



# *TRIPwire*

*Technical Resource for Incident Prevention*



**Homeland  
Security**

FOR OFFICIAL USE ONLY

# The Bombing Threat

Improvised explosive device (IED) attacks remain the primary tactic for terrorists seeking relatively uncomplicated, inexpensive means for inflicting mass casualties and maximum damage.



Given international precedents for terrorist IED use, the United States must prepare to counter similar attacks domestically.



Homeland  
Security

TRIPwire Overview  
FOR OFFICIAL USE ONLY



# Office for Bombing Prevention (OBP) Overview

**OBP is dedicated to enhancing and coordinating the nation's ability to detect, deter, prevent, and respond to attacks that use improvised explosive devices (IEDs) against critical infrastructure, key resources, and soft targets**

**To achieve this goal, OBP is actively engaged in three primary areas:**

- 1) Coordinating national and intergovernmental bombing prevention efforts;**
- 2) Conducting requirements, capabilities, and gap analyses; and**
- 3) Promoting information-sharing and bombing prevention awareness.**

**OBP serves as the Department of Homeland Security's lead agent for ensuring that diverse prevention programs nationwide function together efficiently to meet evolving bombing threats.**



**Homeland  
Security**

*TRIPwire* Overview  
FOR OFFICIAL USE ONLY



# TRIPwire: Technical Resource for Incident Prevention

To counter the IED threat in the United States, the President mandated the establishment of enhanced information-sharing initiatives.

**TRIPwire** is an online network for U.S. State and local law enforcement officials tasked with bombing prevention to discover and share the technologies, tactics, and procedures (TTPs) of terrorist IED use.

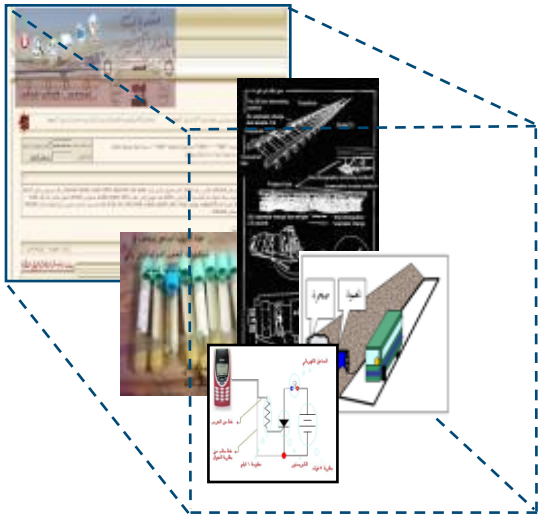
- Access is free, courtesy of DHS's Office for Bombing Prevention.
- TRIPwire is available 24 hours, 7 days a week.
- Access is strictly limited to certified responders. No vendors are allowed.

The screenshot shows the TRIPwire website interface. At the top, there is a navigation bar with tabs for HOME, ABOUT, GLOSSARY, MY PROFILE, CONTACT US, and LOGOUT. Below this is a 'WELCOME' section with a message from the Department of Homeland Security. To the right, there is a 'THREAT ALERTS' section with a 'CURRENT THREAT LEVEL' indicator set to 'ELEVATED'. Below that is a 'MEMBER DIRECTORY' section with a search form. To the right of the directory is a 'TRIPwire DIRECTORY' section featuring a diagram of IED components: Initiators, Explosives, Containers, Devices, Significant Incidents, Terrorist Targets, Initiation Methods, Switches, Precursor Materials, and Terrorist Tactics. Further right is an 'EVENT CALENDAR' section listing upcoming events. At the bottom right, there is a 'TRIPwire LIBRARY' section with links to government resources, terrorist documents, and videos. The website also features a 'COMMUNITY FORUM' with a map of the United States and a 'NEWS' section with recent articles.

