

# Vehicle Borne Improvised Explosive Devices (VBIED) Response

- This PDF is a small variety of slides from my 4-hour Multi-Agency *“Vehicle Borne Improvised Explosive Devices (VBIED) Response” Awareness* Course May 2008 version.
- I developed this PDF after numerous requests for additional information on VBIED Planning & Response especially from emergency services and emergency management agencies.
- Reminder this a small representation of 38 slides from a class of over 190 slides.
- There is a variety of information here from different sources for different agencies! All information is **OPEN SOURCE**.

# Vehicle Borne Improvised Explosive Devices (VBIED) Response

- Please feel free to use this file as a resource as you construct your own training materials for a specific audiences. Just please give credit where credit is due!
- **Please remember that the information should only be used as a guide and you should always use your local training, guidelines and procedures.**
- Reminder this information is constantly being reviewed and updated.
- ***Thank you and be safe!*** If you have any questions or comments please contact me at [fdtac@yahoo.com](mailto:fdtac@yahoo.com)

# Vehicle Borne Improvised Explosive Devices (VBIED) Planning & Response



# *Introduction*

- A rapid, safe and successful response requires planning and preparation.
- The likelihood of a VBIED incident is low, BUT public safety officials must prepare for these situations. 2009 could bring an increase in actual, suspected and hoax IED/VBIED threats.
- Recent VBIED events across the globe have demonstrated the need to prepare local, regional, state, federal public safety and military resources to plan for and respond to these types of events.

# *Course Goal*

To prepare first responders, emergency management, military assets and other officials with some basic tools and information needed to develop or assess a VBIED response plan.



# *Course Notes*

- **COURSE IS A NOT A "TACTICS" COURSE.**
- The guidelines and procedures discussed in the presentation should not replace common sense and experience. It is impossible to plan for every situation.
- New "best practices", intelligence and training becomes available on an on-going basis. These planning and training efforts should be updated on a regular basis.

# *Threat Groups*

- It appears that the “bad guys” (criminals and terrorists) are more determined, violent and heavily armed than ever before.
- Crisis situations such as terrorist events, criminal attacks, hoaxes and explosive threats seem to be occurring with more frequency.
- No two incidents are the same. Factors ranging from the bombers motive, their explosive materials, knowledge of the location and law enforcement resources in the area can all influence the outcome of an incident.

# *VBIED Overview*

- Vehicle borne IEDs come in all shapes, sizes makes, models and colors.
- From the small, simple two-door passenger car to the large cement or sewage truck.
- In Iraq and Afghanistan there have even been instances of fire trucks, ambulances, trailer mounted generators and even donkey drawn carts used to attack Coalition Forces.

# *VBIED Overview*

- VBIEDs have used increasingly larger amounts of explosives from 100 pounds to well over 1,000 pounds or larger.
- The VBIEDs seen in the Middle East and Far East have included mortar rounds, artillery rounds, rocket warheads and improvised explosives.
- Additional materials have been added such as shrapnel, flammables, white phosphorus and chlorine to cause additional death and injury.

# *VBIED Overview*

- VBIEDs can be discovered during a terrorist or criminal explosives response or will be discovered when conducting normal, routine response activities.
- VBIEDs will be designed to be concealed or blend in a specific area as an ordinary vehicle.



# U.S. Vehicle Bombs



- The 1993 WTC and the 1995 Oklahoma City bombings both featured delivery of explosives using large rental vehicles.



Homeland  
Security

- In July 2005, the U.S. Department of Homeland Security (DHS) distributed an Information Bulletin to all state, federal and local law enforcement agencies in the U.S. that addressed the threat of vehicle-borne improvised explosive devices (VBIEDs).
- The Bulletin stated that there is no specific or credible intelligence indicating that terrorist organizations intend to use VBIEDs against U.S. homeland targets. However, the growing use and frequency of lethal VBIED incidents overseas is cause for continuing concern.

