Global IED TTP: Understanding the Threat

CTID

The IED case studies illustrated in the **Global IED TTP: Understanding the Threat** product are general representations of tactics, techniques, and procedures (TTP) in complex operational environments (OEs). When open source information is limited in the details for a particular IED case study, the Complex Operational Environment and Threat Integration Directorate (CTID) applies threat functional analysis of tactics and techniques to portray probable planning and conduct of an attack.

(U) Cover photo: [US Soldiers destroy two recovered improvised explosive devices outside of Combat Outpost Sabari in Afghanistan's Khost province](), 31 July 2012. US Army photo by Sgt. Kimberly Trumbull.

(U) CONTENTS

(U) PURPOSE

- (U) This study was developed in support of the US Training and Doctrine Command (TRADOC) Counter-Improvised Explosive Device (C-IED) Campaign Plan, 17 December 2012.

- (U) The Campaign Plan, prepared by the Directorate for C-IED, US Army Maneuver Support Center of Excellence (MSCoE), requested that TRADOC G-2 support the annual production of a study to assist the US Army training community in understanding the IED threats in various operational environments.[1]

- (U) MSCoE specifically requested that the study focus on how threat actors are employing IEDs across the globe.

- (U) This study provides tactics, techniques, and procedures (TTP) case studies of IED attacks. Each case study presents the TTP and associated key operational environment (OE) conditions that helped to facilitate the attack.

(U) EXECUTIVE SUMMARY

- (U) IEDs will remain a threat across multiple OEs for the foreseeable future.

- (U//FOUO) IEDs are the weapon of choice for various threat actors across the globe.[2]

- (U) All of the Combatant Commands (COCOMs) have experienced some type of IED attacks over the past two years.

- (U) IED construction and employment knowledge and lessons learned will continue to migrate from OE to OE.

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(U) SELECTED IED CASE STUDY LOCATIONS

(U) SCOPE AND PURPOSE

(U) This study is intended to provide the US Army training community with an understanding of current global IED threat TTP. This understanding is achieved through a discussion of selected IED TTP found across various OEs. As this study shows, IEDs are being employed by multiple threat actors across a wide variety of OEs.

(U//FOUO) The study does not include a discussion of IED events in Afghanistan and Iraq. Numerous studies and resources exist to help educate the Army on these TTP. IEDs are a current threat and will likely remain a key weapon of choice for various threat actors outside of Afghanistan and Iraq. For example, more than 1,000 IED attacks happen outside of Afghanistan each month.[3] A quick review of IED attack locations in October 2013 illustrates the range of OEs currently witnessing IED attacks:[4]

- Pakistan
- Kenya
- Ethiopia
- Libya

- Syria
- Lebanon
- Yemen
- Kosovo

- Russia
- India
- Burma
- Colombia

(U) IEDs will continue to be used against deployed Army forces and pose a threat to the domestic security of the US.

(U) Study Caveats

(U) This study is not a rigorous statistical analysis of IED attack data as various sources publish this information on a monthly basis.[5] One of the requirements of the TRADOC C-IED Campaign Plan is to provide a document to facilitate a better understanding of the actual TTP and not a simple regurgitation of attack statistics. This study does, however, use some statistical data to help inform the discussion of IED activity in each COCOM and to set the stage for the discussion of each case study.

(U) This study also does not discuss the technical categorization or components of the IEDs used in each case study. Again, there is a plethora of publications dedicated to providing detail on initiators, switches, main chargers, power sources, and containers. This study is constructed to provide TTP understanding across COCOMs to achieve the goal of understanding the IED threat in various OEs.

(U) METHODOLOGY

(U) This study was conducted using open-source intelligence (OSINT) tools and techniques. Each case study was developed from information presented in open press reports to include foreign press sources. Multiple sources were used to construct each case study. TRISA-CTID will provide a detailed source list for each case study upon request.

(U) Statistical Approach

(U) To determine the most active OEs within a given COCOM over the study period (July 2011-July 2013), analysts utilized the open-source reports contained in JIEDDO's RAPID Weekly News Updates. Analysts examined each report to determine if an IED event had occurred and, if so, in which OE. Results were then aggregated and calculated for each COCOM. Analysts chose case studies to provide the reader with a sense of the most common TTP per COCOM or to highlight new or interesting TTP. Obviously, the TTP discussion is not a reflection of all the TTP per COCOM. It does, however, provide an understanding of the most common TTP.

(U) The authors freely admit that this method has several shortcomings. Working with a sample of events automatically introduces the possibility that the sample used was not representative of all IED events in general. For this particular study, the largest issue is selection bias.

(U) Selection bias occurs when a sample is chosen in a non-random manner. Even the most carefully-crafted method for choosing a non-random sample can introduce a bias, where one particular type of event is more likely to be selected than another. In this study, the IED incidents examined underwent selection bias twice: at initial reporting and at point of inclusion.

(U) In order for an event to be included in this study, it first had to be reported in open-source news. This would require that (1) a local news presence or tie to a non-local news reporter existed; (2) the

media learned of the incident; (3) the media decided that the event was significant enough to report; and (4) the local government did not suppress news of the incident. This first step would result in a higher percentage of events being reported in countries with good communications infrastructure, an open information environment, and relatively few incidents overall, such as countries in Western Europe. A lower percentage would be reported in countries with poor infrastructure, a closed media, or where events are such a common occurrence that they are deemed not newsworthy, such as South Sudan, North Korea, or Colombia.

(U) Once an IED event was reported in open-source news, it then had to be included in the RAPID Weekly News Update. This would require that (1) the report was placed on the Internet; (2) it was located on a website that a JIEDDO analyst reviewed; and (3) it was in a language that the analyst could read. This step would favor reports coming from countries with a strong Internet news presence, well-known media sources, and English-language reporting.

(U) One example of selection bias in this study can be seen by examining the results for NORTHCOM. An examination of the Weekly Updates gave the following percentages: 87% of events occurred in the US, 8% in Mexico, and 5% in Canada. However, an examination of the incidents reveals that the scope of events reported differs vastly. For example, so-called "bottle bombs" were frequently reported by the US media. However, the media in Mexico – where the daily news is filled with reports of the latest atrocities carried out by drug cartels – may not have believed that a bottle bomb set off by a local youth as a prank was worth the time and effort to report. Incidents that made it into the Weekly Report from Mexico were more severe, and were primarily vehicle-borne IEDs (VBIEDs).

(U) Case Study Presentation

(U) Twenty-eight case studies were selected for discussion to provide exposure to representative TTP currently being used in each COCOM. Each case study is introduced with a discussion of its selection methodology. Case studies will not provide an all-inclusive discussion of the IEDs across each OE. RAPID monthly IED attack summaries are an excellent source for this type of information.[6]

(U) If details were lacking in the open-source reporting, TRISA-CTID subject matter experts conducted functional analysis of the threat actor's tactics and techniques to portray probable planning and attack details for the **IED ATTACK TTP** discussion. Threat or opposing force (OPFOR) doctrinal terminology from TRADOC's Training Circular 7-100 Series was applied when possible. For example, if it was clear that a threat actor used an *assault* or *ambush* team, then the TTP discussion uses such terms. *(See Terminology section for definitions of these terms.)*

(U) Each case study presents a discussion of the **KEY OE CONDITIONS** that helped create, assist, or facilitate the attack or conditions leading to the attack. Understanding the OE conditions through analysis across the political, military, economic, social, information, infrastructure, physical environment, and time (PMESII-PT) operational variables is critical to understanding the nature of the threat and the TTP used in each case. Again, the conditions selected are not all inclusive—but do help the reader grasp the importance of understanding each OE as it relates to the IED threat.

(U) Terminology

(U//FOUO) The *Weapons Technical Intelligence (WTI) Improvised Explosive Device Lexicon* defines an IED as "a device placed or fabricated in an improvised manner incorporating destructive, lethal, noxious, pyrotechnic, or incendiary chemicals and designed to destroy, incapacitate, harass, or distract. It may incorporate military stores, but is normally devised from non-military components."[7] Simply stated, IEDs are makeshift weapons using military and commercially available materials to attack an enemy. The following *WTI IED Lexicon* definitions are used throughout this study.

- *(U//FOUO) Air-Borne IED (ABIED)*: An IED delivered by or concealed in an air-based vehicle.
- *(U//FOUO) Animal-Borne IED*: An IED delivered to a target by means of an animal.
- *(U//FOUO) Person-Borne IED (PBIED)*: An IED worn, carried, or housed by a person, either willingly or unwillingly.
- *(U//FOUO) Radio-Controlled IED (RCIED)*. A switch initiated electronically by wireless means consisting of a transmitter/receiver.
- *(U//FOUO) Secondary IED*: An additional IED used to attack individuals or vehicles after the initial event.
- *(U//FOUO) Suicide IED*: An IED initiated by the attacker at a time of their choosing in which they intentionally kill themselves as part of the attack, or possibly to deny capture.
- *(U//FOUO) Suicide Vehicle-Borne IED (SVBIED).* An IED delivered in a ground-based vehicle by a suicide attacker, who detonated the IED while still in the vehicle.
- *(U//FOUO) Vehicle-Borne IED (VBIED):* An IED delivered by or concealed in a ground-based vehicle.
- *(U//FOUO) Victim-Operated IED (VOIED)*: A type of switch that is activated by the actions of an unsuspecting individual. These instruments rely on the intended target to carry out some form of action that will cause it to function.

(U) The following threat tactics definitions are from TC 7-100.2, *Opposing Forces Tactics*.

- *(U) Ambush element:* The ambush element of an ambush has the mission of attacking and destroying enemy elements in the kill zone(s). The ambush element conducts the main attack against the ambush target.
- *(U) Assault element:* The assault element is the action element of an opposing force (OPFOR). It maneuvers to and seizes the enemy position, destroying any forces there*.*
- *(U) Support element:* The support element provides the assaulting detachment with one or more of the following:
  - (U) Command and control
  - (U) Combat service support
  - (U) Supporting direct fire (such as small arms, grenade launchers, or infantry antitank weapons)
  - (U) Supporting indirect fire (such as mortars or artillery)
  - (U) Mobility support

(U) The Way Ahead

(U) *Global IED TTP: Understanding the Threat* is a living document. It will be reviewed and updated on an annual basis to ensure that a representative sample of global IED TTP is available to the US Army training community for training, education, and exercise events. Case study suggestions are welcome and should be sent to TRISA-CTID for possible inclusion in upcoming versions.

(U) GLOBAL IED OVERVIEW

(U) IEDs are not limited to the OEs of Afghanistan and Iraq. Despite the fact that the vast majority of Department of Defense (DoD) reporting is focused on these two OEs, IEDs are a global phenomenon. This trend will not disappear when US forces depart Afghanistan.

(U) A review of global IED incidents confirms that IEDs are a "weapon of choice for threat networks globally."[8] The North Atlantic Treaty Organization (NATO) and the Institute for Defense Analysis concluded that between "January 2011

> (U) "**IEDs will remain one of the most accessible weapons available to terrorists and criminals to damage critical infrastructure and inflict casualties**."
>
> *United States White House, "Countering Improvised Explosive Devices." 26 February 2013.*

and October 2012 there were 12,461 IED incidents globally, resulting in 27,169 casualties in 121 countries. Sixty-seven per cent of these attacks were conducted by 51 regional and transnational threat networks, while the other 33% were carried out by unknown perpetrators."[9] A more recent JIEDDO report reveals that from August 2012 to August 2013 over 14,500 IED incidents occurred globally. The most active OEs outside of Afghanistan and Iraq in August 2013 were: **Pakistan**, **Somalia**, **Colombia**, and **India**.[10] Each of the US Combatant Commands witnessed IED attacks over the course of 2013. IED use will most likely persist well into the future and continue to pose a serious threat to both deployed US forces and US national interests across numerous OEs to include the US.

(U//FOUO) IEDs are an attractive weapon given that they are inexpensive, easy to construct, easy to conceal, and easy to use.[11] RAPID reports that "the most-common IED, the type triggered by a person's weight or a vehicle, cost $416 to build."[12] A suicide attack with an IED costs "between $1,200 and $11,710," and a car or truck bomb, depending on the size of the vehicle, runs "from $6,076 to $12,708."[13] Homemade bombs like the ones used at the Boston Marathon can be constructed using very inexpensive household items. One does not need access to sophisticated technologies to conduct a successful IED attack. In fact, a recent Center for Naval Analysis report found that "technical innovation was observed in OEF and OIF; however, it did not drive the campaigns, which generally relied on widely available legacy technologies. The threat persisted regardless of the technical sophistication of the insurgents."[14] Threat actors will use whatever their OE or regional/global connections provide. IEDs have the added benefit of being an inexpensive and extremely adaptive tactical weapon that has the potential for strategic impact.

(U) Ease of construction also favors IED perpetrators. Easily accessible common local materials can be transformed into deadly IEDs. Chemicals, fertilizers, gasoline, nails, bolts, and cooking pots can all be fashioned into a weapon. Creative adversaries will always find a way to cause destruction and death. IEDs simply lend themselves to adaptation and creativity more than a more sophisticated conventional weapon. And, certainly, the TTP used in IED attacks will evolve and adapt as the threat actors "seek to overcome countermeasures."[15]

(U//FOUO) Modern information and communications technologies (ICT) have empowered threat actors and aided adaptation and TTP sharing. Robust and effective threat networks have been established to transfer and share TTP, funding, and materials necessary for successful IED attacks.[16] *(See TTP Migration for more detail.)*

(U) IEDs can be used across all levels of warfare. Strategically, IEDs can be employed to attack or influence national will or to instill fear in both adversaries and their allies. IEDs can be used to disrupt operational mobility and create a perception of insecurity to those conducting missions in an OE. And tactically, IEDs can be used to attack/destroy both personnel and key infrastructure at a time and location determined by the threat.

(U) Threat Actors and IEDs

(U) IEDs remain the primary weapon for those seeking to employ relatively uncomplicated and inexpensive options for inflicting casualties, damage, and fear.

(U) A range of threat actors use IEDs. The vast majority are non-state actors such as insurgents, terrorists, guerrillas, and criminal organizations. Motivations range from the desire to weaken or defeat a specific political authority, to typical criminal activities, to support of ideological agendas. State actors characteristically do not employ IEDs as a common practice. States, however, can use proxies (e.g. Iran and Hezbollah) to conduct IED attacks. Any time US forces are operating in a hostile OE, IEDs will be part of the threat's arsenal.

(U) The potential for homegrown extremist groups or individuals to employ IEDs on US soil is increasingly likely. Threat actors will continue to evolve, hone their IED skills, and adapt technologies for the foreseeable future. IEDs are relatively easy to construct and will likely be used by a wide range of threat actors against both domestic targets and US forces operating in various OEs.

(U) Combatant Command (COCOM) IED TTP

(U) Selected case studies provide coverage of representative TTP currently being used in each COCOM. Each case study is introduced with a discussion of its selection methodology. Case studies will not provide an all-inclusive discussion of the IEDs across each OE. (RAPID monthly IED attack summaries are an excellent source for this type of information.[17]) They do, however, provide an overview of the most significant and representative IED incidents to provide TTP detail for use in training and education events across the US Army.