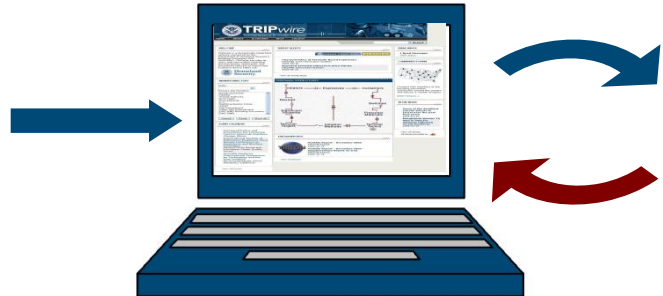


# TRIPwire: Technical Resource for Incident Prevention

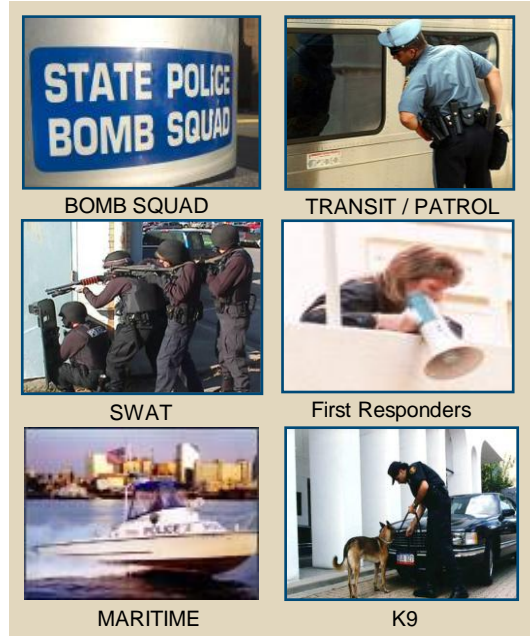
**TRIPwire integrates information gathered directly from terrorist groups with analysis and collaboration tools to help operators *anticipate, identify, and prevent* bombing incidents.**



*Collected Materials*



*Online Analysis and Collaboration Network*



*Operators*

**Community forums, secure e-mail, and discussion threads allow field operators to share experiences and information that promote more accurate situational awareness.**

# TRIPwire Sources: Terrorist Material

TRIPwire provides current and consistently updated information on terrorist tactics, techniques, and procedures (TTPs).

Key portal content is taken directly from terrorist sources:

**TERRORIST MANUALS:** describe actual instructions for IED construction, explosive recipes, and operational execution.

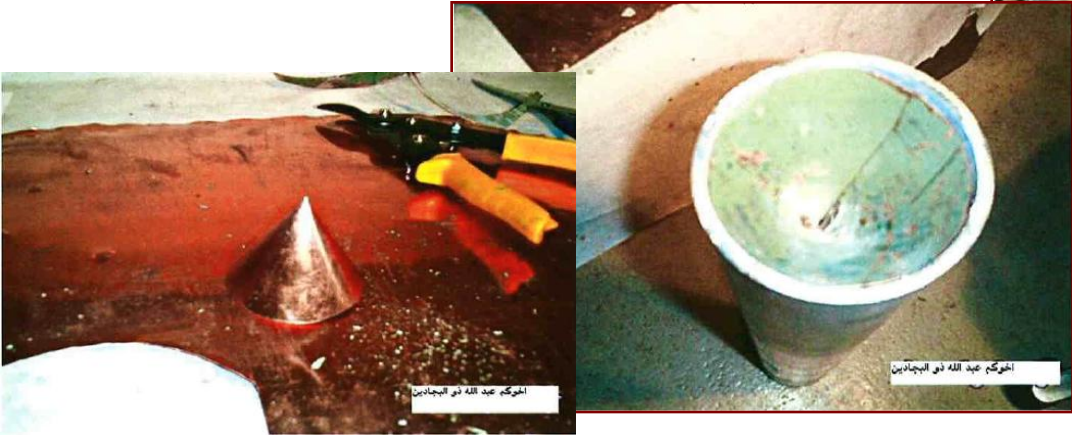
**TERRORIST VIDEOS:** depict hours of footage of successful attacks and tutorials on IED manufacture, emplacement, and detonation.



# TRIPwire Collection Focus: New Tactics

**TRIPwire content reflects newly captured TSM detailing emergent and evolving terrorist tactics.**

**In response to the implementation of EFPs in Iraq, TRIPwire analysts harvested instructional materials on the manufacture of Iranian-style anti-personnel devices released by a prolific IED expert**



**Identifying new or emerging IEDs allows analysts to develop theories of the next stage in a weapon system's evolution and what that means for domestic preparedness and response efforts**



# TRIPwire Collection Focus: Refinement of Known Tactics

Innovations in traditional terrorist methods represent a critical threat as they are difficult to anticipate and detect.

