



(U) IB-22-004 – Improvised Explosive Device Indicators

November 19, 2021

(U//LES) PURPOSE

(U//LES) The purpose of this Intelligence Bulletin (IB) is to provide an overview of improvised explosive devices (IEDs) and homemade explosives (HMEs) and their manufacturing indicators for situational awareness. The National Counterterrorism Center (NCTC) and the Joint Counter Terrorism Assessment Team (JCAT) shared the First Responder Toolbox¹ as guidance intended to promote counterterrorism coordination among government authorities. The Office of Protective Intelligence (OPI) is sharing this information in the event district offices throughout the country encounter suspicious activities or items associated with IEDs or HMEs and their manufacturing components.

(U) BACKGROUND

(U//LES) IEDs and HMEs pose a persistent threat to United States Marshals Service (USMS) personnel and protected facilities as threat actors can easily acquire component materials and instructions. Deputy U.S. Marshals (DUSMs) may encounter suspicious activities; items, including common household commodities; or behaviors associated with the manufacture of IEDs during regular operations.

(U//LES) Threat actors can build IEDs out of common household items often found at grocery and hardware stores. On August 8, 2020, DUSMs encountered IEDs during protest activities at the Edward J. Schwartz United States Courthouse in the District of Oregon (D/OR). An unknown subject threw



Figure 1 (U//LES) Failed IED found in Portland, Oregon on August 8, 2020

¹ First Responder Toolbox Catalog, <https://www.dni.gov/index.php/nctc-how-we-work/joint-ct-assessment-team/first-responder-toolbox> Last accessed November 17, 2021.

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three IEDs among the protestors but one of the IEDs failed to explode as pictured in *Figure 1*.² A witness explained it contained tightly packed gunpowder in a polyvinyl chloride (PVC) pipe. Recognizing indicators of explosives production may disrupt attack planning and remains a critical component in suspicious activity reporting.

(U) Information on how to produce an IED is easily accessible online. On October 22, 2021, Samuel Baptiste pled guilty and was convicted of posting bomb-making instructions on the internet for people he believed were Islamic terrorists. In November 2016, Baptiste posted documents online including, “Instructions: How to Make a Homemade Pipe Bomb,” “Pipe Bombs,” “Improvised Explosive Devices” and “Improvised Munitions Black Book, Volume 1.”³

(U) IED and HME components are inexpensive, legal, and readily available, increasing the challenge of detecting acquisition and use for malicious purposes. Malicious actors may use common household items and basic tools to construct IEDs, highlighting the importance of recognizing the use of seemingly innocuous materials and tools in an unusual manner (*Figure 2*).⁴ The indicators include large amounts of tools and components—especially those not commonly used together for legitimate purposes—and components modified in a manner inconsistent with their intended use. The National Counter Terrorism Center First Responder’s Toolbox offers further details.⁵



Figure 2 (U//LES) IED Indicators and Components from the First Responders Toolbox

² United States Marshals Service, Judicial Security Division. “IED Manufacture Indicators.” September 2021.

³ U.S. Department of Justice. “South Florida Resident Pleads Guilty to Attempting to Provide Material Support to Terrorists.” October 25, 2021. <https://www.justice.gov/usao-sdfl/pr/south-florida-resident-pleads-guilty-attempting-to-provide-material-support-to-terrorists>. Last accessed on November 10, 2021

⁴ The National Counterterrorism Center. First Responders Toolbox. Joint Counter Terrorism Assessment Team (JCAT). 2021. <https://www.dni.gov/index.php/nctc-how-we-work/joint-ct-assessment-team/first-responder-toolbox> Last accessed on November 1, 2021.

⁵ Ibid.

(U//LES) PREVENTION AND MITIGATION

(U) First responders, public safety officials, and USMS personnel may encounter suspicious activities, items, or behaviors associated with the manufacturing of IEDs during any law enforcement (LE) interaction. This is due to the challenge of detecting dangerous indicators in common household items and basic tools.

The following acronyms assist in recalling important details when encountering possible IEDs and IED components. These acronyms help identify suspicious items and determine if they pose a serious threat. Criminals or terrorists often use common items such as backpacks and suitcases to conceal IEDs.