(U) US NORTHERN COMMAND

(U) Most active NORTHCOM OEs. The majority of IED events within NORTHCOM occurred in Mexico and the United States. The construction of IED devices tended to be generally simplistic and yielded a smaller explosive denotation as compared to IEDs prevalent in other COCOMs, specifically CENTCOM. There was also a lower success rate for the IED mechanism actually functioning and the ability to cause desired casualties. As was true of all COCOMs, NORTHCOM IEDs were typically constructed from accessible materials found in the OE. For example, threat actors with access to fertilizers or other materials used in agriculture activities would incorporate such materials into their IED arsenals. Threat actors living near or with access to chemicals, explosives, and materials used in the mining industry would also benefit from such access and incorporate those components into their IED construction. Developing an understanding of each OE facilitates an understanding of potential IED TTP possibilities. Insights into the composition of IEDs can be found by exploring what material access each OE provides.
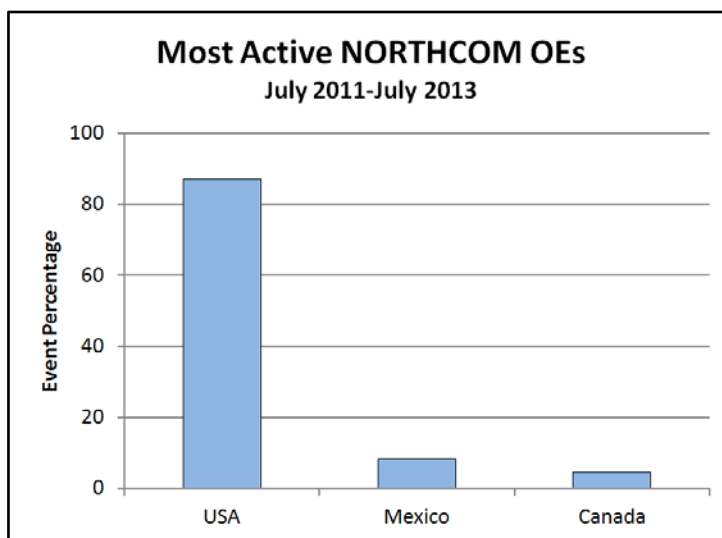
Most Active NORTHCOM OEs
July 2011-July 2013

(U) Most common IED targets. The most common IED targets in NORTHCOM were drug trafficking organizations (DTOs) targeted by rival DTO members or affiliates, Mexican law enforcement and military personnel, infrastructure, and civilian noncombatants.

(U//FOUO) Overview of attacks. IEDs in Mexico were typically constructed as pipe bombs, homemade grenades, and VBIEDs.[18] In the US, pipe bombs were the norm. IED constructional designs tended to range from small and simplistic to moderately complex. However, sophisticated IEDs with military-grade explosives have been used by the Mexican DTO Los Zetas. The Department of Homeland Security concluded that "the use of
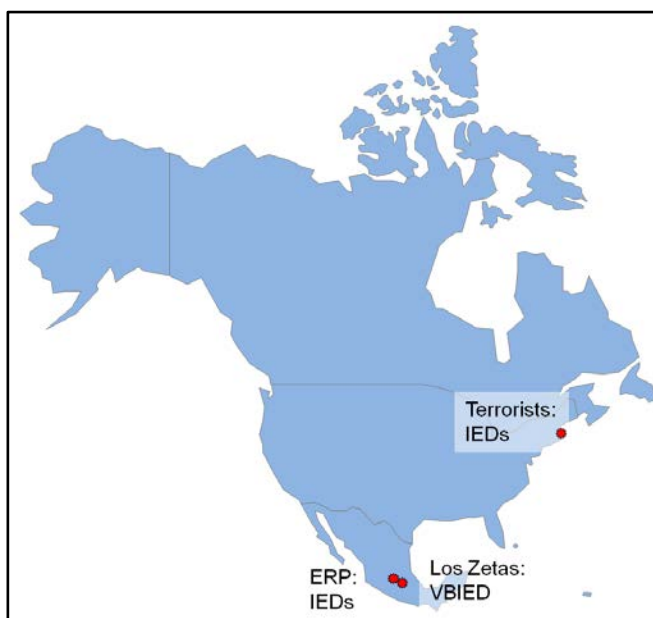
IEDs represents the most likely domestic threat to the United States, our citizens, and way of life."[19]

(U) Threat actors using IEDs. There were several different threat actors that were responsible for the majority (not considering pranks or accidents) of IED attacks across NORTHCOM. These groups were **DTOs**, **terrorists**, **insurgents**, **criminals**, **anarchists**, and **extremist political organizations**. DTOs tended to target law enforcement or anyone that could have a potential negative impact on their nefarious activity. However, the Mexican DTOs were careful not to make the same mistakes with large, deadly VBIEDs as the Colombian DTOs in the 1980s. These larger attacks produced high casualties and led to public outcry. In addition, insurgents in Mexico attacked energy infrastructure in order to disrupt the Mexican economy and draw attention to their agenda.

(U) Even though most of these groups have different ideologies, a few factors remained consistent. IEDs were relatively inexpensive and easy to create through the use of information on the Internet and from other like-minded individuals. Groups used IEDs as a vehicle to send a clear message; even if the IEDs were not deadly, they still created fear and acted as a warning.

(U) Three case studies were selected for NORTHCOM: two in Mexico and the 2013 pressure cooker IED attack in Boston, Massachusetts. Targets across the case studies ranged from infrastructure to civilians at a public event. These case studies represent typical IED attacks seen in NORTHCOM over the past several years.

(U) NORTHCOM CASE STUDY 1: IED ATTACK ON INFRASTRUCTURE IN MEXICO

(U) This event illustrates an IED attack targeting energy infrastructure. This TTP was common across various OEs in NORTHCOM as well as Yemen and Nigeria. This attack provides an excellent example of a successful IED attack against critical energy infrastructure.

(U) **Who: The People's Revolutionary Army (ERP)**

(U) **Where: Guanajuato, Mexico**
      20.553663N 101.125503W
      20.588820N 100.390062W

(U) **When: 05 JUL 07 – 10 JUL 07, times unknown**

(U) **Targets: Infrastructure (natural gas/crude oil pipelines and valves) of the state-owned Mexican Petroleum Company (PEMEX)**

> *(U//FOUO) Threat Actor Profile:* The ERP first appeared in Mexico in 1996. Its goal is to overthrow the Mexican government. The group has pledged to work for the establishment of a representative form of government in Mexico. The ERP has conducted IED attacks against critical infrastructure in the past. Most attacks target infrastructure belonging to US and Mexican petroleum companies. **Typical ERP IEDs are command wire**.

ACTION SEQUENCE
1. 5 July 2007. An ERP element rehearsed, prepared, and loaded IEDs in vehicle during darkness.
2. ERP element drove along pipeline near Salamanaca and selected isolated sites to emplace and detonate IEDs.
3. 10 July 2007. An ERP element in a neighboring state conducted operations in or near Querétaro City. Similar reconnaissance of isolated locations along the pipeline confirmed a site for IED attack.
4. ERP element set IED and detonated the IED.

IED Effects:
Infrastructure Damage

(U) IED ATTACK TTP

(U) 5 July 2007

- (U//FOUO) ERP assault team prepared for the attack and rehearsed the plan of attack.
- (U//FOUO) Team loaded the IED into the transport vehicle.
- (U//FOUO) ERP assault team searched for and found isolated locations and set the IEDs.
- (U//FOUO) Two IEDs were placed close to valves on the gas line.
- (U//FOUO) Two IEDs targeting valves on the gas line exploded.

(U) 10 July 2007

- (U//FOUO) Five days later, a third IED exploded on a gas line near the city of Querétaro.
- (U) 10 September 2007 six more explosions occurred. These blasts followed two separate bombings in July that disrupted natural gas for thousands of residents and businesses.

(U) Result

- (U//FOUO) Four states suffered economic loss due to the attack, and the Mexican Industry Association estimated the cost to be $4.6-9.2 million.
- (U//FOUO) The ERP officially claimed responsibility for the attack.

(U) KEY OE CONDITIONS

- (U) POLITICAL: Following the July blast, President Calderon deployed 5,000 troops from an elite military unit to safeguard PEMEX's facilities as well as dam and power plants. PEMEX stepped up aerial surveillance of its 60,000-kilometer pipeline system.
- (U) ECONOMIC: The ERP targeted two different key sections of the gas/oil pipelines five days apart. The assault team had a good working knowledge of the pipelines, security, and explosives allowing them to effectively target and damage the pipeline. It is possible that the perpetrators were local residents or current/prior PEMEX employees.
- (U) INFRASTRUCTURE: Attacks on pipelines are fairly common across Mexico due to the size and scope of the target. It is extremely difficult and resource intensive to secure the entire pipeline.
- (U) INFORMATION: This tactic can easily be shared across ICT among such groups as al-Qaeda, Movement for the Emancipation of the Niger Delta (MEND), and the FARC. All of these groups have planned or conducted IED attacks against critical energy infrastructure (pipelines).
- (U) MILITARY/INFORMATION: Similar ideology and proximity between the FARC and the ERP may have inspired this attack. Even though not reported, FARC advisors may have assisted in coordination and planning for the attack. The FARC may link to the ERP and Mexico's DTOs for logistical purposes.

- (U) ECONOMIC: Economic disparity across Mexico provides for recruitment, bribery, and general dissidence in the population.
- (U) SOCIAL: The population tends to avoid cooperating with authorities.
- (U) INFRASTRUCTURE/ECONOMIC: Explosives are common in support of mining operations across Mexico. Threat actors wishing to obtain such explosives have an environment rich in opportunity. The tracking and accountability of explosives is difficult in Mexico, which also aids threat actors.
- (U) MILITARY/ECONOMIC: The ERP is determined to attack key government assets to include economic assets. These attacks were both embarrassing and costly to the Mexican government.
- (U) POLITICAL/MILITARY: Across NORTHCOM, both right- and left-wing extremist groups tend to target infrastructure (abortion or animal rights organizations).
- (U) MILITARY: In Mexico, law enforcement, military forces, and economic infrastructure are the most common targets of IED attacks.

(U) NORTHCOM CASE STUDY 2: VBIED ATTACK ON LAW ENFORCEMENT IN MEXICO

(U) This event was selected to highlight the details of an effective attack against law enforcement elements. It was specifically effective at drawing the intended target to the IED (also known as a "Come On" attack type). This incident has the potential to migrate to the US or anywhere US forces are deployed. PACOM has recently seen the use of an IED hidden inside a corpse. *(See PACOM CASE STUDY 1 for more information.)* There have been other unrelated but similar cases that used VBIEDs with a small main charge in Mexico where bodies were used as the bait to lure in first responders. The first example of this type of tactic was used by La Linea (the enforcement arm of the Juarez Cartel) on 15 July 2010. The cartel dressed a deceased cartel member as a police officer to attract first responders.

(U) Who: Los Zetas (not confirmed, but highly probable)

(U) Where: Tula, Mexico
       20.035940N 099.346275W

(U) When: 22 JAN 11, time unknown

(U) Target: Mexican law enforcement

(U) Threat Actor Profile: Los Zetas is an extremely violent drug trafficking and transnational criminal organization based out of Mexico that has influence throughout Central America and even into the United States. The organization's main activities revolve around the facilitation of drug trafficking into the United States; other activities include extortion, money laundering, intellectual property theft, and human smuggling. **Los Zetas do not commonly use IEDs. However, they have used RCIEDs in the past.**

ACTION SEQUENCE:

1 Criminal element staged at a safe house. Support element conducted reconnaissance of target area and drove to kill zone with armed VBIED. After conducting rehearsal on site, criminal element called local police.

2 Law enforcement received a call reporting a vehicle with a dead body and dispatched police officers to the scene.

3 Criminal element probably observed law enforcement officers as they arrived at the gas station and reported their approach to the VBIED.

4 A four man team of law enforcement officers walked to the isolated vehicle and started to inspect the vehicle.

5 VBIED detonated (most likely remote detonator or wired trunk) and killed one and injured three officers.

IED Casualty Effects:
KILLED: One policeman
INJURED: Three policemen

Paved Road

Support Element

Security Element

SAFE

Support Element

Gas Station

Civilian Law Enforcement

Vehicle Borne IED

IED

Law Enforcement Officers

Assault Element

Not to Scale

N

(U) IED ATTACK TTP

(U) 22 January 2011

- (U//FOUO) After conducting an area reconnaissance, cartel members staged in a safe house for final IED attack preparation.
- (U//FOUO) The assault element drove to the kill zone with armed VBIED to rehearse and stage.
- (U//FOUO) Assault element member called the police and reported a dead body found in the trunk of an abandoned car by the side of the road.
- (U//FOUO) Four police officers responded to the situation based on an anonymous tip about a corpse in a VW Bora.
- (U//FOUO) Security element was set up to call assault element with news of the police's arrival at gas station close to the attack site.
- (U//FOUO) Police staged at gas station and walked to site of reported car.
- (U//FOUO) As police approached the abandoned car the VBIED exploded.
- (U//FOUO) Los Zetas left a message at the scene as a means of intimidation or retaliation for Mexican law enforcement.
- (U//FOUO) Assault element likely activated the VBIED by an electronic device, such as a cell phone. The trunk could have been wired, but this was unlikely due to the pinpoint target selection and the note found by investigators.

(U) Result

- (U//FOUO) The commanding police officer was killed and three others were wounded.

(U) Related information

- (U) The VBIED was placed in a remote area and the blast was relatively small. It could be concluded that Los Zetas, even though having a brutal reputation for violence, wanted to limit the collateral damage. This could be due to lessons learned from the Colombian cartels' large scale bombing in the late 1980s that ultimately was one of their downfalls and, ironically, began the rise of the Mexican cartels. This small-scale attack sent a clear warning to law enforcement agents that were attempting to hinder Los Zetas' operations.
- (U) Volkswagens are a common vehicle sold in Mexico.
- (U) All pieces of the bomb were easily accessible items for the cartel.
- (U) This police unit had engaged and targeted Los Zetas in previous weeks.
- (U//FOUO) The death of the commander may have been an unexpected coincidence, but that premise is unlikely. Los Zetas may have merely wanted to make an example of that law enforcement element. The group did specifically place the call to that particular unit; however, Los Zetas most likely selected the commander as the target and conducted surveillance to find out how his unit responded to similar calls. Los Zetas hypothetically could have gathered intelligence about the team's TTP and work schedule, and planned the ambush accordingly.
- (U) Los Zetas has a large funding stream and can afford to purchase all types of conventional weapons and to hire highly trained mercenaries to assist in IED attacks.

(U) KEY OE CONDITIONS

- (U) MILITARY: Los Zetas original members were former elite Mexican Special Forces. They are highly trained, and actively recruit from other military sources such as Guatemalan Special Forces, law enforcement agencies, and street gangs.
- (U) MILITARY/INFORMATION: Los Zetas members are familiar with law enforcement/military procedures, skilled at intelligence collection, and trained in unconventional warfare (including explosives). Such skills will assist in the employment of successful IED attacks.
- (U) MILITARY/ECONOMIC: Los Zetas has an immense budget for training and weapons. Its former money-laundering network of proxies used "Hezbollah to facilitate the transportation and laundering of narcotics proceeds."[20]
- (U) ECONOMIC: The economic disparity within Mexico makes it ripe for corruption and cartel recruitment.

(U) NORTHCOM CASE STUDY 3: IED ATTACK IN BOSTON

(U) The Boston Marathon attack was selected to feature a recent successful IED attack on US soil. This event also illustrates how individuals use ICT to learn, prepare, and execute an IED attack. This TTP was simple, effective, and created both direct casualties and general fear across the population for weeks afterward.