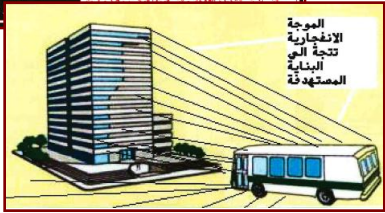
In order to mitigate this threat, it is crucial to emphasize the collection of terrorist materials detailing variations on traditional TTPs

## Vehicle Borne Improvised Explosive Devices

شكل السيارة	نوع السيارة	وزن السيارة	مسافة الخطر	مسافة الخطر	مسافة الخطر
	COMPACT SEDAN	500 POUNDS 227 KILOS	100 FEET 30 METERS	150 FEET 45 METERS	150 FEET 45 METERS
	FULL SIZE SEDAN	1,000 POUNDS 453 KILOS	125 FEET 38 METERS	150 FEET 45 METERS	170 FEET 51 METERS
	PASSENGER VAN OR CARGO VAN	4,000 POUNDS 1,818 KILOS	300 FEET 91 METERS	270 FEET 82 METERS	270 FEET 82 METERS
	SMALL BOX VAN (4 FT BOX)	1,000 POUNDS 453 KILOS	80 FEET 24 METERS	120 FEET 36 METERS	120 FEET 36 METERS
	BOX VAN OR WATER/FUEL TRUCK	3,000 POUNDS 1,360 KILOS	40 FEET 12 METERS	60 FEET 18 METERS	60 FEET 18 METERS
	SEMI TRAILER	60,000 POUNDS 27,279 KILOS	60 FEET 18 METERS	700 FEET 213 METERS	700 FEET 213 METERS

**55 Gallon Drum**

كان برميل يحتوي على 471 باون من خليط الانفجار المتفجر ويكون الناتج تقريبا ستة وعشرين الف وستة وخمسين



**SIGNIFICANT INCIDENT > ATTEMPTED UK INCENDIARY BOMBINGS (2007)**

**ALERT**

Some of the information on this page was obtained directly from the open-source exploitation of terrorist material. Such material has been translated into English from its original language, but has otherwise not been altered, edited, or corrected by the U.S. Government. Any and all errors in calculations, formulas, mixtures, descriptions, or instructions were made by the original authors. Do not attempt to recreate any of the terrorist experiments found within the TRIPwire system.

**Overview**

**Incident Date:** 29 June 2007  
**Location:** London, England; Glasgow, Scotland, United Kingdom  
**Target:** Tiger, Tiger Nightclub  
 Glasgow International Airport  
 Airports  
 Nightclubs  
**Tactic:** Coordinated Attack  
**Fatalities:** 0  
**Injuries:** 1

**Incident Details**

**Incident Description:** At approximately 10:30 PM on June 29, 2007, a call near a... abandoned... reported the... nightclub w...

**TRIPwire**

**Vehicle Borne IED Identification Guide: Parked Vehicles**

**Potential Indicators:**

- Heavy, sagging vehicle (rear-weighted)
- Illegally parked or near authorized vehicle entrances or crowded access points
- Covered or tinted windows
- Large containers on seats or cargo area: bags, boxes, barrels, tanks
- License plates removed or altered
- Odor of gasoline, propane, acids, or chemicals
- Visible wires, switches, batteries, or antennae inside or on vehicle
- Cargo concealed with tarp or blanket

**IF OBSERVED, CALL DISPATCH OR COMMUNICATIONS CENTER**

تقوم بتوصيل الانبوب بين قارورة الغاز وقارورة غاز الاسيتلين

connect the tube to the acetylene gas cylinder.

TRIPwire products inform the bombing prevention community of critical developments in device design and emplacement.



# TRIPwire Collection Focus: Emerging Threats

**Terrorist use of new hard-to-detect dual-use materials and innovative components are on the cutting-edge of IED tactics.**

**In 2006, terrorists developed innovative devices and tactics to initiate IEDs on board airliners with liquid explosives and detonators hidden in cameras. These methods were widely disseminated on terrorist websites, and collected by TRIPwire analysts.**



**INITIATOR >**  
**CAMERA FLASH DETONATOR IMPROVISED METHOD #1**

**ALERT** Some of the information on this page was obtained directly from the open-source exploitation of terrorist material. Such material has been translated into English from its original language, but has otherwise not been altered, edited, or corrected by the U.S. Government. Any and all errors in calculations, formulas, mixtures, descriptions, or instructions were made by the original authors. Do not attempt to recreate any of the terrorist experiments found within the TRIPwire system.

