiators - Improved



HME Filled Plastic Syringe
Improved Blasting Cap



HME Filled Plastic Pen Body -
Improved Blasting Cap

Indicators (Observables): Any of the Following Materials May be Used in Initiators

Blasting Cap(s) – Commercial Electric & Improved Electric, or Chemical (HME Filled) with Wires Protruding from One End

Blasting Caps and Detonation Cord (Detcord) Taped Together

DetCord – Coiled Up and Taped; Wrapped in Tape (Black Electrical, Plastic Packing Tape); Knotted with Blasting Cap in Center

Improved Blasting Caps – Metal Tubing, Ammo Casing, Plastic Syringe, Christmas Tree Light Bulbs, etc., with Wires Protruding from One End

Plastic Pen Bodies & Plastic Syringes (with Plunger Missing) – May be Filled with HME or HE, May Have Wires Protruding Out

Small Cylinder(s) Crimped onto DetCord or with Wires Protruding (Improved)

Supplies – Detonation Cord, Electrical Tape, Epoxy Type Glue, Glue, Hot Glue Gun, Metal Tubing or Sections of Tubing, Thin Insulated Wire, Strands of Christmas Tree Lights or Light Bulbs – Unusual Quantities or Uncharacteristic Materials for the Location

Enemy Tactics, Techniques, and Procedures (TTP)

Plastic Pen Bodies & Syringes are Used if Metal Tubing is Not Available; or Purposely Used to Reduce IEDs Metal Signature

Tips of Christmas Tree Light Bulbs are Removed to Expose Electric Light Components; May be Filled with HME

Initiators - Improved

The Christmas Tree Light Bulb Improved Electric Blasting Cap is a Common TTP in Somalia

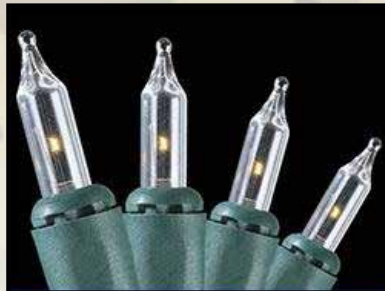
Christmas Tree Light
Bulb - Improved
Electric Blasting
Cap - Somalia



Sections of Aluminum Tube - Somalia



Christmas Tree Light Bulb - Improved
Electric Blasting Cap - Somalia



Christmas Tree Lights*

*Photos are NOT from USAFRICOM AOR

Explosives – Military Munitions

Munitions are Predominantly Used as a Main Charge for IEDs in the USAFRICOM AOR



Military Munitions: Artillery, Mortars, Rockets, RPGs, and Mines. Improvised Fusing - Blasting Caps and / or DetCord Placed into Fuse Well and Packed with Military Explosives or Homemade Explosives (HME).



Photos on this Page are from Nigeria and Somalia

Explosives – Military Munitions

Munitions are Predominantly Used as a Main Charge for IEDs in the USAFRICOM AOR



Land Mine Cache - Somalia



Artillery Shells – Somalia



Radio Controlled IED (RCIED) w/ Artillery Shell – Somalia



RCIED w/ Artillery Shell – Somalia

Explosives – High Explosives

*Commercial / Military Explosives are Predominantly Used in the USAFRICOM AOR,
HME Use Will Increase over Time*



Block of Dynamite - Rwanda



Block of TNT - Rwanda



Blocks of Unknown High Explosives - Rwanda



Block of SEMTEX- Rwanda



Blocks of Unknown High Explosives - Somalia

Explosives – HME

Homemade Explosives are Used in the USAFRICOM AOR



Industrial Grinder - Nigeria



Ammonium Nitrate Crystals*



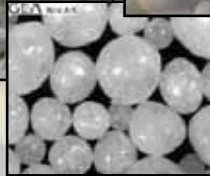
Ammonium Nitrate Prills*



Aluminum Powder*



Ammonium Nitrate and Aluminum Powder (AN-AL) - Nigeria



Ammonium Nitrate and Aluminum Powder (AN-AL) - Somalia

Ammonium Nitrate Fertilizer is inexpensive and available world-wide. A popular and effective fertilizer, when mixed with a Fuel, such as Aluminum Powder it becomes a powerful explosive.