(U//LES) IED COMPONENTS AS PIES

(U//LES) The following describes IED components associated with an explosive device's internal systems. The PIES⁶ acronym (Figure 3) outlines many common IEDs characteristics⁷:

- **P**ower Source- A device that stores or releases electrical or mechanical energy to close an IED's switch and activate the initiator. The power supply, usually in the form of batteries, may be integrated into the switch.
- **I**nitiator –This causes the IED to explode and can take many forms. A device, typically a detonator or igniter, used to start the detonation or deflagration (rapid burning) of the explosive main charge by electric or non-electric means.
- **E**xplosive – There are three types of explosives: primary, secondary, tertiary; categorized by the speed at which they expand. Examples of explosives are dynamite and gunpowder.
- **S**witch –This makes, breaks, or changes a connection between an IED's power source and initiator. This can take many forms and can be wired or wireless.

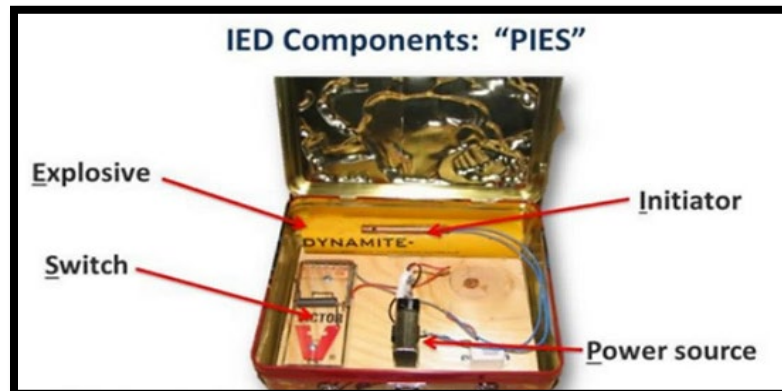


Figure 3 (U//LES) Five Most Common IED Components described with the "PIES" acronym

(U//LES) IS THE ITEM "HOT"?

(U//LES) H.O.T is a guide for assessing unattended or suspicious items and should be combined with broader considerations, such as prevailing security context.⁸ Not all unattended items are suspicious. Indicators of an IED can relate to *what* the item looks like, *where* it is, *when* it was found/placed, *who* placed or reported it, and *why* it came to your attention (5Ws). Utilize the acronym "H.O.T."⁹ and indicators below

⁶ United States Marshals Service, Judicial Security Division. "IED Manufacture Indicators." September 2021.

⁷ U.S. Department of Homeland Security. "Security and Resiliency Guide." Last Accessed on November 12, 2021. https://www.cisa.gov/sites/default/files/publications/Security-and-Resiliency-Guide-Counter-IED_0.pdf.

⁸ Improvised Explosive Device (IED) Guidelines for crowded places. 2017. Available at: <https://www.nationalsecurity.gov.au/Media-and-publications/Publications/Documents/IED-Guidelines/IED-guidelines-crowded-places.pdf> Last accessed on November 12, 2021.

⁹ U.S. Department of Homeland Security. "Security and Resiliency Guide." https://www.cisa.gov/sites/default/files/publications/Security-and-Resiliency-Guide-Counter-IED_0.pdf. Last Accessed on November 12, 2021. https://www.cisa.gov/sites/default/files/publications/Security-and-Resiliency-Guide-Counter-IED_0.pdf.

along with *Figure 4*¹⁰ to determine if an item is a threat.

- **H**idden – Is it placed out of sight or appears to be purposely concealed?
- **O**bviously Suspicious – Is it unexplainable wires or electronics?
- **N**ot **T**ypical – Is it out of place for the location or potentially related to a threat?



Figure 4 (U//LES) Acronym to Determine if an Item is Suspicious

(U//LES) RAIN

(U//LES) The RAIN acronym and *Figure 5* outline the proper steps to follow during a possible IED encounter.¹¹

- **R**ecognize the Indicators of a Suspected Explosive Device – indicators can be related to the characteristics, events, location, or time, including whether the item is Hidden, Obviously, or not Typical (HOT).
- **A**void the Area – Do not touch the suspected item. Instead, direct others to move away immediately.
- **I**solate the Suspected Item – Establish a perimeter to secure the area and wear personal protective equipment.
- **N**otify Appropriate Emergency Services – Describe the **S**uspicious items and persons, the person's **A**ctions, the **L**ocation of the item, the **T**ime of placement and discovery, and **Y**our actions to mitigate risk (SALTY).