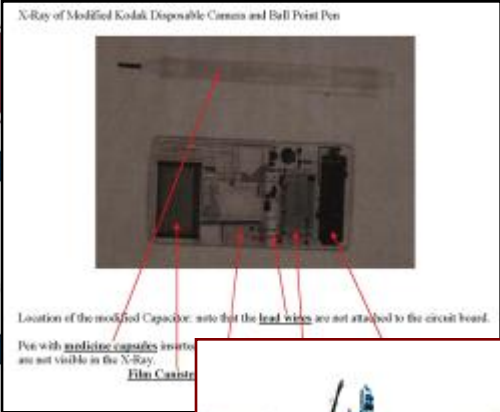
**Overview**

**Classification:** Electrical  
**Category:** Improvised  
**Type:** Detonator  
**Description:** This electric detonator is improvised from a camera flash. The flash capacitor is hollowed out and filled with sensitive primary explosives, and a tungsten wire is fixed between two prongs within the cap and implanted in the explosive material. This functions as a bridgewire and delivers an electrical charge to the primary explosives when the flash is operated, causing the detonator to function.

**Initiator Components**

**Explosives:** Lead azide  
**Casing Material:** Aluminum  
**Bri**  
**T**

**Analysis / Trends**



Based on the terrorist's instructions in tampering with the flash, several indicators might be present. Parallel wires between the capacitor and the circuit board that have been severed and reattached with small loops could indicate that the capacitor has been removed. Small incisions on the camera's shell, on the capacitor's metal exterior or plastic covering, or no wrapping at all, could suggest tampering. Once converted into a detonator, the flash could not function normally, so asking people with cameras to operate the flash while gauging their behavior could identify potential terrorists. However, the document suggests staging the operation out of airports in Africa or in poorer countries, where security may not be as tight as in the U.S. This increases the odds that the device could be snuck past security.



# TRIPwire: Profile Page

**TRIPwire**  
Technical Resource for Incident Prevention

HOME ABOUT GLOSSARY HELP LOGOUT

**INITIATOR**

**ALERT**  
Some of the information on this page was obtained directly from the open source exploitation of terrorist material. Such material has been translated into English from its original language, but has otherwise not been altered, edited, or corrected by the U.S. Government. Any and all errors in calculations, formulas, mixtures, descriptions, or instructions were made by the original authors. Do not attempt to recreate any of the terrorist experiments found within the TRIPwire system.

### Picric Acid Detonator Improvised Method #1

**Overview**

**Classification:** Electrical  
**Category:** Improvised  
**Type:** Detonator  
**Description:** This is an improvised detonator consisting of sulfur, acetone peroxide, and picric acid.

**Initiator Components**

**Explosives:** Sulfur  
TATP  
Picric Acid  
**Casing Material:** Plastic  
**Bridge Wire:** Flashlight bulb filament

**Terrorist Preparation Procedures**

**Required Materials:** batteries bulbs (small flashlight)  
Electric wires, preferably the very thin type  
Small tubes about as long as fingers  
Glue  
Detonation components (sulfur + acetone peroxide + picric acid)  
Plastic tubes  
Voltmeter  
Lighter  
Very cold water  
Lead solder

**Analysis/Trends:** This improvised detonator works very much like an explosive train. When fired, the light bulb initiator burns very hot and ignites the sulfur. This creates a mechanical explosion of the acetone peroxide (TATP), which in turn ignites the picric acid. TATP is a volatile explosive and is used to excite the more stable picric acid.

Improvised detonators of this type allow the perpetrator to avoid criminal means for procuring initiators. This is an in-depth and seemingly thoroughly tested initiator. All of these materials are readily available at a hardware or medical supplies store. The detonation component (picric acid) can be improvised at home.

**IMAGES**

Improvised picric acid detonator image 1. (TRIPwire Document: Bomb Making Discussion Forum)

Improvised picric acid detonator image 2. (TRIPwire Document: Bomb Making Discussion Forum)

Improvised picric acid detonator image 3. (TRIPwire Document: Bomb Making Discussion Forum)

Improvised picric acid detonator image 4. (TRIPwire Document: Bomb Making Discussion Forum)

The profile page is the basic unit of information in the *TRIPwire* portal, designed to present data in a concise manner.



Text fields detail information on a range of explosive and IED-relevant components.

Graphics and diagrams depict actual terrorist incidents, materials, tactics, and devices.