*Photos are NOT from USAFRICOM AOR

Explosives – Indicators

Indicators (Observables): Any of the Following Materials May be Used in Explosives & Main Charges
Ammonium Nitrate (AN) Fertilizer – White to Off-white Prills, Crystals, or Granules, Waxy / Oily to Dry, Roughly 1-3 mm in Size
AN Packaging – Usually 50KG Bags, White, Green, or Tan to Light Brown – Nitrogen Content / Chemical Formulation Printed on Bags: 34-0-0, 34%, or 34
AN Additives – (Enhancers) – Aluminum Powder, Fuel Oils, Sugar, Saw Dust, Starches (e.g., Wheat or Corn Meal Powders)
AN Odor – Odorless to Slight Acidic – Smells Like Ammonia
Aluminum (AL) Powder – Silver to Dark Gray, Fine Powder, Odorless, Sticks to Everything, Hard to Wash Off
Aluminum Powder Packaging - Bag / Jar / Pint to Gallon Cans
Calcium Ammonium Nitrate (CAN) – Appearance – Prills Range in Color from Off White to Brown, Roughly 1-4 mm in Size
CAN Odor – Odorless to Slight Ammonia
CAN Packaging – Usually 50KG Bags, White, Green, or Brown Plastic Sacks with Black, Green, or Green and Blue printing – Nitrogen Content 26–0–0 or 27-0-0, 26% or 27%
Commercial / Military Explosives – Dynamite, TNT, PE-4A, PETN, SEMTEX, etc., Off-white to Orange in Color, Putty Consistency, in Brick or Stick Form
Military Explosives – Bulk or BE, e.g., C-4, Iranian C-4, Usually Off-white in Color, Putty Consistency
Military Munitions – All Types and Sizes – Fuse and High Explosives may be Missing, may be Filled with HME and Primed with DetCord or Blasting Caps & Wires Protruding Out
Soil Discoloration is Result of Waste Solution (Effluence – Residual Water and Calcium Carbonate from Cooking Process) Being Dumped on Ground
Tools – Grinders – Electric Industrial or Mechanical Hand Grinders
Wrapping Materials from Commercial or Military Explosives (Dynamite, C4, PE-4A, PETN, SEMTEX, TNT)
Insurgent Tactics, Techniques, and Procedures (TTP)
AN + Aluminum Powder (AN-AL) HME Found in IED Main Charges, OS Reporting Does Not Mention Other Types of HME Used
AN Grinding May Take Place Anywhere (e.g., Agricultural Fields, Rural Roads, Junk Yards, Occupied Compounds)
AN Separated by Cooking and is Dried on Tarps (Colored Plastic, Clear Plastic, Cloth – Sizes Vary) Drying Usually Occurs Outside
CAN Separation is Done Two Ways: 1) Boiled or “Cooked” in Water to Separate Calcium from AN Fertilizer, Cooking May Create Ammonia Gas Plume and Strong Ammonia Odor; 2) Grinders, Rocks/Bricks/Munitions, Heavy Cylinders to Crush CAN Into Powder
HME / BE Production is Likely to Occur in Remote Locations, Abandoned or Isolated Compounds, or Abandoned Structures
Use of Grinders, Rocks/Bricks/Munitions, Heavy Cylinders to Crush AN Into Powder in Order to Increase Surface Areas
There is NO Reason to Grind or Cook Any Fertilizers, Discovery of These Processes Indicates HME Production.