(U) Who: Tamerlan and Dzhokhar Tsarnaev

(U) Where: 671-672 and 755 Baylston Street, Boston, Massachusetts
 42.349788N 071.078920W
 42.349270N 071.080797W

(U) When: 151450L APR 13

(U) Target: Civilian noncombatants

(U) Threat Actor Profile: Tamerlan and Dzhokhar Tsarnaev are brothers that exemplify the lone-wolf terrorist typology. They are half Chechen and half Avar and grew up in Kyrgyzstan and Dagestan. By 2003 they immigrated to the US. Around 2008, the brothers started getting more involved with their Islamic religion, ultimately becoming more and more radicalized and were allegedly responsible for the bombing in Boston. **This was the first known IED-related incident for both of the brothers**.
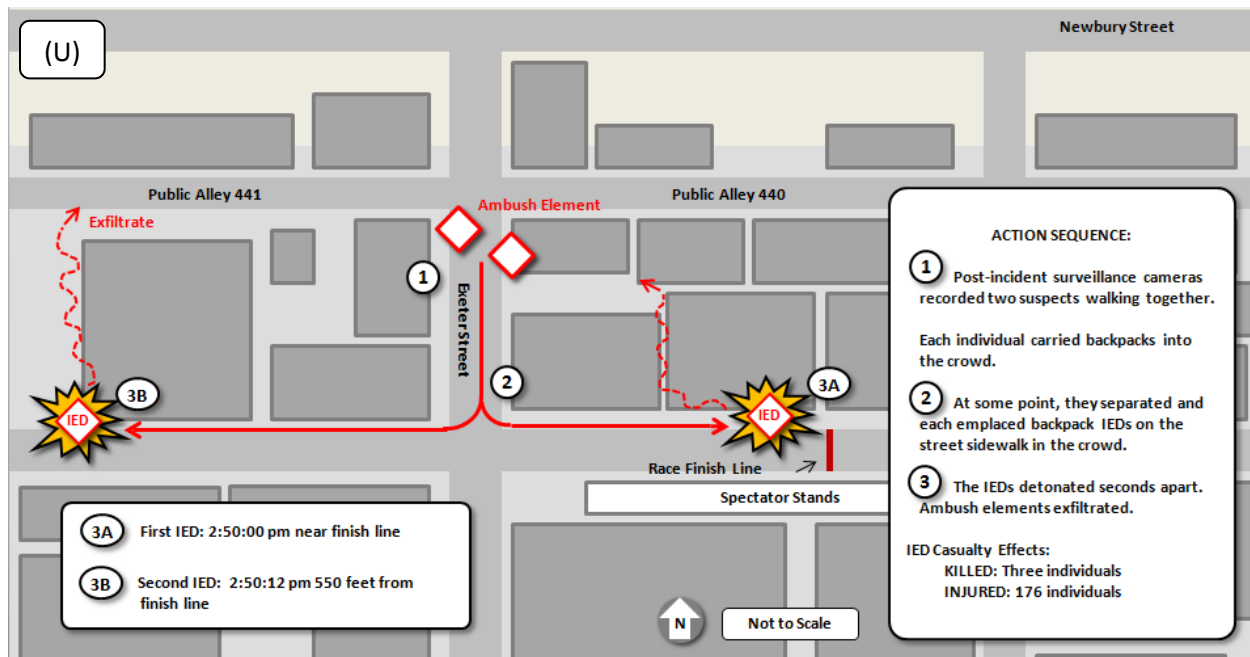
(U) IED ATTACK TTP

(U) Prior to day of attack

- (U) Ambush element likely conducted area reconnaissance of the marathon route weeks prior to the event. Route maps were easily obtained in the open press.
- (U) Ambush element likely reviewed various Internet sites and magazines for information and instructions for building IED using a pressure cooker as the container.

(U) 15 April 2013

- (U) Ambush element walked through crowd of bystanders and emplaced two IEDs along the end of the marathon route. IEDs were most likely concealed in canvas backpacks worn by each ambush element member.
- (U) Ambush element separated to plant the IEDs in different locations. IEDs most likely emplaced inside or next to trash cans.
- (U) The IEDs were detonated 12 seconds apart; the first at the finish line and the second approximately 168 meters before the finish line.
- (U) Ambush element exfiltrated in the chaos that ensued.

(U) 18 April 2013

- (U) In a news conference, the FBI released photographs and surveillance videos showing two suspects each carrying backpacks and walking nonchalantly, but purposefully, in single file formation. The FBI sought the public's help in identifying them.

(U) Related information

- (U) The IEDs were made from easily obtained household items including pressure cookers, nails, and bolts.
- (U) Motive for the attack allegedly due to US military engagements in Afghanistan and Iraq.
- (U) 1 July 2013, Royal Canadian Mounted Police arrested two individuals in British Columbia who were planning to use the same TTP as in the Boston IED attack.
- (U) This incident was easy to execute and will likely migrate globally.

(U) Result

- (U) The IED attack resulted in three fatalities and 176 people injured.

(U) KEY OE CONDITIONS

- (U) SOCIAL/INFORMATION/INFRASTRUCTURE: Target was likely selected since it was a well-known sporting event that provided global coverage and a target-rich environment.

- (U) INFORMATION: Use of Internet for tactical and technical information helped to empower the perpetrators.
- (U) INFRASTRUCTURE: The street construction, finish line, and street barrier system provided a target rich environment with good line of sight and adjacent to escape routes.
- (U) MILITARY: Explosions were detonated 12 seconds and 168 meters apart to likely help create confusion as to how many devices may be involved.

(U) US SOUTHERN COMMAND

(U//FOUO) SOUTHCOM has the highest volume of IED attacks outside of CENTCOM.[21] The most recent *Posture Statement of General John F. Kelly, United States Marine Corps Commander, United States Southern Command Before the 113th Congress Senate Armed Services Committee*, states that "the U.S. Southern Command area of responsibility has the highest improvised explosive devices (IED) activity in the world outside of Afghanistan and Iraq, with Colombia accounting for over 90% of IEDs in the region."[22]

(U//FOUO) **Most active SOUTHCOM OEs.** Colombia accounted for the vast majority of the IED activity in SOUTHCOM.[23] In addition to Colombia, Argentina, Chile, Paraguay, Peru, and Venezuela have all experienced IED activity, albeit at a much lower rate.[24]

Most Active SOUTHCOM OEs
July 2011-July 2013
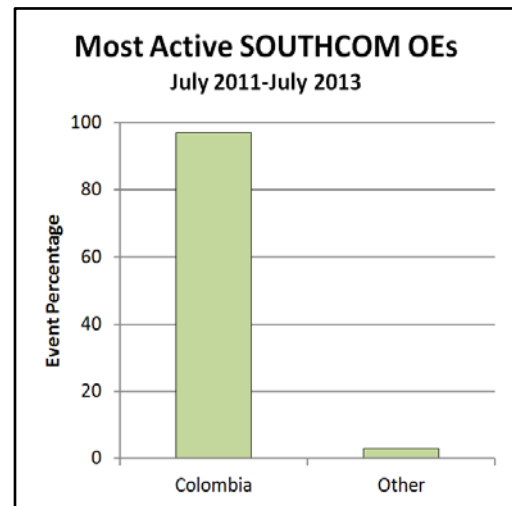
(U) **Most common IED targets.** Most IED attacks in SOUTHCOM targeted police, government infrastructure, and civilian noncombatants.

(U//FOUO) **Overview of attacks.** The majority of IED attacks in SOUTHCOM were complex VOIEDs.[25] Many involved the use of secondary devices, small arms fire (SAF), and ambushes targeting those responding first to the attack. Attacks varied by delivery systems to include motorcycle VBIEDs, package bombs, and sticky bombs. The FARC recently (July 2013) "attacked a police station by strapping a bomb around a dog's body."[26]

(U) **Threat actors using IEDs.** The most active threat actor employing IEDs in SOUTHCOM was the FARC. Although the group has been weakened over the past several years, "the FARC continues to confront the Colombian state by employing improvised explosive devices and attacking energy infrastructure and oil pipelines."[27] Other key actors using IEDs in SOUTHCOM were Ejercito del Pueblo Paraguayo in Paraguay, National Liberation Army (ELN) in Colombia, and the Shining Path (SL) in Peru. Various anarchist groups have also use IEDs across SOUTHCOM.

(U) All case studies were selected from Colombia given that it was the home of the vast majority of IED attacks in SOUTHCOM. These case studies are also representative of regional IED TTP for complex attacks, package IEDs, and IEDs emplaced along roads and near buildings.

(U) SOUTHCOM CASE STUDY 1: COMPLEX VBIED AND IED ATTACK ON POLICE IN COLOMBIA

(U) This incident was selected to exemplify a complex VBIED attack in SOUTHCOM. This is an example of an attack requiring planning and synchronization of a VBIED, an IED, and additional ambush positions. The primary targets were members of a police force. FARC members detonated a truck bomb near the police station in Morales. Properties were damaged and the police called for assistance from the anti-riot police.

(U) **Who: The FARC**

(U) **Where: Morales, Colombia**
          02.7500N 076.6167W

(U) **When: 15 APR 12 – 16 APR 12, times unknown**

(U) **Target: Police and anti-riot officers**

(U) *Threat Actor Profile:* The FARC originated as a Marxist communist party in 1964 that operated in Colombia and Venezuela. After suffering significant losses in conflicts with government forces, the group eventually turned from its Marxist ways and built wealth as a DTO. While the organization's main activities revolve around drug trafficking, it is also involved in kidnapping, hijacking, and ambushes and raids on government, security, political, and military targets. **Typical FARC IEDs: VBIEDs, off-route IEDs, and other emplaced IEDs composed of HME material**.

ACTION SEQUENCE:

① FARC militants exploded a VBIED on 15 April 2012 near the police station in Morales, Cauca. Properties were damaged and police called for assistance from the Escuadrón Móvil Antidisturbios de la Policía, or anti-riot police.

② An IED was emplaced on the anticipated approach route of police response. The FARC security element and ambush element waited for the police vehicle to approach the kill zone.

③ On 16 April 2012, a vehicle with four anti-riot police approached the town from the south and was ambushed with an IED and small arms fire (SAF). One officer was killed and three officers were wounded. FARC elements exfiltrated.

IED Casualty Effects:
KILLED: One Police Officer
INJURED: Three Police Officers

(U) IED ATTACK TTP

(U) 15 April 2012

- (U) Ambush element parked a VBIED near the local police station.
- (U) Ambush element exploded the VBIED in close proximity to the police station.
- (U) Ambush element exfiltrated to a safe location post-VBIED detonation.
- (U) Another ambush element had already placed an IED along a road on an anticipated approach route into the city.
- (U) A security element and an ambush element were positioned with the second IED.

(U) 16 April 2012

- (U) As the police vehicle approached the town the next day, they were ambushed with both an IED and SAF.

(U) Result

- (U) One officer killed, and three others were wounded.

(U) KEY OE CONDITIONS

- (U) POLITICAL: Cauca Valley is politically and economically extremely important to Colombia. "The Cauca Valley produces sugar cane, coffee, potatoes, plantains, and so on. It is one of Colombia's major bread baskets. The area is also the home of significant light industry such as tires, paper/cardboard, and medicine, among others."[28]
- (U) MILITARY: FARC 60th Front, Mobile Column Jacobo Arenas is active in the area and knows how to use IEDs against government infrastructure and police forces.
- (U) INFRASTRUCTURE: This attack severely damaged the Morales police station.

(U) SOUTHCOM CASE STUDY 2: IED ATTACK ON A POLICE STATION IN COLOMBIA

(U) This incident demonstrates the coordinated use of a package IED targeting police and the cooption of unwitting victims as the delivery means. It is also an example of a small insurgent cell's capability to do great damage with a minimal investment.

(U) Who: The FARC

(U) Where: Vistahermosa, Meta, Colombia
          03.1167N 073.7500W

(U) When: 221215L AUG 12

(U) Target: Police station

(U) IED ATTACK TTP

(U) 22 August 2012

- (U) Members of the FARC 27th Front placed a package IED with pressure-release switch and five kilograms of pentolite in trunk of taxi in Granada.

- (U) Approximately 1030 hrs: Taxi driver in Grenada loaded two passengers and received instructions from dispatcher to go to the park in Vistahermosa next to the police station. Drive time is 1 hour, 25 minutes.
- (U) Approximately 1205 hrs: Taxi stopped at corner of Carrera 13 and Calle 9 to deliver the package to a woman on the sidewalk next to the police station. The driver opened trunk and the woman moved to the side of the taxi.
- (U) 1215 hrs: As the driver lifted the package, it exploded.

(U) Result

- (U) Victims included the driver, the woman on the sidewalk, two passengers in the car, and two children playing in the street. The police station was damaged.
- (U) Later investigation determined the target was the police station.

(U) KEY OE CONDITIONS

- (U) POLITICAL: Marxist terrorist organization operating as a drug trafficking organization, openly defying government integrity. Political assassinations and IEDs are common TTP of the FARC.
- (U) MILITARY: FARC 27th Front, commanded by Jairo Mora Gonzales alias "Byron Yepes." 27th Front is known for killing police and extorting the local populace.
- (U) ECONOMIC: Police speculated this attack was retaliation for unpaid extortion money.
- (U) SOCIAL: Police speculated this attack was a terrorist attack against the civilian population of Vistahermosa to force its compliance with FARC activities.
- (U) INFRASTRUCTURE: Police also speculated this attack was actually directed against the nearby police station.
- (U) INFORMATION: The perpetrators had direct information on the taxi company, the dispatcher procedures, and the placement of an unwitting accomplice (the woman receiving the package).
- (U) PHYSICAL ENVIRONMENT: August in Colombia sees much of the population outside going about its business.
- (U) TIME: Lunchtime in Colombia sees citizens moving about from places of work to restaurants, including using the local park near where the device exploded, to eat lunch.

## (U) SOUTHCOM CASE STUDY 3: IED ATTACK ON CIVILIANS IN COLOMBIA

(U) This incident was selected to provide an example of how the FARC used terror tactics through IEDs to both control/influence the civilian population and attempt to influence the political process.

(U) Who: The FARC

(U) Where: Cedeño, Yarumal, Antioquia, Colombia
     06.9500N 075.4167W

(U) When: 030500L JUN 12

(U) Target: Civilian noncombatants
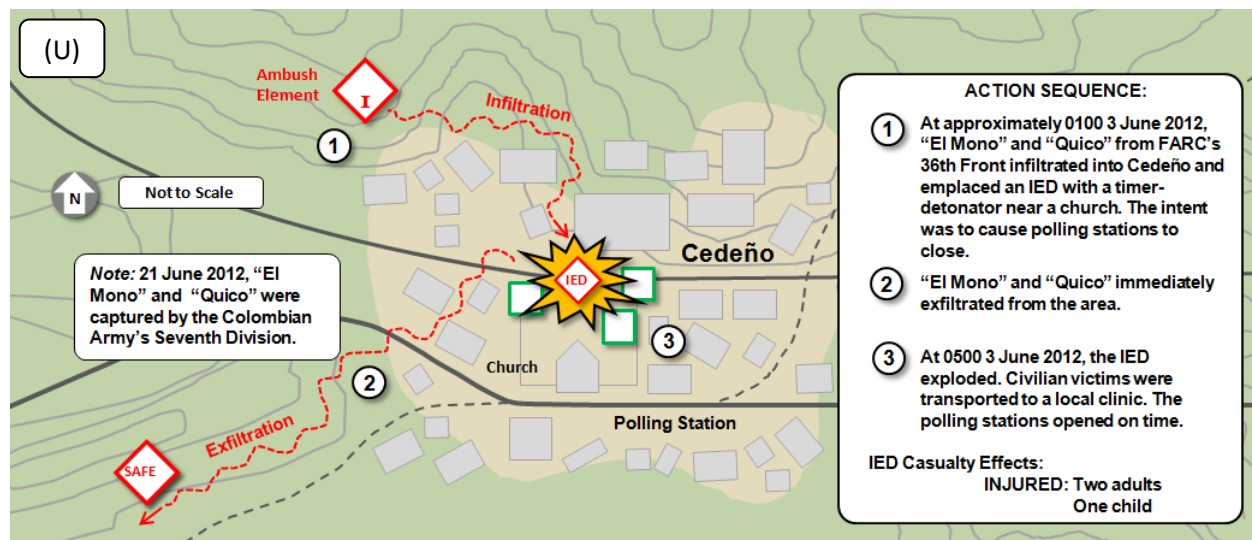
(U) IED ATTACK TTP

(U) 3 June 2012

- (U) Approximately 0100: An ambush element from FARC's 36th Front consisting of two men known as "El Mono" and "Quico" infiltrated the town. The two emplaced an IED with a timer near a church. A polling station was located close to the church.
- (U) Ambush element exfiltrated the area and gathered at a safe location.
- (U) At around 0500, the IED detonated.
- (U) The intent was to cause the polling station to close.