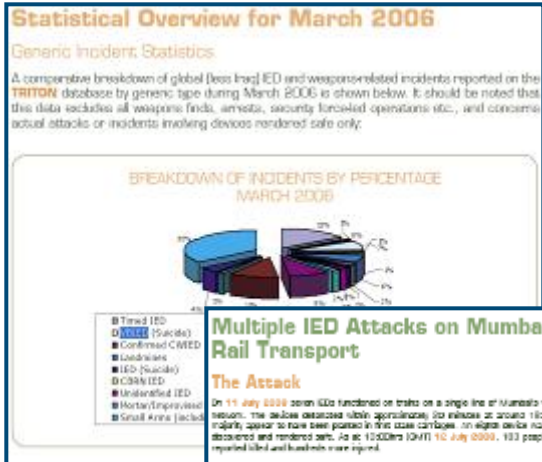
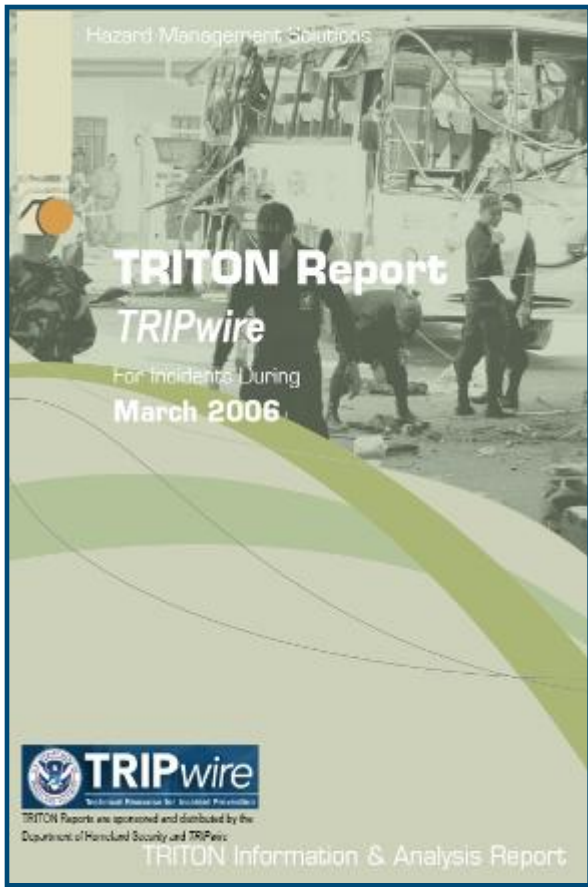
Analysis/Trends provides contextual analysis contributed by DHS subject-matter experts.

# TRIPwire Sources: TRITON Reports

**TRITON is the industry-standard report on international terrorist incidents.**

**TRITON Reports provide a comprehensive overview of IED and terrorist incidents in three formats:**

- Monthly Reports
- Iraq Supplements
- Quick Look Reports



**TRIPwire has exclusive rights to provide TRITON reports to the State and local Bombing Prevention community.**



# TRIPwire Benefits

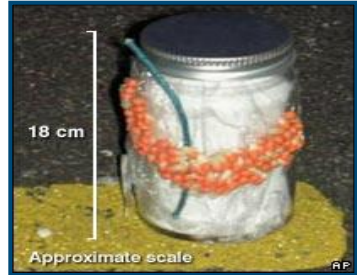
**DHS releases a threat bulletin indicating terrorist interest in using peroxide-based explosives to attack subway systems.**



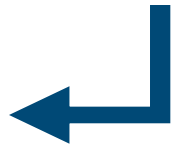
**Transit Officer logs into TRIPwire**



**Studies fact sheets on peroxide-based explosives**



**Accesses device descriptions of peroxide-based IEDs**



**Learns about the terrorist attack against the London Tube utilizing peroxide-based explosives**



**Officer is better prepared to anticipate and identify bombing threats**

# TRIPwire Benefits: Improved Bombing Prevention Knowledge

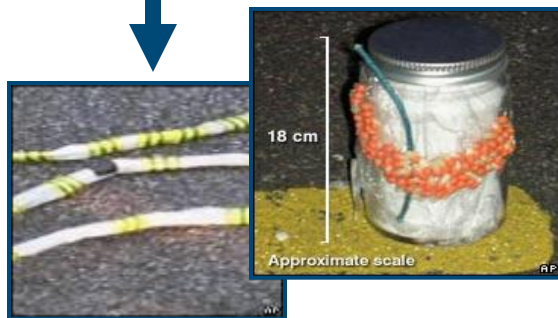
The transit officer studies *TRIPwire* profiles to learn about terrorist TTPs for the manufacture of explosives and IEDs:



Learns to be aware of dual-use precursor chemicals such as acetone and hydrogen peroxide to make peroxide-based explosives.