Switches – Radio Controlled (RC)

RC Switches are the Predominant Switch Type in the USAFRICOM AOR



RC Transmitter – BM-518 Motorcycle Alarm Key Fob - Somalia



Complete Switch (BM-518 Motorcycle Alarm) w/
Dual 6v Batteries - Somalia



RC Receiver - BM-518 Motorcycle Alarm - Somalia



RC Transmitter – BM-518 Motorcycle Alarm Key Fob - Somalia



RC Receiver - BM-518 Motorcycle Alarm - Somalia



RC Receiver - BM-518 Motorcycle Alarm - Somalia

Switches – RC Indicators

Any of the Following Materials in Any State of Assembly May be Used for IED Switches

Batteries with Wires Attached to Terminals, and / or Batteries Taped Together, Batteries may be Sealed in Tape or Plastic with Wires Protruding

Circuit Boards Removed from Electronic Devices, Additional Wires may be Attached, and may be in Various States of Construction

Electronic Components that are Uncharacteristic or Out of Place for Location (Key Fobs, Wireless Devices, etc.)

Persons in Possession of Electronic Devices may be Uncharacteristic Based on Person's Status, Education, Income

Plastic Boxes Containing Circuit Boards, Wires Protruding from Sealed Plastic Box, Power Source Taped to Plastic Box

Supplies & Tools to Construct or Modify Electronic Devices: Solder Iron, Solder, Glue Gun, Glue, Epoxy, Electronic Circuitry, Wire, Circuit Boards, Small Boxes (Plastic, Metal, Cardboard), Wire Cutter/Crimper, Screw Drivers, Solder Iron, Hot Glue Gun, Circuit Tester, Hack Saw

Transmitter, Receiver, or Transceiver Devices with a Series of Numbers Written on Device, Wires Connected to, or Protruding from Devices and / or Power Supplies

Insurgent Tactics, Techniques, and Procedures (TTP)

"Civilians" Loitering (acting as lookouts), May Look Nervous or Out of Place, Avoiding Eye Contact, Talking on Radios or Cell Phones

Emplacement of RC & IED Components is Typically at Ground Level or Elevated Off the Ground, Concealed with Debris, Trash, Trees, Shrubbery, Cloth, Hidden Behind Walls and Doors

Somalia – Enemy Forces Prefer the Use of the Bodyguard BM-518 Motorcycle Alarm System Receiver and Key Fob Transmitter

Nokia Cell Phones Appear to be the Preferred Transceiver Devices for RCIEDs – May be Due to Cost and / or Availability

Numbers Written on a Project Box or Circuit Component are Frequencies or Number Series Used to Function the Device

RC Switch is Often Taped to Power Source and / or Main Charge with Black Electrical Tape or Packing Tape

Receiver Emplacement may be: Inside, On Top, or Next to Main Charge, Offset to Avoid Detection and Electronic Counter Measures

Some RC Devices (e.g., Wireless Remotes) Require the Triggerman to Maintain a "Line of Sight" and have Distance Limitations

Spotter or Triggerman May Be Loitering in Area. Observers May Be in Area Due to IED Emplacement is Not in Line of Sight

Switches – Radio Controlled (RC)

RC Switches are the Predominant Switch Type in the USAFRICOM AOR



Q-Link Vehicle Alarm System Receiver- Nigeria



Key Fob Remote - Nigeria



Cartier Relay Switch - Nigeria



Cell Phones - RC Transceiver - Somalia

Nokia 1280 Cell Phone is the Most Commonly Used RC Switch Transceiver in Somalia



Cell Phone - RC Transceiver with Execution Code - Somalia



Switches – Victim Operated (VO)

Victim Operated Switches are the Second Most Favored Switch Type in the USAFRICOM AOR



Four Hacksaw Blade Pressure Plate - Somalia



Dual Hacksaw Blade Pressure Plate - Somalia



Dual Hacksaw Pressure Plate & Corrugated Metal Pressure Plate - Somalia

Switches - Command Operated



Plastic Clothes Pin,
Wired - Somalia



Command Pull or VO Trip Line
w/ Insulation Block - Somalia



Command Wire (CW)
Rocker Switch - Somalia



CW Rocker Switch
- Somalia



CW - Dual Rocker Switch,
Suicide Vest - Somalia

Indicators (Observables): Any of the Following Materials in Any State of Assembly May be Used for IED Switches

