

IMPROVISED EXPLOSIVE DEVICE COUNTERMEASURES

A-T SOLUTIONS, INC.



1. NOTIFICATION / SITUATION

- Obtain clear understanding of objectives
- Pre-Blast operation / Suspected presence of unexploded device
- Post-Blast operation / Detonation occurred
- Answer the 5 “Ws” (*Fig. 1*)
- Identify tasking authority
- Locate Entry Control Point (ECP)
- Identify Point of Contact (POC)
- Identify Incident Commander
- Request support—Fire, Medical, Security
- Time area secured

2. INITIAL PLANNING

- Designate response team
- Plan Route to ECP or staging area
- Load-out equipment
- Load-out explosive
- Establish communications (Primary/Secondary)
- Consider additional support

3. ARRIVAL ON SCENE

- Threat Assessment (*Fig. 2*)
- Secondary device hazard
- Contact Incident Commander—make initial suggestions
- Confirm Actions Taken (The 5 “Cs”) (*Fig. 3*)
- Evaluate other hazards in the area
- Establish or adjust initial blast area
- Request additional support assets if needed
- Make necessary notifications to the Chain of Command
- Brief your team and determine equipment requirements

Fig. 1

Where is it?
What is it?
When was it found?
Why is it there?
Was anything seen, heard, or done to the item?

Fig. 2

Am I safe, is everyone else safe?
Target
Placement
Arming
Category
Functioning of Item

Fig. 3

Confirm Item
Clear Area
Cordon Area
Control Access
Check ECP

3. ARRIVAL ON SCENE, *cont.*

- Question Witness (Fig. 4)
- Reconfirm 5 “Ws” (Fig. 1)

4. ACTION PLAN

- Determine plan of attack
- Plan on REMOTE procedures
- Use appropriate PPE
- Select appropriate tools
- Brief your team
- Brief Incident Commander on recommendations

5. RECON

- REMOTE procedures if possible
- Threat Assessment (Fig. 5)
- Take loaded tool on Recon
- Minimize time on target
- Consider ECM
- Take adequate X-rays of device if needed
- Determine device condition
armed/unarmed
- Confirm blast/fragmentation radius and
adjust if needed
- What actions could be taken to reduce the hazards?

6. RENDER SAFE PROCEDURES (RSP)

- REMOTE procedures if possible
- Choose correct tools and approach to perform RSP
- Evaluate X-ray for positioning of tool
- Brief your team on RSP and tool selection

7. TRANSPORT/DISPOSAL

- Determine need to transport to safe disposal area
- Liaison for approval to conduct emergency destruction operation on site
- Determine proper blast / fragmentation distances for disposal
- Can the robot be used during disposal?
- Stress safety during all explosive operations

Fig. 4

- Separate witnesses
- Be friendly
- Allow witness to tell story
- Do not lead witness
- Draw a picture of item and
surrounding area
- Remain calm

Fig. 5

- Target
- Placement
- Arming
- Category
- Functioning of Item

5 “Ws”: SITUATIONAL AWARENESS

Where is it?

Exact location of suspect item. First question should confirm location, inside, outside, in what room, where in room, height above floor, etc. This will reduce search time and identify obstacles for remote equipment employment (stairs, narrow doorways, etc).

What is it?

Detailed description of suspect item. Determine quantity if more than one, size, shape, container construction, visual components (wires, switches, timers, explosives, liquids, etc).

When was it found?

Time found, placed, or reported.

Why is it there?

By determining target or motivation of bomber, it may lead to critical design information of suspected device (type by function, level of sophistication).

Whether anything ...

Was done to the item or the surrounding area? Did a witness see it being placed? Was anything done to the item by this individual? Was it moved? Is there any noise coming from item? Are the lights on or off at this location?

5 “Cs”: ACTIONS TAKEN

- **Confirm** the threat is valid.
- Ensure the area is **Clear** of all non-essential personnel.
- **Cordon** distance has been established.
- Ensure access to the area is **Controlled**.
- Verify the immediate area has been **Checked** for secondary hazards and entrapment devices.

THREAT ASSESSMENT:

Target - What/whom is the target? If no target can be identified, the target could be Bomb Squad or the other emergency responders, or it may not be a real device.

Placement - Was the device easily placed/concealed? May indicate that the device did not require arming or tripwire placement. Was it intended to be found? May indicate victim operated design feature and possible presence of secondary devices.

Arming - You may not be able to determine device-arming features until diagnostics are conducted. However, if you suspect that an arming sequence occurred (source intelligence, witness report), there are some things to consider.

IMPROVISED EXPLOSIVE DEVICE COUNTERMEASURES



THREAT ASSESSMENT, cont.:

Category - Each IED Countermeasure incident is categorized according to the threat it poses. Potential targets should be pre-categorized wherever possible to assist in the risk decision process. **Take note of the order of precedence to help determine category assignment and determine whether event is life-threatening or non-life threatening.**

1. Public safety
2. Safety of officers on scene
3. Protection and preservation of public and private property
4. Collection and preservation of evidence
5. Convenience to the public/restoration of services

Type by function - The bomber is only limited by their imagination when designing a device; however, all the types can be grouped into three major categories: (**Fig. 6**)

- 1. Time fired** – IED detonates after pre-set time delay. Mechanical, analog, igniferous, digital, or electronic timing mechanisms can be utilized.
- 2. Command initiated** -Allows bomber to choose optimum moment to detonate device. Includes Radio Controlled, Suicide tactics and command wired initiating systems.
- 3. Victim operated** - IED detonates by actions of unsuspecting individuals.

Fig. 6

1

TIME FIRED

1. Clock
2. Watches
3. Integrated circuits
4. Timers
5. Burning fuse

2

COMMAND INITIATED

1. Cell phones
2. Modified radio system
3. Keyless entry system
4. Wireless doorbell system
5. FM receiver
6. Pagers
7. LRCT

3

VICTIM OPERATED

1. Disturbance
2. Pressure
3. Pressure release
4. Tension/Pull
5. Tension release/Push
6. Light
7. Acoustic
8. Magnetic
9. Passive infra red (PIR)
10. Active infra red (AIR)