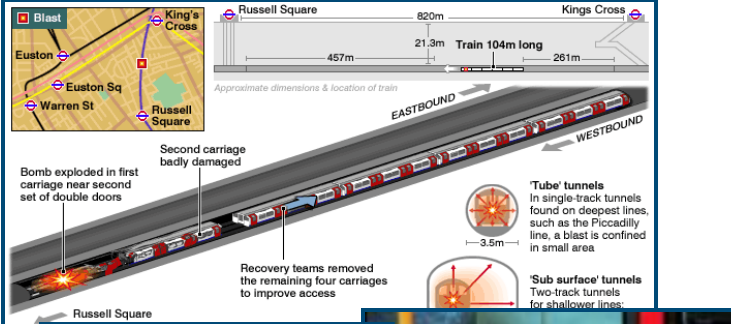


Discovers it is a highly sensitive white powdery substance with a strong acidic odor.



Encounters actual terrorist instructions for IEDs using peroxide-based explosives.

# TRIPwire Benefits: Improved Bombing Prevention Awareness



The officer studies tactics used in previous international terrorist incidents targeting subway systems.



Feedback from a member of the Chief William Bratton of the LAPD and user of *TRIPwire*:

*"TRIPwire is exactly the kind of support local law enforcement needs on the federal level to combat and to interdict terrorism,"*

*"TRIPwire is an example of using technology to tie the various and mostly separate law enforcement agencies together into a seamless crime web."*

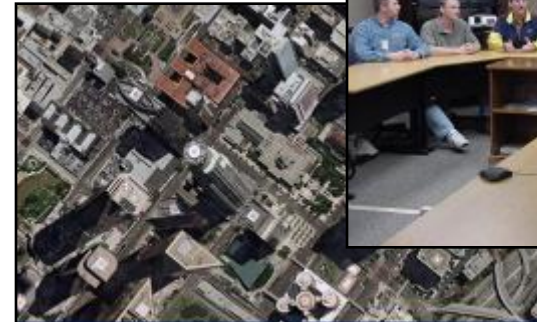
The transit officer has improved knowledge and awareness of precursor materials, explosives, and possible IEDs in the form of bags or packages left on trains or at major transfer stations.



# OBP Programs: Multi-Jurisdiction Planning

***Multi-Jurisdiction Improvised Explosive Devices Security Plans (MJIEDSPs) assist high-risk, multi-jurisdiction urban environments ensure efficient, effective responses to bombing threats or incidents***

- An effective response to bombing threats is not just the responsibility of bomb squads—it requires the coordination of many different disciplines and public safety organizations.
- The MJIEDSP process assists high-risk urban areas in developing thorough IED Security plans that efficiently integrate assets and capabilities from multiple jurisdictions and emergency service sectors.
- OBP works closely with each MJIEDSP community to inform them about planning and operational requirements for IED incident response, culminating in the development of a NRP and NIMS compliant multi-jurisdiction plan.



## Multi-Jurisdiction IED Security Planning Guide

March 2007

Pre-Decisional Draft 03/21/07  
For Internal Deliberative Use  
Not for Distribution



Homeland  
Security



Homeland  
Security

TRIPwire Overview  
FOR OFFICIAL USE ONLY



# National Campaign Event: Philadelphia, September 20<sup>th</sup>, 2007

DHS Secretary Michael Chertoff, Mayor John Street, Police Commissioner Sylvester Johnson, and PA State Homeland Security Advisory James Powers participated in the largest National Campaign Event to date at City Hall in Philadelphia.