**FIRST RESPONDERS SHOULD NOT  
ATTEMPT TO APPROACH A  
CONFIRMED OR SUSPECTED IED OR  
VBIED; THIS IS A JOB FOR  
SPECIALLY TRAINED PERSONNEL.**



# *Pre-Incident Planning*

- Law Enforcement, Fire, EMS, Emergency Management, Military, Special Teams and other officials all share some of the same priorities during a VBIED event. (*Life Safety and Incident Stabilization*).
- Planning and interagency cooperation for a VBIED threat or any "critical incident" type of event should be paramount.
- As with all emergency management planning efforts a multi-agency tabletop or functional exercise should be conducted to test your IED/VBIED planning and training efforts.

# ***VISIBLE INDICATORS:***

- Responders should be very cautious of any vehicles that arouse your curiosity.
- A vehicle is parked suspiciously for a prolonged amount of time in a central location or strategic location.
- The vehicle or vehicles rear appears to be weighted down.
- Stolen, non-matching plates or no plates at all.

# ***VISIBLE INDICATORS:***

- Wires, bundles, circuit boards, electronic components, unusual containers, propane tanks, devices or materials visible in the vehicle.
- Ordinance such as blasting caps, detcord, military explosives, commercial explosives, grenades, artillery, etc.
- Unknown liquids or materials leaking inside or under vehicle.
- Unusual attachments or bodywork.

# ***VISIBLE INDICATORS:***

- **Some indicators by themselves may not mean a suspicious vehicle or item is present.**
- **However, if multiple indicators are present caution should be exercised.**

# The Military Five Cs

**Confirm** - with witnesses and binos/scopes from a safe distance there is a possible VBIED.

**Clear** - the area, moving people away from the suspected device in a 360 degree fashion.

**Cordon** - the area off, minimum 1,500 to 2,000 feet.

**Control** - all access to the area using law enforcement checkpoints.

**Check** - for secondary hazards including the Command Post and Staging Area for possible secondary devices.

# ***RESPONDER "ACTIONS ON"***

- If a first responder (Fire, EMS, Law Enforcement) comes across a suspicious vehicle during routine activities immediately inform all personnel verbally and leave the area.
- DO NOT USE YOUR RADIO (Cell or MDT) for this activity until your are some distance away (300-500 meters) from the vehicle or device.

# ***RESPONDER "ACTIONS ON"***

- Call out to other personnel that you have found a suspicious item/material (wires, devices, containers, etc.)
- Do NOT TOUCH or MOVE anything.
- Do not open or close vehicle doors, windows, hood, trunk, etc. Do not touch light switches, keys, items, etc.
- Move yourself, other responders and the public out of the area as quickly as possible.
- Once one confirmed or possible VBIED has been found be aware of additional or secondary devices or VBIEDs.

# *VBIED Response*

- When responding to incidents with an actual or suspected VBIED device, responders must become more “tactical” in their thinking and response.
- If responding to an actual or suspected VBIED incident get all the dispatch information you can via cell phone or MDT and not radios if possible.
- **If there has been an actual explosion use radios to communicate since there will be an overriding need for rapid communications due to life safety and response priorities!**



# *VBIED Response*

- Scan the areas where you are parking and staging. Do not stack vehicles or staff up in one area if possible.
- Minimum stand off distance of 1,500-2,000 feet from vehicle if possible.
- Rapidly implement Incident Command System (ICS) and necessary components (Unified Command, Staging, etc.)
- **Always be aware of secondary devices and vehicles.**

# ***VBIED Response***

- Do not use two-way radios, cell phones, mobile data terminals (MDT) within 1,500 or more feet from suspected vehicle.
- Observe the vehicle with binoculars, spotting scope or cameras.
- Clear and control AO (area of operation) as you would a hazmat zone.
- If you discover an exploded or unexploded VBIED, you have also discovered a crime scene and it must be treated as such.
- **Bomb squad personnel or robots should be the first to approach a VBIED or suspected VBIED.**

# *Response Issues*

- Notify all key agencies and supporting entities as soon as possible on a confirmed or suspected VBIED (Emergency Management, Hospitals, etc.)
- Plan on large and immediate local and national media response.
- Plan on large and immediate parents, family and friends response to the incident scene.