(U) Result

- (U) Two adults and a child were injured. The victims were transported to a local clinic.

- (U) Police and army deployed additional security personnel to the area.
- (U) At 0800 the polls opened despite the IED attack.

(U) 21 June 2012

- (U) "El Mono" and "Quico" were captured by the Colombian Army's Seventh Division.

(U) KEY OE CONDITIONS

- (U) POLITICAL: The intent of this attack was to disrupt local elections and terrorize the local populace.
- (U) MILITARY: FARC's 36th Front is part of the Northwestern Bloc (AKA Ivan Rios Bloc), which has been specifically targeted by the Colombian Army's Seventh Division. The 36th Front leads the entire FARC in the use of explosives.
- (U) ECONOMIC: The FARC in these areas earns its money from drug trafficking, extortion, and gold mining. There is much illegal mining by the civilian populace whom the FARC "taxes."[29]
- (U) INFRASTRUCTURE: The 36th Front routinely targets electricity infrastructure, transport companies, and security forces with IEDs.

(U) US EUROPEAN COMMAND

(U) Most active EUCOM OEs. Between July 2011 and July 2013, over 90% of the EUCOM incidents studied occurred across ten OEs. Leading the top five was Ireland with 15%, followed closely by Northern Ireland, Russia, and Turkey with 14% each. The United Kingdom (UK) followed with 13%. Israel suffered 9% of events during this period, trailed by Greece and Italy at 4% each. Spain and Bulgaria (included in "Other" in the graph below) both incurred 2% of the aggregate.
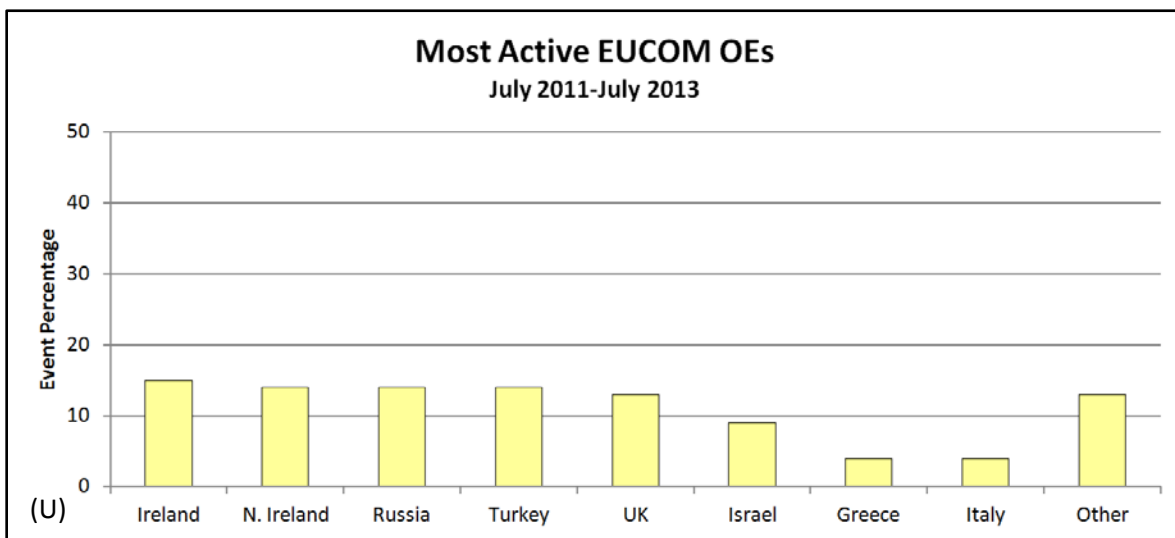

(U) Most common IED targets. The most common target types in EUCOM were military personnel, paramilitary security forces, and civilian noncombatants. This was especially the case in the UK, Ireland, Northern Ireland, and Russia. Some targets were selected for their high-profile publicity value. This was the case with the 1 February 2013 PBIED attack on the American Embassy in Ankara, Turkey, and also with the infamous Hezbollah PBIED tour bus bombing at the Burgas International Airport in Bulgaria, located near a popular Israeli tourist resort area on the Black Sea.

(U//FOUO) Overview of attacks. Most IEDs in EUCOM were PBIEDs, VBIEDs, and postal IEDs.[30] Most attacks were not extremely complex in nature. The exception would be VBIEDs that surfaced in late 2012 in the Syrian civil war and subsequently crossed international boundaries in a spectacular way to adversely affect government authority and civil order in Turkey. The use of such devices, both in the Mediterranean/North Africa (MENA) region and the British Isles, reflected a level of technical sophistication associated either with state-sponsored terrorism or some other highly-developed infrastructure that had ample opportunity to grow and develop over a long period of time. An example of one such actor would be the Irish Republican Army (IRA), which has a historical tradition dating to the early 20th century.

(U) Threat actors using IEDs. The inherent diversity of European cultures and nation-states is mirrored in the assortment of threat actors across EUCOM. In Spain, Bulgaria, Russia, and a few small states that

until 1991 helped comprise the Soviet Union, almost all IED activity was perpetrated by radical Islamists. These included al-Qaeda affiliates, the Caucasus Emirate, and the pro-Chechen Riyad-us-Saliheen Martyrs' Brigade. The same held true for Israel (HAMAS and Hezbollah). Most of the IEDs in Greece could be traced to that country's entrenched and longstanding anarchist movements, including such organizations as the Revolutionary Nuclei, Anti-State Justice, Black Star, and the Conspiracy of Cells of Fire.
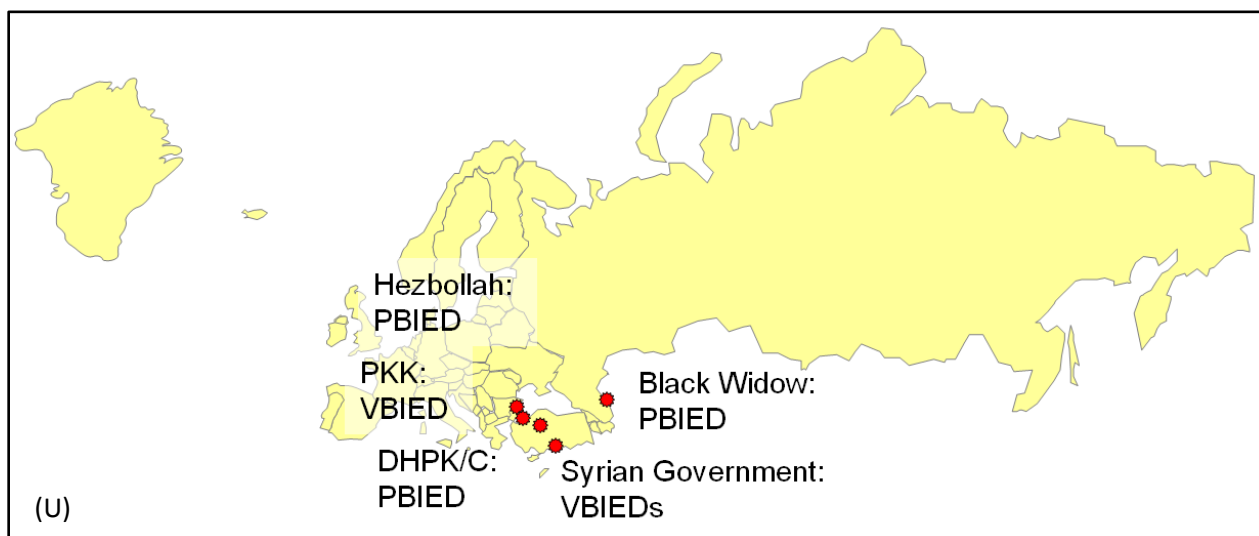
(U) In the British Isles, various Irish republican paramilitary organizations to include the Provisional Irish Republican Army, the Real Irish Republican Army, and the vigilante group Republican Action Against Drugs were new players in a century-old effort to remove Northern Ireland from the United Kingdom.

(U) In MENA, Turkey presented a special case. Until early 2013, Kurdish separatists, organized mainly as the Kurdistan Workers' Party of Turkey (PKK) presented the country's most significant IED threat. However, events since the outbreak of the Syrian civil war shifted alliances in a way that brought about a rapprochement between the Turkish government and the Kurds. Currently, the main IED threat to Turkey appears to reside in domestic left-wing terrorist organizations with longstanding ties to the Syrian intelligence infrastructure. These include the far-left Revolutionary People's Liberation Party/Front (DHKP/C), and a spin-off group called Acilciler ("Urgent Ones"), which seeks to return Turkey's Hatay Province to Syria.

(U) Five case studies were selected for EUCOM. PBIEDs and VBIEDs targeting government buildings and public transportation are representative of the IED events occurring across the EUCOM OE.

(U) EUCOM CASE STUDY 1: PBIED (BLACK WIDOW) ON GOVERNMENT BUILDING IN DAGESTAN

(U) This event was chosen as an example of an incident type that has occurred over two dozen times since 2000. The Black Widow bombing was selected as this reflects a tactic that continues to be used with great effect throughout the Caucasus region. A Black Widow bombing occurred as recently as 21 October, 2013, killing five people and injuring an additional 17.[31] This type of attack also underscores heightened security concerns relevant to the Russian Olympics, scheduled to occur in February 2014.

(U) Who: Madina Aliyeva, Black Widow Suicide Bomber

(U) Where: Makhachkala, Dagestan
42.96N 047.30E

(U) When: 250800L MAY 13

(U) Target: Russian police

(U) Threat Actor Profile: The Black Widows are female suicide bombers of Chechen origin that have lost husbands in the Chechen wars against Russia. Madina Aliyeva is believed to be one of the Black Widows. She was twice widowed, once in 2009 when her first husband was killed, and again in 2012 when her second husband was killed. **PBIEDs are the most likely IED type used by the Black Widows**.

ACTION SEQUENCE:

1 Black Widow Suicide Bomber walked up to Dagestani Police Forces outside Ministry of Interior Dagestan building.

2 Black Widow Suicide Bomber detonated her IED when she was standing near the police officers.

IED Casualty Effects:
KILLED: One suicide bomber
INJURED: 18 individuals
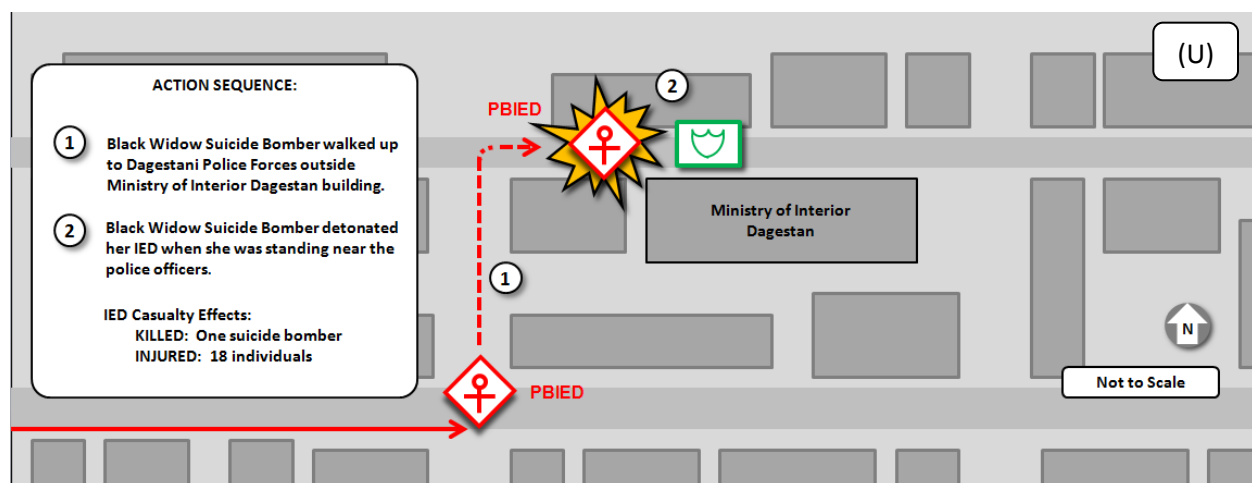
(U) IED ATTACK TTP

(U) 25 May 2013

- (U) 25 year old Madina Aliyeva walked up to a group of traffic police officers near the Ministry of Interior of Dagestan building in Makhachkala, Dagestan.
- (U) She then detonated her PBIED.

- (U) The explosion killed Madina Aliyeva and injured 18 others, including two children and five police officers.
- (U) The PBIED consisted of one F1 hand grenade and five grenade shells filled with shrapnel.
- (U) The PBIED contained 500 grams—nearly one pound—of TNT.

(U) Related information

- (U) Russian officials refer to female suicide bombers from the Caucasus region as "Black Widows" because their husbands died during the Chechen war against Russia.
- (U) Russian officials claim Black Widows have been active since 2000 and were involved in over two dozen incidents.

(U) KEY OE CONDITIONS

- (U) POLITICAL/MILITARY: Unstable security environment between Russia and Islamic separatists of the Caucasus region.
- (U) SOCIAL/MILITARY: Perpetrator was a woman who had lost two husbands and was disgruntled with Russian military and government policies.
- (U) SOCIAL: Low education rates with high unemployment are widespread in the Caucasus region and add to destabilization of the environment.

(U) EUCOM CASE STUDY 2: PBIED ATTACK ON TOUR BUS IN BULGARIA

(U) This event was chosen to demonstrate the disproportional impact a single incident can have on the world stage, and the capability of threat actors to reach across international boundaries to conduct terrorist attacks. In this instance the magnitude of destruction (seven killed, 32 injured) and target selection process (busy international airport at a favorite Black Sea resort location) reflected skill sets associated with a highly sophisticated and well-grounded terrorist infrastructure (Hezbollah).

(U) Threat Actor Profile: Hezbollah is a complex radical Islamic (Shia) global organization based out of Lebanon that has political, social, and military wings. The group has tens of thousands of members and over 10,000 active fighters. Hezbollah's activities include bombings, hijackings, kidnappings, and attacks using rocket-propelled grenades (RPGs) and snipers. **Typical Hezbollah IEDs are PBIEDs, VBIEDs, and SVBIEDs that primarily target Israeli forces and civilians**.