Any Type of Switch Co-located With Other IED Components is an Indication of IED Component Manufacturing May be Occurring

Clothes Pin Switch – Plastic, Colors Vary, Wires Secured to Both Contact Points, Connected Wires Will Be Insulated

Insulator Block Will Have a String Tied to One Side of it; Prior to Emplacement the String May be Wrapped Around a Spool

Non-activated Clothes Pin Switches Will Have a Non-metallic “Insulator Block” Separating the Contact Points

Rocker Switch – Simple On / Off, Usually Small in Size of 1 - 2 Inches (Length & Width), Wires May be Connected

Pull / Trip Lines Vary by Color and Thickness, May be Co-located with Other IED Components

Saw Blades Co-located with Wood Blocks, Wire, Tape, Nails, Screws, etc., may be an Indication the IED Component Manufacturing is Occurring

Insurgent Tactics, Techniques, and Procedures (TTP)

Clothes Pin Switches May be Emplaced to Function as: Command Pull Switches, Command Pull to Arm, Victim-operated Trip Wire Switches

Clothes Pin Switches are Typically Anchored to a Heavy or Stationary Object (e.g. Rock, Tree, or Stake in the Ground)

Rocker Switches are Predominantly Command Operated

Saw Blade Pressure Plates of Different Designs Typically Incorporate Two Saw Blades

Spotter or Triggerman May Be Loitering in Area. Observers May Be in Area Due to IED Emplacement is Not in Line of Sight

Trip Lines May be: Elevated to Target Vehicles, or Concealed in Shrubs, Bushes, Tall Grasses, etc., Targeting Foot Patrols

Containers - Main Charge

All Types of Containers Are Used to Hold Explosives



Complete CW-RC IED w/ 1Gal Paint Can - Somalia



Glue Can - Somalia



1 Gal. Metal Paint Cans - Somalia



Modified Propane Tank - Somalia



Various Containers - Nigeria



Soda Cans Filled with Explosives & DetCord - Nigeria

Containers - Main Charge

All Types of Containers Are Used to Hold Explosives



Various Containers - Nigeria



Various Containers - Nigeria



Shape Type Charge - Nigeria



Steel Drum, Vehicle-Borne IED (VBIED)
- Nigeria



Glass Jug & HME - Somalia



Vegetable Oil Metal Cans - Nigeria

Containers - Main Charge

All Types of Containers Are Used to Hold Explosives



Suicide Vest – Person-Borne IED - Somalia Various Metal & Plastic Containers - Nigeria

Metal Can w/ Frag & RC Transceiver
(Cell Phone) - Somalia

Indicators (Observables): Any of the Following Materials May be Used as Containers for IEDs

Containers – Are NOT Limited to the Images in this Guide, Anything that can Hold Explosive Materials can be Used as a Main Charge Container

Metal Boxes – Constructed Out of Scrap Metal w/ Pieces Welded Together, DetCord or Wires May Protrude Out

Metal Cans – All Sizes, May be Taped Closed, May Have Fragmentation Glued to Outside or on Lid, DetCord or Wires May Protrude Out

Metal Pipes – Closed With Back Plate on One End and Metal Liner, Platter, or Fragmentation on the Other, DetCord or Wires May Protrude Out

Metal Pipes – May have Clamps, Handles, and / or Sights Welded On, Quantity of Cut Pipe Sections Co-located with Other IED Components

Military Munitions – Emptied and Refilled with HME or BE, DetCord or Wires May Protrude Out, Fuse Ends May be Taped Shut

Military Munitions – May be Used as Main Charge Container or Added to a HME Main Charge, or as Fragmentary Enhancement

Plastic – Bottles, Jugs of Different Sizes and Colors; Contain No Metal (No Metal Content (NMC)), Co-location with Explosives or Other IED Components Indicates a Very High Probability that IED Manufacturing is Occurring

Suicide Vests & Belts – Improvised or Store Bought, DetCord or Wires May Protrude Out – Typically Concealed by Baggy Clothes, Jackets, Coats, etc.