- Secretary Chertoff delivered keynote remarks highlighting recent DHS effort to address IEDs, including Office for Bombing Prevention, the national strategy for IEDs, and the use of grant funding to assist State and local responders.
- Secretary Chertoff and the other dignitaries viewed a demonstration of TRIPwire and the equipment and resources brought by local bomb squads and explosives detection canine teams.
- Over 100 law enforcement and security personnel participated in IED awareness training held at the University of Pennsylvania.
- OBP conducted capability analysis for select local bomb squads to gauge the region's level of preparedness for IED threats.
- The event was featured in worldwide and national press



**Homeland  
Security**

TRIPwire Overview  
FOR OFFICIAL USE ONLY



# Accessing *TRIPwire*

To register for a *TRIPwire* account go to [www.tripwire-dhs.net](http://www.tripwire-dhs.net)

**TRIPwire**  
Technical Resource for Incident Prevention

**LOGIN**

Username:

Password:

[Register for Account?](#)

WARNING: This system is for the use of authorized users only. Individuals using this computer system without authority, or in excess of their authority, are subject to having all of their activities on this system monitored and recorded by system personnel. In the course of monitoring individuals improperly using this system, or in the course of system maintenance, the activities of authorized users may also be monitored. Anyone using this system expressly consents to such monitoring and is advised that if such monitoring reveals possible evidence of criminal activity, system personnel may provide the evidence of such monitoring to law enforcement officials.

- Click “Register for Account?”
- Complete electronic registration form and click “Submit”
- The *TRIPwire* Help Desk will contact you to confirm the status of your account

The *TRIPwire* Help Desk is open **Monday through Friday, 9 AM until 6 PM, Eastern Standard Time**. Inquiries made outside of help desk hours will be answered the next business day.

**Phone: (866) 987-9473**

**Email: [Help@tripwire-dhs.net](mailto:Help@tripwire-dhs.net)**



**Homeland  
Security**

*TRIPwire* Overview  
FOR OFFICIAL USE ONLY







Homeland  
Security

**Detica DFI** 

**Christopher Kenly**  
Associate, Counterterrorism

**DeticaDFI**  
1717 Pennsylvania Ave NW  
Washington, DC 20006  
(202) 452-6900  
[ckenly@deticadfi.com](mailto:ckenly@deticadfi.com)



Homeland  
Security

*TRIPwire* Overview  
FOR OFFICIAL USE ONLY





# Homeland Security



Homeland Security

*TRIPwire* Overview  
FOR OFFICIAL USE ONLY



# National Campaign

OBP is currently conducting an ongoing series of National Improvised Explosive Device (IED) Prevention and Awareness Campaign events throughout the 2007-2008 calendar year.

The ***National IED Prevention and Awareness Campaign*** is designed to:

- Emphasize the IED threat and the importance of the bombing prevention mission;
- Provide information to the public and media about role DHS is playing with Federal, State, and local partners to combat IEDs; and
- Educate stakeholders on resources available to assist them via DHS or partner agencies.



Homeland  
Security

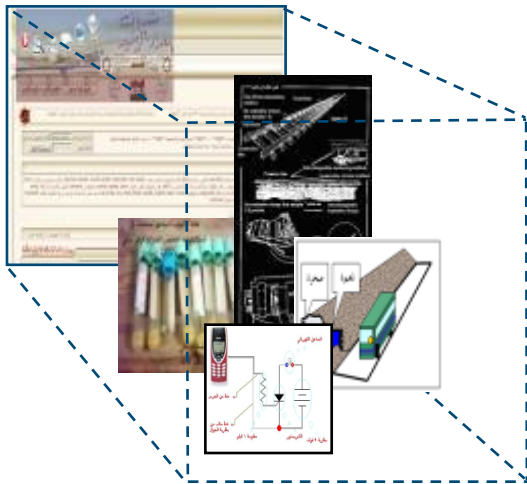
TRIPwire Overview  
FOR OFFICIAL USE ONLY



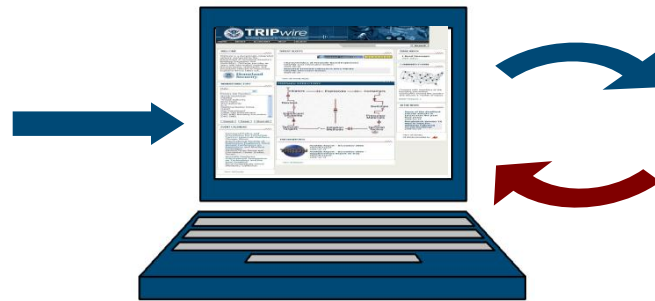


# National Campaign and TRIPwire

The Campaign's message of information sharing is underscored by *TRIPwire*. *TRIPwire* is an online network for State and local law enforcement officials tasked with bombing prevention to discover and share the technologies, tactics, and procedures (TTPs) of terrorist IED use.