(U) Who: Hezbollah (implicated by Bulgarian government)

(U) Where: Burgas International Airport, Bulgaria
          42.504722N 027.518056E

(U) When: 181710L JUL 12

(U) Target: Civilian noncombatants
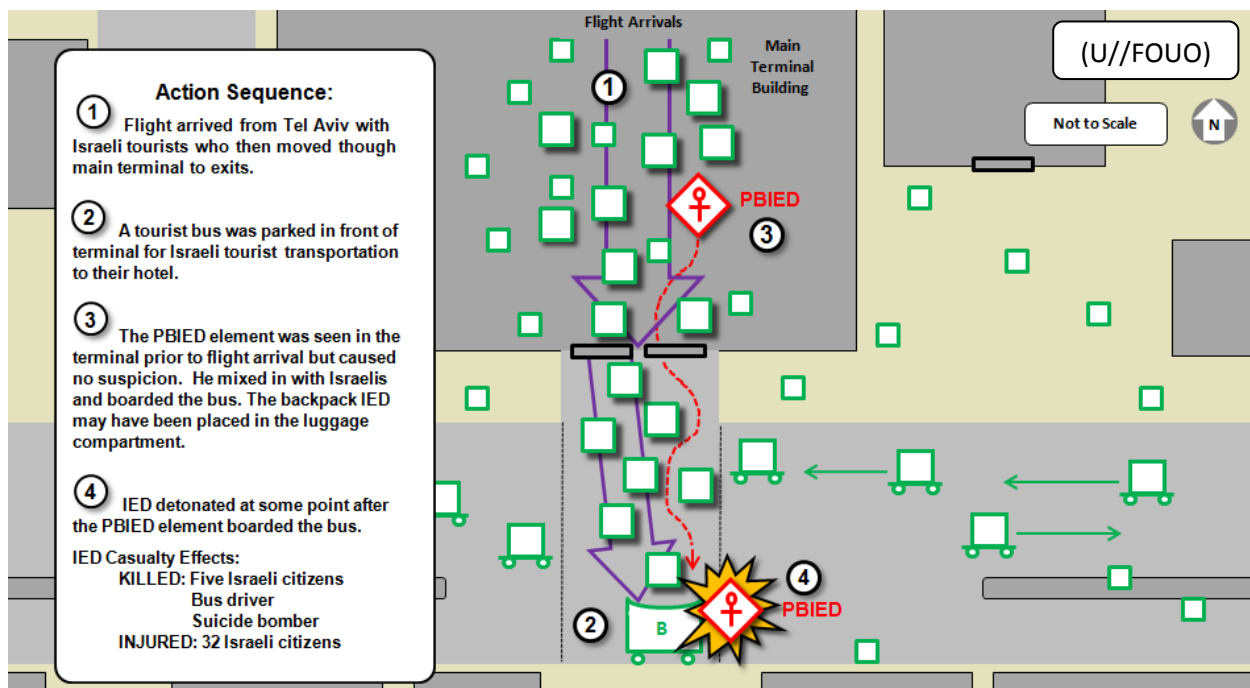
(U) IED ATTACK TTP

(U) 18 July 2012

- (U//FOUO) The bomber arrived at the terminal dressed as a typical tourist.
- (U//FOUO) A flight arrived from Tel Aviv; Israeli tourists moved through the main terminal to the baggage claim area. They then they proceeded to the designated area for ground transportation.
- (U//FOUO) The bomber, who had a backpack, mingled unnoticed with the travelers and boarded the bus with them.
- (U//FOUO) Subsequent to boarding the bus, the bomber detonated the PBIED.

(U) Related information

- (U//FOUO) The bomber was initially identified as Mehdi Ghezali, approximately 36 years old and a Swedish citizen who had been held at Guantanamo Bay from 2002-2004. He was reported to have also been captured attempting to enter Afghanistan in 2009. This identification was later dismissed by Swedish Intelligence and the Bulgarian government.
- (U//FOUO) The bomber was in possession of a fake Michigan driver's license and forged US passport, and had been in Burgas for 4-7 days.
- (U//FOUO) The bomber dressed as a typical tourist to fit in at the terminal and around the buses.
- (U//FOUO) The bomber had outside help—certainly logistical help—in Bulgaria, and the IED was most likely built in Bulgaria.
- (U//FOUO) Bulgaria initially implicated Hezbollah, but later said its involvement could not be proven at present.
- (U//FOUO) The explosive was reported to be approximately three kilograms of TNT and was most likely command-detonated by the bomber.
- (U//FOUO) The backpack may have been placed in the luggage compartment, below the passengers; the bomber then boarded the bus.

(U) Result

- (U//FOUO) 42 Israelis on board, 1 Bulgarian (driver); total of seven killed (five Israelis, the driver and the bomber) and 32 Israelis injured.
- (U//FOUO) The European Union subsequently decided to freeze some Hezbollah assets in Europe.
- (U//FOUO) The Gulf Cooperation Council froze all Hezbollah assets of both military and political branches.

(U) KEY OE CONDITIONS

- (U) PHYSICAL ENVIRONMENT/INFRASTRUCTURE: Busy international airport in a resort area located on the Black Sea.
- (U) SOCIAL: Israelis had just arrived on flight from Tel Aviv for holiday.
- (U) SOCIAL: Bulgaria is popular holiday spot for Israelis.
- (U) PHYSICAL ENVIRONMENT: Relatively easy access into Bulgaria from Turkey.
- (U) MILITARY: IED carried in backpack as it would not draw undue attention in airport or on bus.

(U) EUCOM CASE STUDY 3: VBIED (MOTORCYCLE) ATTACK ON BUS IN TURKEY

(U) This event was chosen because it complemented a trend that developed within an 18-month window between January 2010 and June 2011. During that period, terrorists used motorcycles as a conveyance of choice to perpetrate 42 attacks worldwide. Motorcycles are well-suited for navigating in urban traffic, operating in varied terrain and in poor road conditions, and also allow a driver to handle ingress and egress issues while a passenger focuses on detonating the IED. Motorcycles fitted with IEDs also lend themselves to relatively easy concealment for timed VBIED detonations. Motorcycles can be used to deliver the IED or can be the IED itself. Such attacks have been carried out in Afghanistan, Colombia, Greece, India, Iran, Iraq, Pakistan, the Philippines, and Thailand.[32]

(U) **Who: PKK**

(U) **Where: Istanbul, Turkey**
04.053889N 028.948333E

(U) **When: 010900L MAR 12**

(U) **Target: Bus carrying police officers**

> (U) *Threat Actor Profile:* The Kurdistan Workers' Party (PKK) is a leftist Kurdish nationalist organization that has fought against the state of Turkey for decades in an effort to form an autonomous 'Kurdistan.' The group has over 4,000 members and is heavily involved in drug trafficking and other criminal activities. **The PKK typically targets government officials using VBIEDs**.

ACTION SEQUENCE:

1. PKK bombers parked a motorcycle IED near the police station.

2. Civilians moved the motorcycle because its position interfered with a construction project.

3. Police bus approached the police station and passed by the motorcycle. The IED was detonated by remote control.

4. Police bus came to a stop 50 yards from the initial blast site of the motorcycle.

IED Casualty Effects:
INJURED: 15 Police officers
One civilian

(U) IED ATTACK TTP

(U) Overnight 29 February-1 March 2012
- (U) PKK bombers attached an IED to a motorcycle and parked it near an Istanbul police station.

(U) 1 March 2012 (early morning)

- (U) Two civilian workmen noticed the motorcycle and moved it out of their way.

(U) 1 March 2012 (0900)

- (U) A mini-bus carrying 21 to 23 anti-terrorism police officers passed the motorcycle.
- (U) The assault element detonated the explosive charge by remote control.

(U) Result

- (U) 15 police officers and one civilian were injured in the blast. The injured were treated on the scene and then taken to a hospital where they were examined and then subsequently released.
- (U) The explosion caused windows in the police station and other nearby buildings to break, and damaged other parked vehicles.
- (U) The bomb was made from plastic explosives and was similar to an IED attached to a bicycle that exploded in Istanbul in 2011.

(U) KEY OE CONDITIONS

- (U) SOCIAL: Motorcycles are highly maneuverable and an ever present sight in the urban areas of this OE.
- (U) SOCIAL/INFRASTRUCTURE: Over 200,000 motorcycles are estimated to be in use throughout the world.
- (U) MILITARY: Motorcycle IEDs are easily concealed and can be hidden in a number of ways: in gas tanks, in vehicle-mounted cargo containers, or in "saddlebags."
- (U) POLITICAL/MILITARY: Between January 2010 and July 2011, terrorists perpetrated 42 motorcycle IED attacks worldwide and motorcycle-related incidents continued into 2012 and 2013.
- (U) ECONOMIC: The affordability of motorcycles makes them a cost effective weapon of choice for terrorists.
- (U) SOCIAL: Abandoned motorcycles are less noticeable to authorities than abandoned cars.
- (U) POLITICAL: All types of incidents perpetrated by the PKK diminished in 2012 because of a truce between that group and the Turkish government.

(U) EUCOM CASE STUDY 4: PBIED ATTACK ON US EMBASSY IN TURKEY

(U) In part, this event was chosen because it indicated a continuation of a trend that involved 53 attacks on US embassies and consulates between January 2006 and September 2012.[33] In this instance, it also revealed a change in tactics for the Revolutionary People's Liberation Party/Front (DHKP/C) in Turkey, a group that prior to the 1 February 2013 bombing of the American Embassy in Ankara, had refrained from attacking American targets, and since the 1991 collapse of the Soviet Union, had faded into the background as a threat actor capable of significantly affecting the Turkish political scene. The attack also demonstrated the appeal for terrorists of high visibility soft targets, like embassies, that can potentially yield significant propaganda dividends if successfully carried out.

(U) Who: DHPK/C

(U) Where: Ankara, Turkey
          39.908333N 032.855278E

(U) When: 011315L FEB 13

(U) Target: US Embassy

(U) Threat Actor Profile: The DHPK/C is a terrorist organization that began as an extremist political party in Turkey. The group advocates for the establishment of a socialist state and the abolishment of harsh Turkish prisons and is funded primarily through donations and extortion activities. **The group has orchestrated small arms and suicide bomber attacks against Turkish security and military officials.** The PBIED attack on the US Embassy could represent resurgence.

ACTION SEQUENCE:
1. DHKP/C bomber used pedestrian walkway to approach gatehouse.
2. Bomber turned left into gatehouse as guard opened door to allow entry.
3. Metal detector alarm sounded.
4. Bomber panicked and detonated PBIED.

IED Casualty Effects:
KILLED: One security officer
INJURED: One civilian
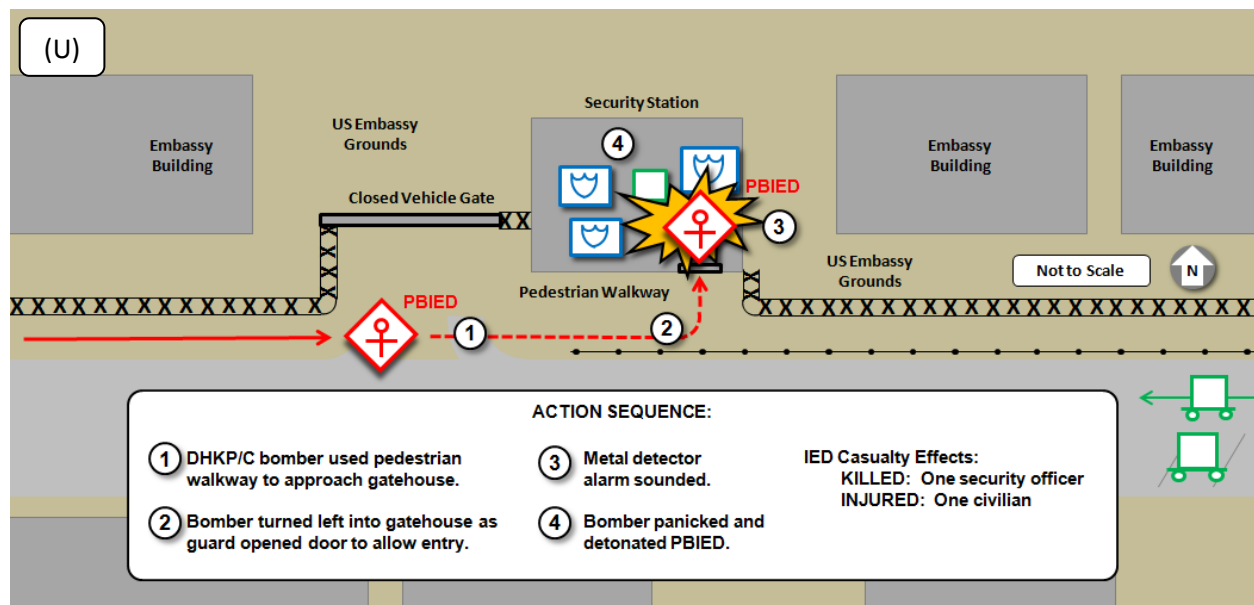
(U) IED ATTACK TTP

(U) Prior to day of attack

- (U) The bomber or an associated security/support element likely performed advanced reconnaissance on the embassy compound. Knowledge of a walk-in visitor entrance and the location of a package drop slot would have been gained at that time.

(U) 1 February 2013

- (U) The suicide bomber approached the embassy compound on foot.
- (U) The perpetrator's nondescript behavior and appearance aroused no suspicion.
- (U) The bomber was carrying an envelope, giving the impression of a courier on a routine mission.
- (U) The bomber entered the gatehouse when a guard opened the exterior door.
- (U) The attacker set off the alarm while passing through the metal detector.
- (U) The bomber reached for his suicide vest detonator as the guard yelled to warn others.
- (U) The suicide vest was packed with 13 pounds of TNT and a hand grenade, both of which detonated.

(U) Result

- (U) One security guard was killed and one embassy visitor was seriously wounded; there were no American casualties.
- (U) The blast was heard a mile away, blew the gatehouse door off its hinges, and shattered windows in nearby buildings.
- (U) The embassy compound perimeter remained intact, protected by layered physical security. Embassy staffers moved to a safe location as Turkish security forces swarmed the blast area.
- (U) The American ambassador emerged shortly after the incident to praise Turkish security personnel, condemn the perpetrators, and express solidarity with the Turkish government.

(U) KEY OE CONDITIONS

- (U) POLITICAL/MILITARY: The DHPK/C is a home-grown Turkish terrorist organization, first organized during the Cold War, with a secular Marxist ideology.
- (U) MILITARY/INFRASTRUCTURE. This was the group's first violent attack on an official US facility.
- (U) MILITARY/INFRASTRUCTURE: The attack was partially motivated by NATO deployment of Patriot missile batteries to Turkey.