# *Response Issues*

## EMS Response Issues

- Tactical medics may need to be utilized.
- EMS may need to utilize “scoop and scoot” and “load and go” from the incident area.
- Casualty collection points may be established in “safe” areas.
- EMS may need to implement disaster procedures such as triage tags, casualty collection points and field treatment areas for minor injuries.

# *Scene Assistance*



- **Local Emergency Operations Center (EOC)** should be activated as soon as possible for long term response, recovery, management, investigative and local, state and federal support efforts.
- **Joint Information Center (JIC)** should be established involving all key agencies and players to manage the local and national media efforts.

# *Scene Assistance*

- Family Assistance Centers (FAC) may need to be established near the site and other remote locations.
- Helpline phone numbers should be initiated.
- CISM (Critical Incident Stress Management) efforts should be considered for all responders.



# L.A.C.E.S.

Another effective scene management tool adopted from the wildland/forestry fire community.

- Lookout
- Awareness
- Communications
- Escape
- Safety Zones



# *L.A.C.E.S.*

- Lookout: Someone is watching overall entire VBIED/IED scene from a safe distance and high ground if possible.
- Awareness: All responders on the scene maintain "situational awareness" and must be ready for surprises.
- Communications: Responders MUST have effective communications (voice, hands, radios).
- Escape: Plan escape route from unstable scenes.
- Safety Zones: Escape to safe areas that provides distance and shielding.

*The response to an VBIED, is similar to a hazardous materials response. Use your “zones of control”:*

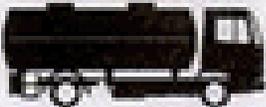
- **Hot zone** – where the VBIED is located and damage/injury will occur.
- **Warm zone** – where the large perimeter area will be established and area cleared.
- **Cold zone** – location of a unified command post, staff, resources and staging.

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# U.S. Department of Defense Minimum Evacuation Distances

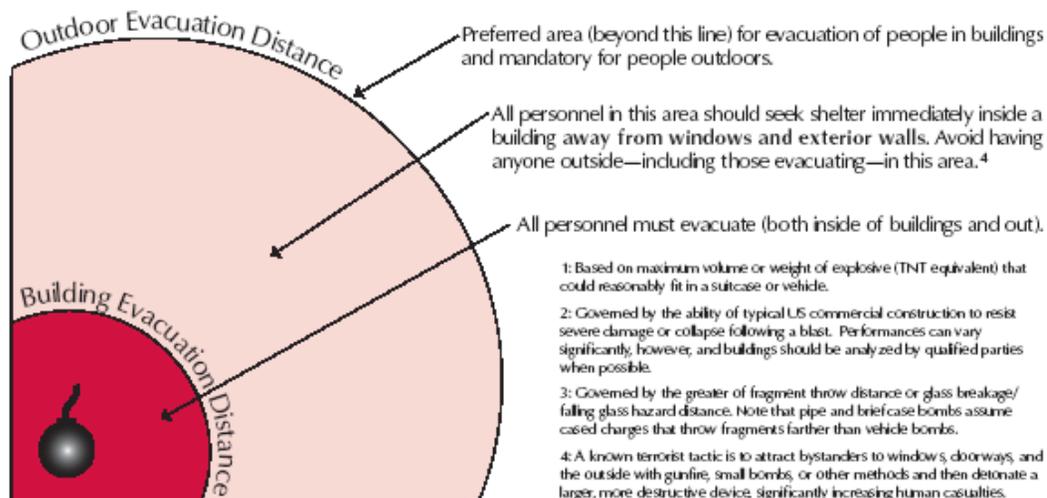
Threat Description		Explosives Mass (TNT equivalent)	Building Evacuation Distance	Outdoor Evacuation Distance	
High Explosives (TNT Equivalent)		Pipe Bomb	5 lbs 2.3 kg	70 ft 21 m	850 ft 259 m
		Suicide Belt	10 lbs 4.5 kg	90 ft 27 m	1,080 ft 330 m
		Suicide Vest	20 lbs 9 kg	110 ft 34 m	1,360 ft 415 m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