*Collected Materials*



*Online Analysis and  
Collaboration Network*



*Operators*

Community forums, secure e-mail, and discussion threads allow field operators to share experiences and information that promote more accurate situational awareness. *TRIPwire* demonstrations and enrollment is held at each campaign event to encourage IED prevention and awareness-related information sharing.



**Homeland  
Security**

*TRIPwire* Overview  
FOR OFFICIAL USE ONLY



# National Campaign Event: Los Angeles, November 3<sup>rd</sup>, 2006

OBP publicly launched *TRIPwire* and held a National Campaign event with the Under Secretary for Preparedness, LAPD Chief William Bratton, and Mayor Antonio Villaraigosa at the LAPD Training Academy.

- *TRIPwire* was unveiled to the public in a press conference outside LA City Hall that received national media attention.
- OBP conducted *TRIPwire* demonstration sessions and an IED tabletop exercise with representatives from the LA Bomb Squad, Canine Units, Fire Department, HazMat Unit, Counter Terrorism Unit, and SWAT.
- The Under Secretary highlighted the importance of information sharing and interagency coordination in countering the IED threat.
- The success of the event emphasized the critical need for partnerships and coordinated bombing prevention efforts between Federal, State, and local stakeholders.



**Homeland  
Security**

*TRIPwire* Overview  
FOR OFFICIAL USE ONLY



# National Campaign Event: Nashville, January 8<sup>th</sup>, 2007

This National Campaign event included the Deputy Assistant Secretary for Infrastructure Protection, Tennessee Homeland Security Director Dave Mitchell, and Tennessee Bureau of Investigation (TBI) Director Mark Gwyn at TBI Headquarters.



- OBP conducted *TRIPwire* demos and IED tabletop exercises with representatives from the Nashville Bomb Squad, K-9 EOD, HazMat Unit, Military, and ATF.
- Director Mitchell highlighted the importance of information sharing and interagency coordination in countering the IED threat.
- The event was attended by key stakeholders in IED prevention from around Tennessee, including all bomb-squad commanders in the State.
- The event received significant media coverage and emphasized the importance for information sharing and IED awareness for the general public.



**Homeland  
Security**

*TRIPwire* Overview  
FOR OFFICIAL USE ONLY





# National Campaign Event: Raleigh, July 23<sup>rd</sup>, 2007

Congressman David Price and Assistant Secretary for Infrastructure Protection Robert Stephan hosted this all-day National Campaign event in Raleigh, NC.

- Rep. Price and Assistant Secretary Stephan delivered remarks to the press highlighting the importance of adequate equipment and training for first responders, information sharing between levels of government, and public awareness to prevent terrorist IED plots.
- Over 240 law enforcement and private sector security personnel participated in IED awareness training held at the RBC Center in Raleigh.
- OBP conducted capability analysis for all bomb squads in the state of NC to gauge the State's level of preparedness for IED threats.
- The event was featured in local and regional press including The News & Observer and various national broadcast news affiliates including regional ABC and CBS stations.



# OBP Programs: Capabilities Analysis and Enhancement

The *National Capabilities Analysis Database (NCAD)* is currently gathering comprehensive data on our State & local first responders to assess their operational IED security capabilities

- NCAD provides an analysis of bomb squad, explosive detection canine unit, SWAT, and public safety dive team IED security operational capabilities and readiness throughout the United States using a task-based model of assessment.
- Results are integrated into the comprehensive NCAD database to help establish and measure progress toward IED security-related national preparedness goals.
- The NCAD program is closely linked to the Multi-Jurisdiction IED Security Plan (MJIEDSP) program, which combined provide DHS officials with an accurate, data-driven decision support tool for national IED security capabilities enhancement.



Homeland  
Security

TRIPwire Overview  
FOR OFFICIAL USE ONLY



# NCAD Results

**To date, NCAD has surveyed over 120 public safety bomb squads and 12 public safety dive teams, providing a snapshot of our national preparedness**

- NCAD gap analysis results provide justification for equipment and training investments
- NCAD gap analysis results inform the development of technology requirements and roadmaps
- Sample gap analysis from NCAD:
  - 96% of squads surveyed have electronic countermeasures (ECM) capability;
  - 74% of squads surveyed have no nuclear or radiological identification capability;
  - 58% of squads surveyed have no secure voice capability; and
  - 50% of squads surveyed have no capability to work in low or zero light.



**Homeland  
Security**

*TRIPwire* Overview  
FOR OFFICIAL USE ONLY