(U) EUCOM CASE STUDY 5: VBIED ATTACK ON GOVERNMENT BUILDINGS IN TURKEY

(U//FOUO) This event was chosen for three reasons: (1) it underscored the implications of the Syrian civil war for Turkey's national security concerns; (2) its scale of magnitude (50 killed and hundreds wounded) could potentially affect the course of Turkey's relations with the United States; and (3) it reflected a milestone in the capability of regional, state-sponsored threat actors to use large and sophisticated VBIEDs. Turkey faces a unique set of circumstances as a NATO ally that shares a porous and volatile border with an OE in the midst of an unpredictable civil war with dangerous potential for escalation.[34]
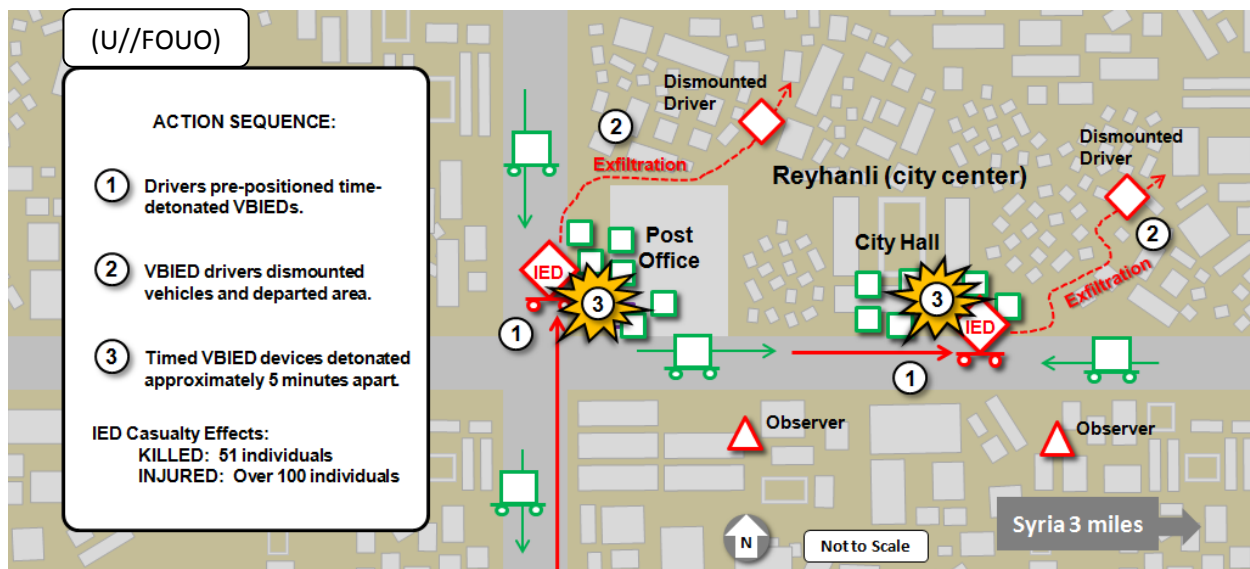
(U) Threat Actor Profile: Approximately twelve individuals have been charged by the Turkish government for this terrorist act with allegations that the Syrian government orchestrated the attack. **While all of those arrested are Turkish nationals, it is suspected that at least nine of the perpetrators have ties to the Syrian intelligence agency.** Syria has denied any involvement in the attack and has offered to lead a joint investigation; Turkey declined the offer.

(U) **Who: Syrian government (alleged)**

(U) **Where: Reyhanli, Turkey**
      36.267222N 036.573611E

(U) **When: 111245L MAY 13 – 111300L MAY 13**

(U) **Target: Municipal complex**

(U//FOUO)

ACTION SEQUENCE:

1. Drivers pre-positioned time-detonated VBIEDs.

2. VBIED drivers dismounted vehicles and departed area.

3. Timed VBIED devices detonated approximately 5 minutes apart.

IED Casualty Effects:
KILLED: 51 individuals
INJURED: Over 100 individuals

(U) IED ATTACK TTP

(U) Prior to day of attack

- (U//FOUO) The fluid cross-border traffic between Turkey's Hatay Province and Syria, three miles away, enabled the assault element to conduct a thorough reconnaissance.

(U) 11 May 2013

- (U//FOUO) Blending in with the local population in Reyhanli city center, the assault element went unnoticed as it pre-positioned two VBIEDs near the city hall and post office.
- (U//FOUO) The drivers successfully exfiltrated the downtown area where they had left the VBIEDs.
- (U//FOUO) Concealed in parked cars, the IEDs remained undetected by authorities.
- (U//FOUO) Planted with the intent of maximizing casualties, the two blasts detonated only minutes apart.
- (U) Observers were likely used to monitor the attack.

(U) Result

- (U//FOUO) The scale of destruction reflects a spike in the use of large VBIEDs by regional threat actors.
- (U//FOUO) The detonations left 51 dead and over 100 injured.
- (U//FOUO) The damage radius included four large city blocks.
- (U//FOUO) Property damage included eight public buildings, 120 houses, 732 workplaces, and 62 vehicles.
- (U//FOUO) The Syrian government denied responsibility, but Turkish officials stressed the linkage between the alleged perpetrators and Syrian intelligence operatives.
- (U//FOUO) In the aftermath of the attack, the Turkish government arrested 13 suspects and imposed a media blackout
- (U//FOUO) The apparent intent of the bombing was to foment hatred of Turkish people toward Syrian refugees/rebels.
- (U//FOUO) The incident inflamed a domestic debate in Turkey over the wisdom of its policy toward Syria.

(U) KEY OE CONDITIONS

- (U) MILITARY: There is a past linkage of insurgents in Turkey to Syrian Intelligence.
- (U) POLITICAL: Turkish government hosts and supports Syrian rebels.

- (U) PHYSICAL ENVIRONMENT: Turkey shares 500-mile border with Syria. Reyhanli is three miles from Syrian border.
- (U) SOCIAL: 20,000 Syrians reside in a refugee camp near Reyhanli. Turkey currently shelters about 500,000 Syrian refugees.
- (U) MILITARY: Reyhanli is the largest Turkish mass casualty event since start of the Syrian civil war.

(U) US PACIFIC COMMAND

(U//FOUO) **Most active PACOM OEs**. India, Thailand, the Philippines, and Bangladesh are the most active IED OEs in PACOM.[35] The vast majorities of IED attacks are the result of localized separatist groups seeking attention in support of a specific agenda or criminal activities. There is also a potential for Lebanese Hezbollah-sponsored or -conducted IED attacks in the region.[36]

(U) **Most common IED targets**. PACOM IED targets are primarily government security forces and government and civilian infrastructure.

Most Active PACOM OEs
July 2011-July 2013

(U//FOUO) **Overview of attacks**. A 2011 National Ground Intelligence Center (NGIC) assessment concluded that "IED attacks using suicide TTP are not common in all nations within PACOM compared with large anti-personnel IED attacks. However, some insurgent and militant organizations have used the suicide TTP to attack civilians and have garnered much media attention."[37] In addition, "IED technology will continue to be transferred from nation to nation throughout the PACOM area of operations (AO). Longstanding smuggling routes and vast coastlines will allow for the transfer of IED materials to nations with an active insurgent presence with little interference from government authorities. NGIC assesses with high confidence that continuing and further cooperation between these nations and the willingness of host nations to actively pursue and prosecute terrorist groups can greatly reduce IED attacks throughout nations in the PACOM AO."[38]
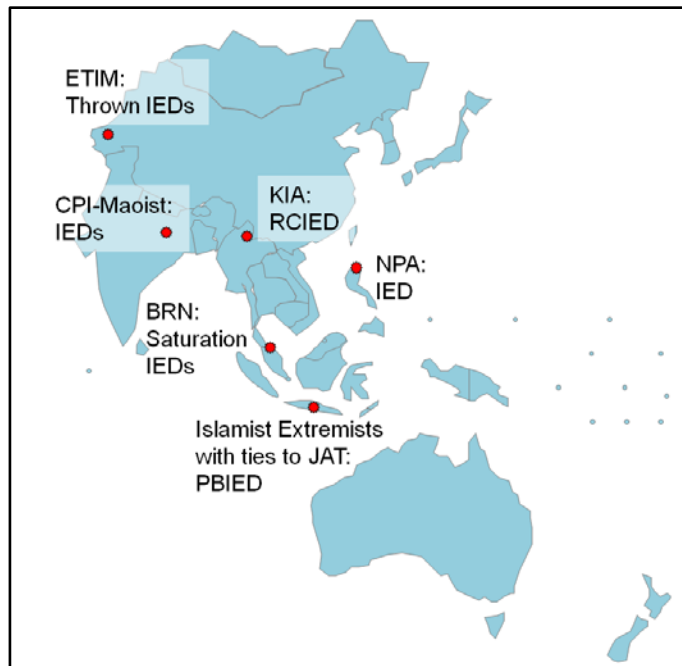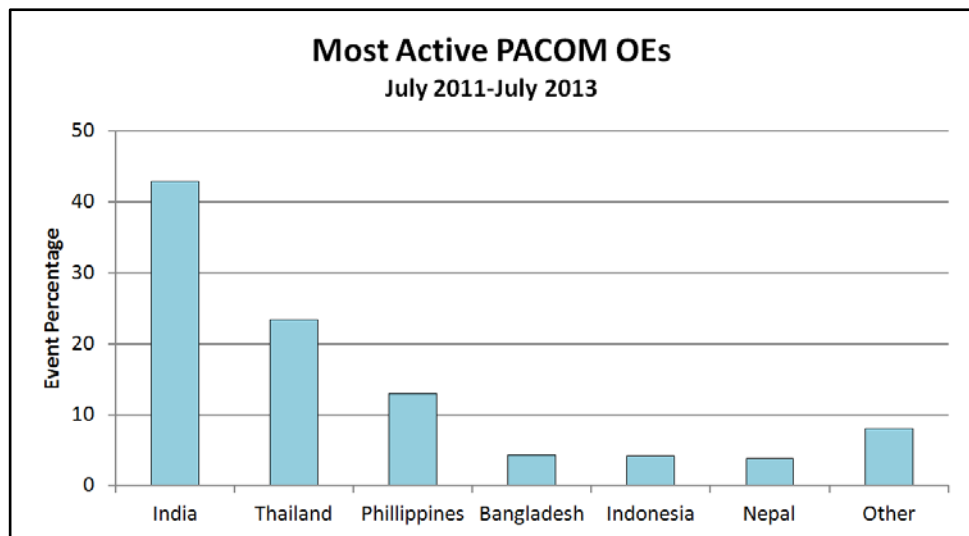
(U//FOUO) **Threat actors using IEDs**. IED attacks are commonly employed by **militants**, **separatists**, **extremist organizations**, and **insurgents** across PACOM.[39] The most active groups are Lashkar-e-Taiba (LeT), CPI-Maoist insurgents, United Liberation Front of Assam (ULFA), southern insurgency in Thailand, Abu Sayyef Group (ASG), the Moro National Liberation Front (MNLF), and Jemaah Islamiyah (JI).

(U) Six case studies were selected for PACOM. A new tactic of using corpses to conceal IEDs in India, an IED targeting first responders in Burma, an attack in China, a saturation IED attack in Thailand, a PBIED attack in Indonesia, and a complex IED attack in the Philippines were chosen to show the range of TTP.

(U) PACOM CASE STUDY 1: IED IN HUMAN CORPSE IN INDIA

(U//FOUO) This incident was chosen as an example of a tactic seen more and more in PACOM: threat actors using the corpses of animals and humans to conceal IEDs. This particular example demonstrates how an insurgent force was able to overwhelm a host-nation police force with direct fire while at the same time planning and preparing to emplace IEDs that were intended to target the police force reinforcements and other first responders. In this case, Maoist insurgents in Jharkhand, India, targeted medical personnel, medical facilities, and first responders with two IEDs hidden in the bodies of two Central Reserve Police Force (CRPF) officers.

(U//FOUO) In this particular case study, the use of this tactic was a result of Maoist insurgents varying their IED TTP because of the Indian military's effectiveness at curbing the number of IED incidents. The Maoists had been experimenting with different delivery methods and triggers, including using the bodies of animals and humans to draw in targets. The IED was then typically detonated by remote control, pressure, or timed devices. Maoist insurgents have primarily targeted security forces.[40]
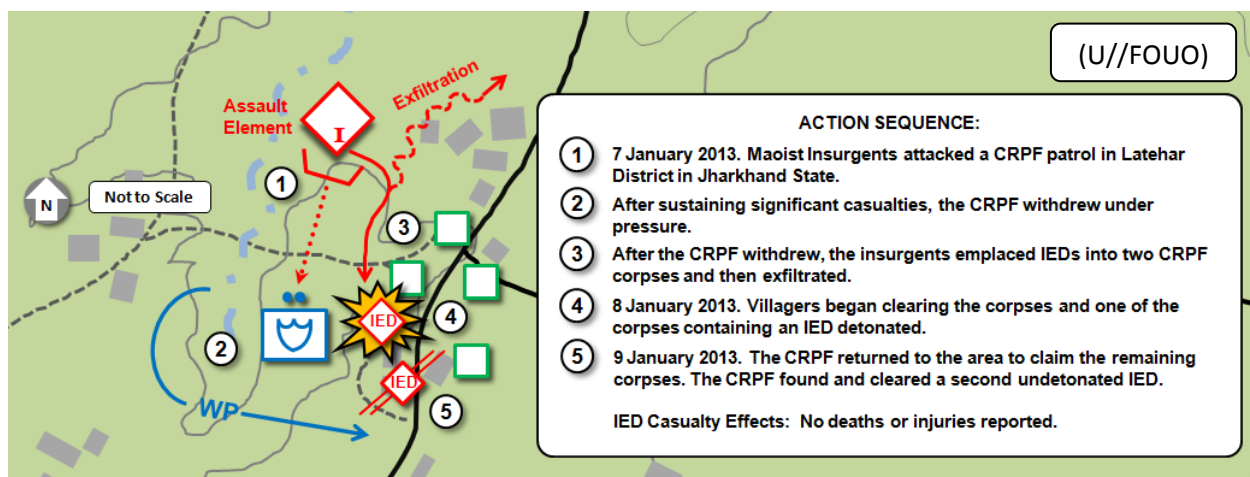
(U) Who: CPI-Maoist

(U) Where: Jharkhand State, India
    23.7444N 084.5049E

(U) When: 07 JAN 13 – 09 JAN 13, times unknown

(U) Target: First responders, medical personnel/facilities

(U) Threat Actor Profile: The Communist Party of India-Maoist (CPI-Maoist) is a left-wing extremist group in India that for more than three decades has conducted a protracted campaign aimed at over-throwing the government of India. The military wing of the group is believed to have around 3,500 individuals using small arms, light machine guns, grenades, and landmines. **The group regularly uses IEDs to target government security forces**.

(U//FOUO)

ACTION SEQUENCE:

1 7 January 2013. Maoist Insurgents attacked a CRPF patrol in Latehar District in Jharkhand State.

2 After sustaining significant casualties, the CRPF withdrew under pressure.

3 After the CRPF withdrew, the insurgents emplaced IEDs into two CRPF corpses and then exfiltrated.

4 8 January 2013. Villagers began clearing the corpses and one of the corpses containing an IED detonated.

5 9 January 2013. The CRPF returned to the area to claim the remaining corpses. The CRPF found and cleared a second undetonated IED.

IED Casualty Effects: No deaths or injuries reported.

(U) IED ATTACK TTP

(U) 7 January 2013

- (U//FOUO) The CRPF conducted a sweeping operation in the forests of Latehar District in Jharkhand State. During the operation, Maoist insurgents attacked and successfully overwhelmed the CRPF, killing several police officers. After sustaining significant casualties, the CRPF withdrew.
- (U//FOUO) After the CRPF withdrew, the assault element planted IEDs in the bodies of two police officers.
- (U//FOUO) The assault element then exfiltrated the area.

(U) 8 January 2013

- (U//FOUO) As local villagers were attempting to clear the bodies of the fallen police officers, one of the bodies that concealed an IED detonated.

(U) 9 January 2013

- (U//FOUO) CRPF forces returned to collect the remaining dead and discovered an undetonated IED inside the abdomen of another corpse.