¹⁰ Ibid.

¹¹ Ibid.



Figure 5 (U//LES) RAIN Acronym – How to Handle a Suspected IED Situation

(U//LES) OPERATIONAL GUIDANCE

(U//LES) USMS personnel should follow the below steps to properly report a detected IED or HME. These records will assist in decreasing the chances of such instances occurring in the future.

1. **Report Incident to USMS Communications Center**
 - o 800-336-0102
2. **Submit a CSO-018 outlining incident**
 - o [CSO-018s](#) are found in the Quarterly Unannounced Training (QUT) Portal
3. **Complete CSO-003**
 - o [CSO-003](#) – Court Facility Incident Report
4. **Follow up with USM-011 / USM-321**
 - o Complete [USM-011](#) – Report of Investigation via Intranet
 - o Complete USM-321 via [Capture](#).

(U) IEDS IN HIGH-RISK ENVIRONMENTS

(U) Below are brief descriptions of two incidents involving IEDs or HMEs in the previous four years. IED components included commonly available materials. *Figure 6* shows examples of common forms IEDs may take.¹²

¹² Ibid.



Figure 6 (U//LES) Common IED Configurations

(U) On October 14, 2021, Brian J. Kunsman, 44, arrived by ambulance in the emergency room at St. Luke's University Hospital in Allentown, Pennsylvania, for injuries he sustained in a single-car accident. Hospital staff found a pipe bomb as they logged his possessions. The hospital staff called the local police department who brought the Allentown Police Bomb Squad to the scene. Kunsman said he possessed the pipe bomb for, "self-defense purposes"¹³ and forgot it was in his backpack when medical responders transported him to the hospital according. No injuries occurred during the ordeal, but Police Chief Bachart was more concerned the pipe bomb went undetected and made its way into both the ambulance and the hospital with the suspect. The incident endangered the lives of the ambulance workers, hospital staff, and the patients. Pennsylvania Magisterial District Judge Michael J. Pochron arraigned Kunsman and charged him with the illegal possession of weapon of mass destruction and possession of methamphetamine. Individuals may forget they have an IED and unintentionally carry it into public spaces such as federal buildings and hospitals.

(U) On December 11, 2017, Akayed Ullah, an Islamic State of Iraq and the Levant (ISIS)-affiliated terrorist detonated a pipe bomb strapped to his chest in a subway station near the Port Authority Bus Terminal in

¹³ Hattersley-Gray, Robin. "Patient Brings Pipe Bomb into Pennsylvania Emergency Room." Campus Safety. October 19, 2021. <https://www.campusafetymagazine.com/news/patient-brings-pipe-bomb-into-pennsylvania-emergency-room/>. Last accessed on November 10, 2021.

midtown Manhattan. Ullah built the pipe bomb out of his Brooklyn apartment without detection or suspicion. This was due to the commonly available materials he used to construct the weapon including sugar, match heads, Christmas tree lightbulbs and metal screws. OPI assesses threat actors may utilize the abundance of holiday décor during the holiday season in the manufacturing of IEDs.

(U) CONCLUSION

(U//LES) To prepare for and prevent an IED from going undetected law enforcement officers should maintain situational awareness, be properly equipped, cite the acronyms meant to make detection easier, and always stay vigilant to those within and around the facility. IEDs and HMEs can go undetected due to their simplistic components and design. Individuals have been able to enter vulnerable facilities with IEDs without suspicion. The existing prevention and mitigation strategies discussed in this analytical product should aid law enforcement officers in deterring such instances. For more information and guidance on IEDs and other counterterrorism elements, USMS personnel should access the First Responder Toolbox.

(U) If you have any questions pertaining to this IB please contact OPI's Threat Management Center at (202) 307-6100.

(U) DISSEMINATION LIST

(U) USMS OPI and Districts