<b>ATF</b>	<b>VEHICLE DESCRIPTION</b>	<b>MAXIMUM EXPLOSIVES CAPACITY</b>	<b>LETHAL AIR BLAST RANGE</b>	<b>MINIMUM EVACUATION DISTANCE</b>	<b>FALLING GLASS HAZARD</b>
	COMPACT SEDAN	500 Pounds 227 Kilos <i>(In Trunk)</i>	100 Feet 30 Meters	1,500 Feet 457 Meters	1,250 Feet 381 Meters
	FULL SIZE SEDAN	1,000 Pounds 455 Kilos <i>(In Trunk)</i>	125 Feet 38 Meters	1,750 Feet 534 Meters	1,750 Feet 534 Meters
	PASSENGER VAN OR CARGO VAN	4,000 Pounds 1,818 Kilos	200 Feet 61 Meters	2,750 Feet 838 Meters	2,750 Feet 838 Meters
	SMALL BOX VAN <i>(14 FT BOX)</i>	10,000 Pounds 4,545 Kilos	300 Feet 91 Meters	3,750 Feet 1,143 Meters	3,750 Feet 1,143 Meters
	BOX VAN OR WATER/FUEL TRUCK	30,000 Pounds 13,636 Kilos	450 Feet 137 Meters	6,500 Feet 1,982 Meters	6,500 Feet 1,982 Meters
	SEMI-TRAILER	60,000 Pounds 27,273 Kilos	600 Feet 183 Meters	7,000 Feet 2,134 Meters	7,000 Feet 2,134 Meters

## Bomb Threat Stand-Off Distances

Threat Description	Explosives Capacity <sup>1</sup> (TNT Equivalent)	Building Evacuation Distance <sup>2</sup>	Outdoor Evacuation Distance <sup>3</sup>
 Pipe Bomb	5 LBS/ 2.3 KG	70 FT/ 21 M	850 FT/ 259 M
 Briefcase/ Suitcase Bomb	50 LBS/ 23 KG	150 FT/ 46 M	1,850 FT/ 564 M
 Compact Sedan	500 LBS/ 227 KG	320 FT/ 98 M	1,500 FT/ 457 M
 Sedan	1,000 LBS/ 454 KG	400 FT/ 122 M	1,750 FT/ 533 M
 Passenger/ Cargo Van	4,000 LBS/ 1,814 KG	600 FT/ 183 M	2,750 FT/ 838 M
 Small Moving Van/ Delivery Truck	10,000LBS/ 4,536 KG	860 FT/ 262 M	3,750 FT/ 1,143 M
 Moving Van/ Water Truck	30,000LBS/ 13,608 KG	1,240 FT/ 378 M	6,500 FT/ 1,981 M
 Semi-Trailer	60,000LBS/ 27,216 KG	1,500 FT/ 457 M	7,000 FT/ 2,134 M

This table is for general emergency planning only. A given building's vulnerability to explosions depends on its construction and composition. The data in these tables may not accurately reflect these variables. Some risk will remain for any persons closer than the Outdoor Evacuation Distance.



# *Sources of Info/Training*

- [www.emrtc.nmt.edu](http://www.emrtc.nmt.edu)

DHS Live explosive training for first responders.

- [www.tripwire-dhs.net](http://www.tripwire-dhs.net)

DHS Office of Bomb Prevention (OBP)  
Tech Resources for Incident Prevention.

# FIRST RESPONDER CRITICAL INCIDENT GUIDE



AUGUST VERNON

*New First  
Responder Incident  
Field Guide from  
Red Hat Publishing  
Available early 2009  
[www.redhatpub.com](http://www.redhatpub.com)*

Public Safety Sensitive

# CONCLUSION

- Please remember to follow local guidelines and procedures.
- Each community should have a plan in place to address these types of events.
- The more our public safety agencies prepare, the better they are prepared to respond to and effectively manage any type of critical incident that might arise. The community has entrusted us with their safety.... SO LETS PREPARE NOW!

# *Thank you & be safe!*



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*August Vernon provides specialized emergency services planning and training on critical incidents.*