(U) Related information

- (U) There were no reports of deaths or injuries related to the IED detonation.
- (U//FOUO) Reporting after the event revealed that the perpetrators had practiced the device construction and detonation process "as corpses of goats and dogs were found in the surrounding area in the weeks before the event. Militant confessions later confirmed this. Additionally, past militant/terrorist procedure in PBIEDs has included practicing on animals."[41]
- (U//FOUO) Reporting claimed the device was designed to detonate upon pulling of the stitches, and as a back-up, exposure to light via the "solar panel."[42]
- (U//FOUO) Luring victims to an IED is a common TTP. Usually with a corpse the IED is placed beside or underneath the body. "The placement of the device inside the body of a deceased CRPF troop…suggests it had a 'Trojan Horse' type of intent."[43]
- (U) There is potential for this TTP to spread to other OEs.

(U) KEY OE CONDITIONS

- (U) PHYSICAL ENVIRONMENT: India's Maoists insurgents are adept at utilizing the jungle terrain for IED attacks.
- (U) POLITICAL/MILITARY: Maoist insurgency ongoing across the OE. IED attacks are common.

- (U) POLITICAL: The government of India has enacted new laws restricting access to fertilizer, making it more difficult to be used as a component in IEDs.
- (U) MILITARY: The Indian National Army has had success this year at finding and clearing IEDs and IED caches, and in limiting access to IED materials.
- (U) MILITARY: The insurgents have been experimenting with different delivery methods and triggers and have found success in using the bodies of animals and humans to place IEDs to draw in first responders.

(U) PACOM CASE STUDY 2: IED ATTACK ON MILITARY POST IN BURMA

(U//FOUO) This incident illustrated a tactic common throughout PACOM and the world. Threat actors are known to have emplaced IEDs that have the sole purpose of targeting first responders, be they medical, military, police, or civilian. This particular incident depicts an attack on a host nation government building that resulted in the call for first responders. Knowing the likely response, the guerrillas emplaced IEDs along the main highway that detonated as the first responders arrived.

(U) Since June 2011, the Kachin Independence Army (KIA) has been targeting roads, railways, and bridges in order to disrupt the Burmese Army's advances and supply routes. Due to the success of the KIA, the Burmese Army has attempted to avoid disruption by changing its routes. As a result, the KIA has begun targeting facilities of the Burmese military in addition to traditional logistic infrastructure.

(U//FOUO) In this case study, the KIA attacked a Burmese military post, killing several soldiers. As the first group of responders were en route to the attack site, its convoy was ambushed by a KIA support element using an IED. The IED was detonated by remote control as the convoy passed, killing six Burmese soldiers.
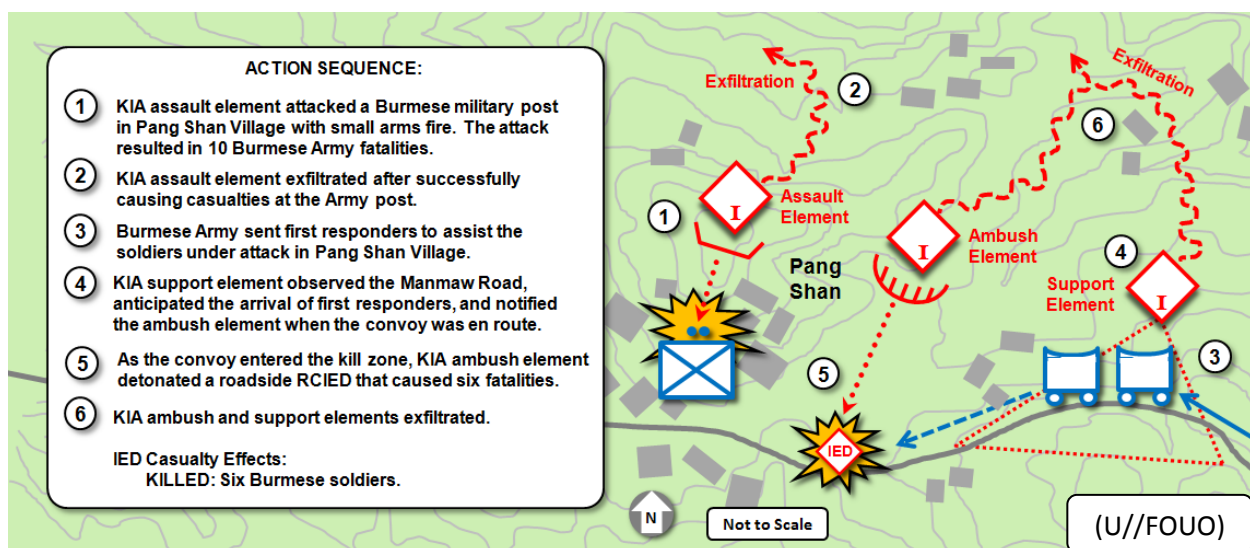
(U) Who: KIA

(U) Where: Pang Shan Village, Burma
          26.74N 097.82E

(U) When: 12 SEP 12, time unknown

(U) Target: Burmese military

(U) Threat Actor Profile: The KIA is the military wing of the Kachin Independence Organization, the political organization that controlled the Kachin State in Burma for nearly fifty years until a ceasefire was established with the Burmese government in 1994. Fighting began anew in June 2011 after the Burmese government began a military offensive into Kachin State. The KIA has an estimated 7,500 to 10,000 active fighters and is armed with assault rifles, grenades, and IEDs. **Since 2011 the group has been using IEDs to attack the Burmese military**.

ACTION SEQUENCE:

1. KIA assault element attacked a Burmese military post in Pang Shan Village with small arms fire. The attack resulted in 10 Burmese Army fatalities.
2. KIA assault element exfiltrated after successfully causing casualties at the Army post.
3. Burmese Army sent first responders to assist the soldiers under attack in Pang Shan Village.
4. KIA support element observed the Manmaw Road, anticipated the arrival of first responders, and notified the ambush element when the convoy was en route.
5. As the convoy entered the kill zone, KIA ambush element detonated a roadside RCIED that caused six fatalities.
6. KIA ambush and support elements exfiltrated.

IED Casualty Effects:
      KILLED: Six Burmese soldiers.

(U//FOUO)

(U) IED ATTACK TTP

(U) 12 September 2012

- (U//FOUO) The KIA assault element attacked a military post in Pang Shan Village with SAF.
- (U//FOUO) The Burmese military dispatched first responders to the village in response to the attack.
- (U//FOUO) The KIA ambush support element watched the main road into the village and alerted the KIA ambush team of the convoy's arrival.
- (U//FOUO) The KIA ambush element then detonated the RCIED when the convoy was in position (kill zone).

(U) Result

- (U) Six Burmese soldiers in the convoy were killed.
- (U) Ten other Burmese soldiers were killed in the firefight.

(U) KEY OE CONDITIONS

- (U) POLITICAL/MILITARY: Currently Burma is experiencing what is often considered the world's longest civil war. Violence, to include IED attacks, is present in the OE.
- (U) POLITICAL/MILITARY: In 2011, the Burmese government violated the ceasefire that was signed in 1994 by mounting an offensive into Kachin State. Since 2011, violence between the KIA and the Burmese military has greatly increased.
- (U) INFRASTRUCTURE: The Myitsone Dam is a development project currently underway in Burma. There is significant opposition to this project. Once complete, the dam is expected to cause significant flooding that will dislocate over 10,000 ethnic Kachin people, flood farm lands, disrupt the local environment, and destroy sites of cultural significance.
- (U) ECONOMIC: The Chinese are providing the workers for the dam projects, even the unskilled labor, and do not allow the Kachins to participate in the economic growth that modernization creates.
- (U) SOCIAL: The Burmese government discriminates against the Kachins and other minority groups that continue to create animosity with the current regime.
- (U) INFORMATION: The Kachin News Group exploits any negative act by the Burmese government for its benefit.
- (U) PHYSICAL ENVIRONMENT: The Kachins live in an isolated part of Burma, near China, that physically separates them from other Burmese people. The construction of dams will reduce the livable areas in their homeland.

(U) PACOM CASE STUDY 3: IED THROWN INTO RESTAURANT IN CHINA

(U) This incident was selected to demonstrate how a common tactic can spread to an OE not associated with large-scale insurgencies. In this particular example, a threat actor was attacking civilians and first responders in order to draw attention to its separatist cause. The East Turkestan Islamic Movement (ETIM) attacked an ethnic Han restaurant in Kashgar, Xinjiang Uyghur Autonomous Region (XUAR), China. The target was well-known shops and restaurants popular with Hans.
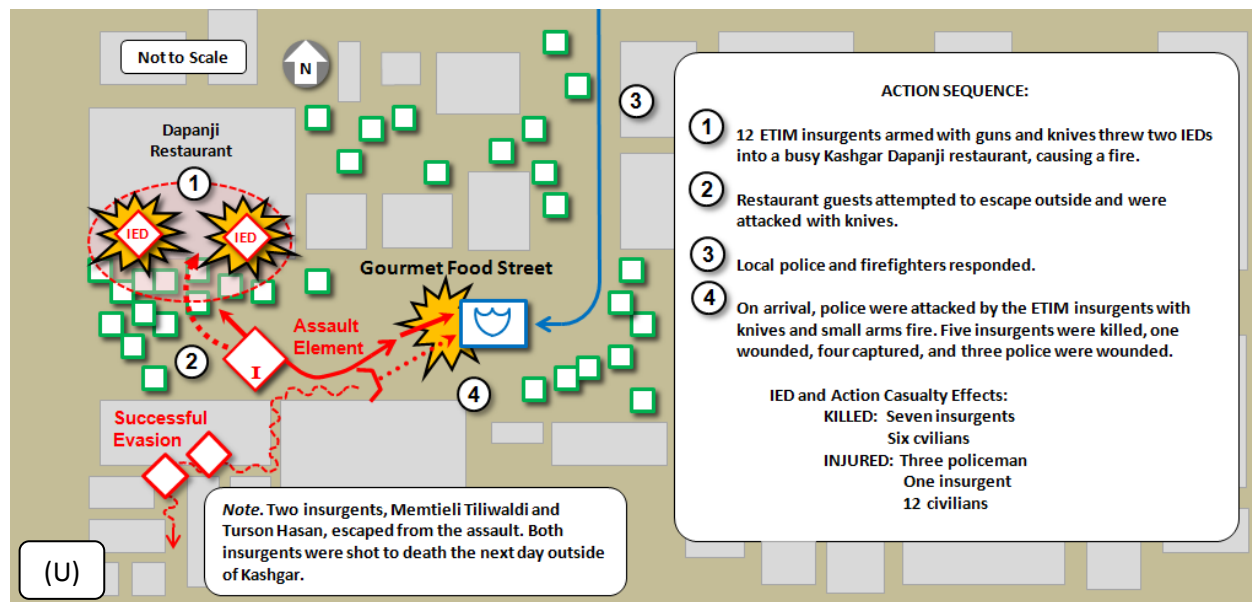
(U) Threat Actor Profile: The ETIM is an Islamist extremist organization based in China's Xinjiang Uyghur Autonomous Region. The group is comprised of ethnic Uyghurs seeking to create an Islamic state in Xinjiang Province. It is believed that the group receives support from al-Qaeda in the form of training and financial assistance. **The group primarily targets ethnic Han Chinese and Chinese government officials.**

(U) **Who: ETIM**

(U) **Where: Kashgar, XUAR, China**
          39.4667N 075.9667E

(U) **When: 31 JUL 11, time unknown**

(U) **Target: Ethnic Han population and Chinese government officials**

ACTION SEQUENCE:

1. 12 ETIM insurgents armed with guns and knives threw two IEDs into a busy Kashgar Dapanji restaurant, causing a fire.

2. Restaurant guests attempted to escape outside and were attacked with knives.

3. Local police and firefighters responded.

4. On arrival, police were attacked by the ETIM insurgents with knives and small arms fire. Five insurgents were killed, one wounded, four captured, and three police were wounded.

IED and Action Casualty Effects:
KILLED: Seven insurgents
              Six cvilians
INJURED: Three policeman
              One insurgent
              12 civilians

Note. Two insurgents, Memtieli Tiliwaldi and Turson Hasan, escaped from the assault. Both insurgents were shot to death the next day outside of Kashgar.

(U) IED ATTACK TTP

(U) 31 July 2011

- (U) An assault element consisting of a dozen Uyghur men armed with guns and knives threw two IEDs into a busy Kashgar restaurant, resulting in a fire.
- (U) The targeted restaurant was located at the end of Gourmet Food Street, a crowded street lined with restaurants and shops that were popular with Han people.
- (U) As restaurant goers fled into the street, the assault element stabbed them with knives.
- (U) Firefighters arrived to put out the fire and police engaged in a firefight with the armed men, shooting seven but sustaining one injury of their own.
- (U) Remaining assault element members escaped into crowded streets and shops.

(U) Result

- (U) The restaurant owner, a waiter, and four patrons were killed; 12 other Han people suffered injuries.
- (U) Four of the shot suspects died immediately, and another died in hospital. Another four suspects were taken into custody.

(U) KEY OE CONDITIONS

- (U) POLITICAL: The Chinese government dominates everything in XUAR, and the Uyghurs have no political power. ETIM is a separatist organization demanding that XUAR be free of China.
- (U) MILITARY: The militants were trained in Pakistan according to the Chinese government.[44]
- (U) ECONOMIC: Uyghurs tend to be at the low end of the socioeconomic spectrum, overshadowed by ethnic Hans. This breeds resentment.
- (U) SOCIAL: Uyghurs do not speak Mandarin, China's official language, and have low levels of education.[45]
- (U) SOCIAL: Uyghurs are typically discriminated against by the Chinese government because they are Muslim, an ethnic minority, and many are involved in the separatist cause.

(U) PACOM CASE STUDY 4: SATURATION IED ATTACK ACROSS CITY IN THAILAND

(U) This type of attack has occurred several times in southern Thailand. It involved several IEDs that are typically set to go off within the same 24-hour period in order to overwhelm the first responders. This type of saturation attack has not only occurred in PACOM, but in CENTCOM as well. More specifically, several VBIEDs exploded in a short time in several cities in Afghanistan.

(U//FOUO) The Barisan Revolusi Nasional (BRN) and other Islamic insurgent groups placed over 50 IEDs throughout Pattani Province in Thailand. Primary targets ranged from local businesses to first responders, civilians, and paramilitary forces. This incident is also a good example of a multiple simultaneous attack in a single city or region, like the London mass transit attack in 2005 and the 2004 Madrid train attacks.