Insurgent Tactics, Techniques, and Procedures (TTP)

Containers May be Concealed by or Emplaced In: Trash, Plants, Vehicle Tires, Debris, Dirt, Walls, etc.

Tendency to Use Small Manufactured Product Containers (Paint & Soda Cans, Steel Drums), Rather than Fabricate Improvised Containers

Containers - Main Charge - Improvised

All Types of Containers Are Used to Hold Explosives



Cardboard Box Concealing
Improvised Steel Box – Somalia



Explosively Formed Projectile (EFP)-Like Steel
Container w/ Copper Liner, Handle & Sight - Somalia



Welded Metal Ball Type - Nigeria



EFP-Like Steel Container - Somalia

IED Components

Components Used to Construct EFP-like IED Main Charges

EFP-like Devices are Poorly Constructed Anti-armor and Anti-personnel Devices Such as Directional Fragmentation Charges and Platter Charges. Predominantly Employed in Somalia



Copper Liner – Platter Charge



Steel Pipe – Fabricated Container



Steel Backplate



RC & EFP-like Components - Somalia



Copper Cone – Shape Charge

IED Enhancements & Indicators

Enhancements, Components, and Supplies



Fragmentation – Bolts & Washers - Somalia



Fragmentation Glued to Container Lid - Somalia



Aluminum Powder - Somalia



Knotted Detonation Cord - Somalia



Fragmentation – Ball Bearings - Somalia

Indicators (Observables): Any of the Following Indicators May be Evidence of IED Construction

Aluminum Powder – Silver-to-dark Gray in Color, Fine Powder – Added to Homemade Explosives as a Fuel to Enhance the Explosive Properties

Detonation Cord – Varies in Color (e.g., Red, Orange, Blue, Yellow), is Used Both as a Detonator and / or Booster for the Main Charge

Fragmentation – Ball Bearings, Nuts, Bolts, Washers, Nails, Bullets, Shell Casings, Scrap Metal, Rocks, Glass, etc., May be Co-located with Glue or Epoxy

Military Munitions and Munitions Casings – May be Empty or Refilled with HME, DetCord or Wiring May Protrude Out

Supplies – Epoxy, Electrical Tape, Glues, Metal Tubing, Packing Tape, Plastic Bags or Sheeting, String / Twine, Solder, Welding Supplies, Wire

Tools – Screwdrivers, Hammers, Hot Glue Gun, Knives, Wire Cutters, Scissors, Volt Meters, Band Saw, Blow Torch, Soldering Iron, Welder

Wires of Any Type, Gauge, and Length (Alternator, Electrical, Insulated and Non-insulated)

IED Emplacement

Emplacement TTPs are Dictated by Environment, Time, Material, and Knowledge



Elevated IED Concealed Behind Wall - Somalia



Command Wire – Surface Laid - Somalia



Main Charge Under Debris - Somalia



RC IED Concealed in Tire / Trash - Somalia



Trip Line – Unconcealed - Somalia

IED Emplacement

Emplacement TTPs are Dictated by Environment, Time, Material, and Knowledge



IED Buried in Pothole - Somalia



VBIED - Nigeria



Main Charge Hidden in House - Somalia



Surface Laid Command Wire - Somalia



Disrupted Emplacement at
Base of Wall - Somalia

IED Emplacement

Any of the Following Materials in Any State of Assembly May be Used for IED Switches

Absence or Avoidance of Civilian Foot and Vehicular Traffic in Particular Areas, Evidence of Alternate or Detoured Routes of Travel

"Ant Trail" – Disturbed Earth, Buried Command Wire – Thin Line of Raised Dirt and Looks Like Freshly Dug Dirt

"Ant Trail" – Disturbed Earth, Buried Command Wire – Thin Line of Sunken Dirt, Looks Like a Groove in the Dirt

Debris / Trash Piles that Look Out of Place, Strange, Looks Recently Disturbed

Disturbed Earth – Signs of Recently Dug Up Ground, Raised Earth (Bumps) or Sunken Earth – Roads, Paths, Trails – Dirt or Pavement

IED Warning Markers – Stacked Rocks; Sticks or Branches Stuck in the Ground; Rocks in the Road or Pathway; Articles of Clothing or Plastic Bags Hanging or "Stuck" in Foliage; Graffiti, Obscure Objects or Symbols that Appear Out of Place; Tape, String, Clothing that is Tied to or Wrapped Around Poles or Trees; Markings on Doorways, Walls, Entrances etc.; Painted Rocks or Objects In or Near Paths & Roads

Personnel-Borne IED (Suicide Bomber) – Person Appears Nervous, Avoids Eye Contact, Praying or Mumbling, Wearing Inappropriate Clothing for the Weather Conditions, Baggy Clothing, Looks or Acts Out of Place, Bulges in Clothing Around the Waist, Chest, or Groin Areas, Ignores Directions / Orders

String , Twine, or Wire – Appears to be Laying on the Ground; Elevated Off the Ground; Placed Between Two Objects; Tied or Anchored to a Stationary Object; Appears or Disappears into the Ground, Wall, Foliage, Debris Piles

Vehicle-Borne IED – Sagging Rear-end; Objects Inside Covered Up; Exposed Wires, Buttons or Switches; Driver Looks Nervous, Praying or Mumbling, Appears Out of Place; Car is Out of Place Relative to Area; Driver Hastily Leaves Area After Parking Vehicle; Erratic Driving, Avoids Check Points, Ignores Traffic Signals and Patterns

Insurgent Tactics, Techniques, and Procedures (TTP)

"Civilians" Loitering (acting as lookouts), May Look Nervous or Out of Place, Avoiding Eye Contact, Talking on Radios or Cell Phones

Elevated or Angled Emplacement of Anti-armor IED and Anti-personnel Devices to Increase Lethality of Explosive Device

Emplacement of IED Components May Be a Step in a Complex Staged IED Emplacement

Emplacers Will Use Environment and Surroundings to Hide / Conceal IED

Insurgents Heat Asphalt with a Blowtorch to Soften the Material Making the Asphalt Easier to Cut

Many RCIED Switch and Command Wire Devices Require the Triggerman to have a Line of Sight to the IED

Surface Laid Emplacement at Approximately 1 to 2 Meters is Favored over Burying Main Charges

Points to Remember

USAFRICOM IED and IED component construction and configuration as well as enemy IED activities, behaviors, TTPs will change over time.

The predominant power sources in the USAFRICOM AOR are 6v and 12v motor vehicle batteries.

Electric blasting caps are the predominant initiator type in the USAFRICOM AOR. Improvised electric blasting caps using christmas tree light bulbs are also popular.

Command wire switches require the triggerman to have a line of site with the target, or a spotter to communicate with the triggerman.

The predominant main charge explosive in the USAFRICOM AOR are military munitions filled with HME, commercial or military explosives.

RC (command switch) is the predominant switch type used in the USAFRICOM AOR and require a triggerman and/or spotter / observer. Be on the look-out for people loitering, behaving strangely, or that appear to be out of place.

“Ant trails” or areas with linear disturbed earth (raised or sunken earth) are visual indicators (observables) of emplaced command wire.

To avoid ground based detection methods, command wires are elevated off the ground and strung in trees, utility poles, roofs, vegetation, etc.

Notes

Notes

CONTACT:
JIEDDO INTEGRATED SIGNATURES PROGRAM

FOR COMMENTS AND UPDATES VISIT:
[HTTP://WWW.INTELINK.SGOV.GOV/BLOGS/_IEDRECOGUIDE](http://www.intelink.sgov.gov/blogs/_iedrecogguide)

ALSO AVAILABLE IN HARD AND SOFT COPY:
HME/BE RECOGNITION GUIDE – AFGHANISTAN
COMMAND SWITCH RECOGNITION GUIDE – AFGHANISTAN
VICTIM OPERATED IED RECOGNITION GUIDE – AFGHANISTAN
POTASSIUM CHLORATE RECOGNITION GUIDE – AFGHANISTAN



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