(U) Threat Actor Profile: The BRN is a separatist movement that operates in southern Thailand and northern Malaysia and aims for the independence of the Pattani Province. **The BRN and its affiliates typically use the tactic of saturation IEDs to give a demonstration of the groups' combat power**.
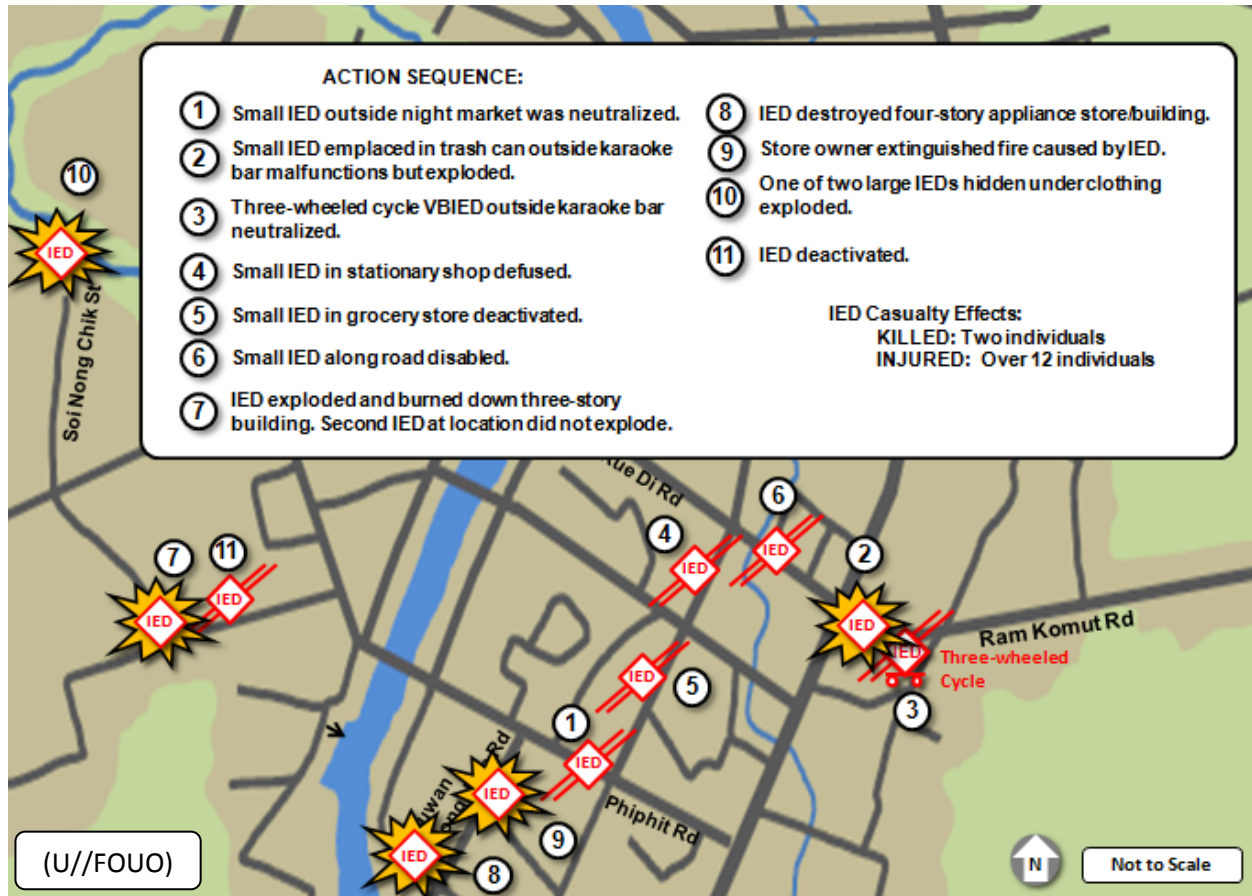
(U) BRN is the main insurgent organization operating in the region. There is a trend toward an increase in VBIEDs, as well as coordinated bombings involving several devices. Larger bombs are also becoming more prevalent. For example, bombs "of 50 kg or greater are becoming more frequent, raising questions about the efficacy of security operations that remain unable to detect such devices as they are assembled, transported, and deployed."[46] Most violence in the conflict has taken the form of drive-by shootings and IED attacks, but insurgents have increased the frequency of larger, complex assaults on more difficult targets.

(U) Who: BRN and affiliated Islamic insurgent groups

(U) Where: Pattani Province, Thailand
        06.8583N 101.2500E

(U//FOUO) When: 161640L FEB 13 – 171300L FEB13

(U) Target: Businesses, paramilitary, civilians, and first responders

ACTION SEQUENCE:

1. Small IED outside night market was neutralized.
2. Small IED emplaced in trash can outside karaoke bar malfunctions but exploded.
3. Three-wheeled cycle VBIED outside karaoke bar neutralized.
4. Small IED in stationary shop defused.
5. Small IED in grocery store deactivated.
6. Small IED along road disabled.
7. IED exploded and burned down three-story building. Second IED at location did not explode.
8. IED destroyed four-story appliance store/building.
9. Store owner extinguished fire caused by IED.
10. One of two large IEDs hidden under clothing exploded.
11. IED deactivated.

IED Casualty Effects:
KILLED: Two individuals
INJURED: Over 12 individuals

(U//FOUO)

Not to Scale

(U) IED ATTACK TTP

(U) 16-17 February 2013

- (U//FOUO) The BRN and possibly other anti-Thai government insurgents emplaced over 50 IEDs throughout Pattani Province.
- (U//FOUO) At least 11 of these were located in a four-square-mile area in downtown Pattani city.
- (U//FOUO) Government responders defused eight of the 50 IEDs, including six in the downtown area.
- (U//FOUO) The IEDs were a combination of small, easily-concealable, unsophisticated bombs intended to cause fires and larger, more complex devices meant to cause greater damage.
- (U//FOUO) Two of the attacks included secondary IEDs aimed at the first responders.

- (U//FOUO) Motorcycle riders, later identified by closed-circuit TV, emplaced the IEDs in or near various businesses.
- (U//FOUO) IED 1 (1640 hours): A small IED with a timer made from a watch was left outside a night market, but explosive ordinance disposal (EOD) personnel neutralized the IED.
- (U//FOUO) IED 2 (1910 hours): A small IED dropped in a trash can outside a karaoke bar malfunctioned, but still caused a small explosion that injured a single outside patron.
- (U//FOUO) IED 3 (about 1915 hours): Customers sitting outside the karaoke bar alerted police to a possible three-wheel cycle VBIED meant to injure first responders, which was subsequently deactivated.
- (U//FOUO) IED 4 (2100 hours): A small IED with timer was found in a stationary shop; the owner took the IED outside and placed it in a park, where police defused it.
- (U//FOUO) IED 5 (2100 hours): The owner of a grocery store found a small IED with a timer and placed it outside in the middle of the street, where an EOD team deactivated it.
- (U//FOUO) IED 6 (2200 hours): An EOD team disabled a small IED with timing device found along Rue Di Road.
- (U//FOUO) IED 7 (2358 hours): An IED exploded at the Diana Mini Mart, starting a fire that eventually destroyed the entire three-story building.
- (U//FOUO) IED 8 (0023 hours): An IED exploded at an appliance/construction store; the resulting fire burned down the four-story building before it could be controlled.
- (U//FOUO) IED 9 (0108 hours): A small IED exploded at a kitchenware store, but the owner put out the fire before it caused any major damage.
- (U//FOUO) IED 10 (1200 hours): One of two large IEDs hidden under some clothing exploded at the Big Ben Clock Tower roundabout on Soi Nong Chik Street, killing two paramilitary personnel and injuring 10 civilians. The second IED malfunctioned and did not explode.
- (U//FOUO) IED 11 (1300 hours): EOD personnel found and disabled a second IED at the Diana Mini Mart store, the target of which was possibly first responders.

(U) KEY OE CONDITIONS

- (U) SOCIAL: BRN is a separatist Islamist organization seeking independence of the Pattani Province that has support from Muslim states like Algeria, Syria, and Libya.
- (U) MILITARY: The saturation attack may have been in retaliation for the death of 16 Muslim fighters the week before.
- (U) ECONOMIC/INFRASTRUCTURE: Due to the prevalence of motorcycles, they were used both for transportation and as part of an IED.

(U) PACOM CASE STUDY 5: PBIED ATTACK ON CHURCH IN INDONESIA

(U) This event was selected as an example of a small group instigating an IED attack without any apparent direction from a central authority. These types of attacks occur in many OEs, usually directed by Muslims against non-Muslim targets or Muslim targets considered not conservative enough. Members of the same group that attacked the church in this example also attacked a mosque because it was considered too liberal.
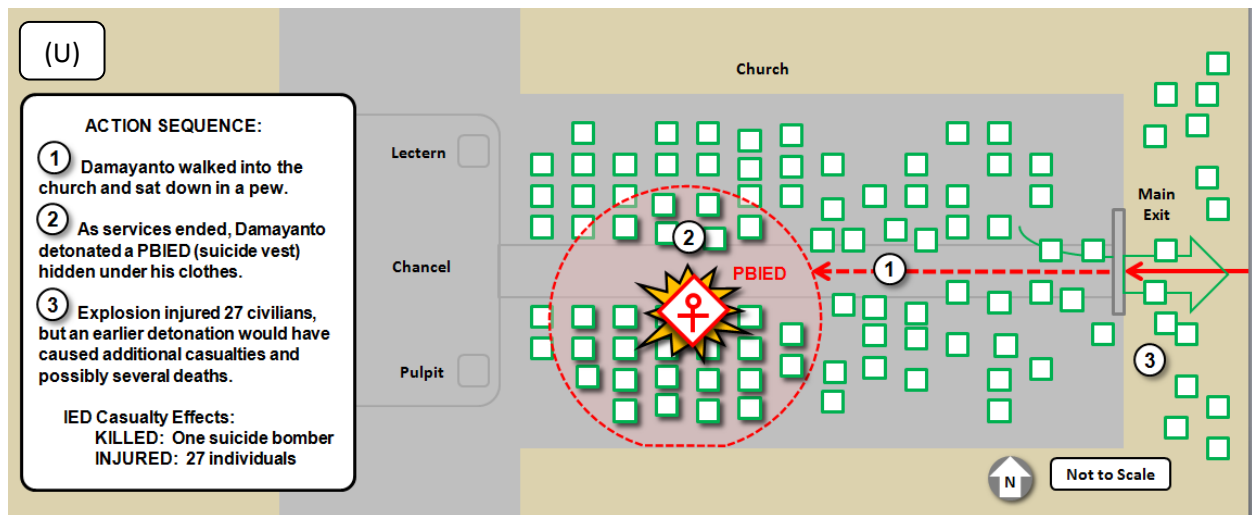
(U) Who: Islamist Extremists in Cirebon with ties to Jemaah Ansharut-Tauhid (JAT)

**(U) Where: Kepunton, Solo, Central Java, Indonesia
      07.6000S 110.8167E**

(U) When: 251100L SEP 11

(U) Target: Full Gospel Bethel Church

(U) Threat Actor Profile: The extremists responsible for this attack are violent jihadists that have recently escalated their tactics to punish anyone belonging to religions other than Islam. These individuals went from using sticks and stones to using bombs and guns courtesy of training and influence from the terrorist organization JAT. The JAT is an extremist Islamist organization that seeks to establish an Islamic caliphate in Indonesia and targets Indonesian government personnel, police, military, and civilians in pursuit of its mission. **The group's IED tactics typically involve the use of PBIEDs**.

(U)

ACTION SEQUENCE:

① Damayanto walked into the church and sat down in a pew.

② As services ended, Damayanto detonated a PBIED (suicide vest) hidden under his clothes.

③ Explosion injured 27 civilians, but an earlier detonation would have caused additional casualties and possibly several deaths.

IED Casualty Effects:
KILLED: One suicide bomber
INJURED: 27 individuals

Church

Lectern

Chancel

Pulpit

② PBIED ① Main Exit ③

N   Not to Scale

(U) IED ATTACK TTP

(U) Background

- (U) Several terrorists associated with the group JAT received training in bomb making and other terrorist-related activities through local insurgent groups.

(U) 25 September 2011

- (U) A terrorist named Damayanto walked into the church service at the Full Gospel Bethel Church in Solo and sat down in a pew.
- (U) The terrorist wore a PBIED covered by his outer clothes.
- (U) Just as the services ended and the congregation began to file out, Damayanto detonated his PBIED.

(U) Result

- (U) The explosion injured 27 people, but no one was killed.
- (U) If the terrorist had detonated his IED sooner, there would have been more casualties and a greater likelihood of deaths, as the church would have contained more civilians.

(U) KEY OE CONDITIONS

- (U) POLITICAL: Over the last decade, the Indonesian government has cracked down on those insurgents that have used terrorist bombings as a tactic. This has created animosity from many of the small Islamic groups that wish to install a government in Indonesia based on *sharia* (Islamic) law.
- (U) ECONOMIC: IED attacks not directed against churches or mosques often target businesses owned by non-Muslims. These attacks continue to drive a wedge between the Islamic community and the rest of the country, often Christian.
- (U) SOCIAL: Many of these small insurgent groups attack non-Muslim targets such as churches, but will attack mosques and Islamic-owned businesses if the owners do not practice a conservative enough brand of Islam or if they operate businesses that defame Islam, such as strip clubs. These attacks continue to divide the Islamic community from the country's non-Islam population.
- (U) INFRASTRUCTURE: The targets are normally buildings where the group thinks the *kafirs* (nonbelievers) or Muslims who fail to abide by the Koran gather. While the targets may be people, the attack often occurs in a building with some symbolic stature.
- (U) INFORMATION: The arrest of many of the Islamic insurgents and their placement in the same prison allows many of the insurgents to converse with each other and develop a level of

camaraderie the insurgents did not have before their imprisonment. The incarceration also allows individuals to expand their network of safe houses, supporters, and conspirators to a more national level.

(U) PACOM CASE STUDY 6: COMPLEX IED ATTACK ON POLICE IN THE PHILIPPINES

(U) This event was selected as a representative example of IED tactics being used in the Philippines, one of the most active OEs for IEDs in PACOM. This case study illustrates a complex attack. The threat actor emplaced an IED and, after detonating it, proceeded to ambush the target with small arms fire.

(U) On 27 May, members of the New People's Army (NPA) staged an ambush in Capagaran village of Allacapan town, approximately two kilometers away from the Allacapan Police Station (in Cagayan Province in the Philippines). They targeted a Philippine National Police (PNP) Special Action Force (SAF) truck carrying 15 officers. The IED detonation was followed by small arms fire from 30 NPA militants. The attack resulted in the death of nine PNP SAF officers and left six wounded.

(U) Threat Actor Profile: The NPA is a Maoist group that aims to overthrow the government of the Philippines through protracted guerrilla warfare. Activities of the NPA include extortion, raids, assassinations, bombings, and small arms attacks. The group typically targets security forces, government officials, local infrastructure, and businesses that refuse to pay extortion. **The NPA uses landmines to construct IEDs and regularly emplaces them along patrol routes and near police checkpoints**.

(U) Who: The NPA

(U) Where: Allacapan, Cagayan, Philippines

18.263914N 121.586266E

(U) When: Approximately 270830L MAY 13

(U) Target: PNP SAF

ACTION SEQUENCE:

1. At approximately 0830, an NPA support element detonated an IED and disabled the PNP SAF vehicle, killing eight officers and wounding six others.

2. After the IED detonation, approximately 30 NPA militants ambushed the vehicle with small arms fire.

3. The remaining PNP SAF officers returned fire but were overwhelmed and forced to withdraw dismounted.

4. After causing the PNP SAF officers to withdraw under pressure, the NPA retrieved weapons and munitions from the fallen officers and exfiltrated.

IED Casualty Effects:
   KILLED: Nine Officers
   INJURED: Six Officers

(U) IED ATTACK TTP

(U) 27 May 2013

- (U) A truck carrying 15 PNP SAF officers en route to a routine medical appointment was traveling along a main highway. The PNP SAF regularly conducts patrols along this highway.
- (U) At approximately 0830, an NPA ambush element detonated an IED emplaced along the road.
- (U) As soon as the IED detonated, approximately 30 NPA militants that had been hiding in the bush alongside the road attacked the convoy with small arms fire.
- (U) The remaining PNP SAF officers returned fire but were overwhelmed and forced to withdraw dismounted.
- (U) After causing the PNP SAF officers to withdraw under pressure, the NPA retrieved weapons and munitions from the fallen officers and exfiltrated.

(U) Result

- (U) The IED incapacitated the vehicle, immediately killed eight officers, and wounded the remaining six. One officer was unaccounted for.
- (U) A ninth officer died of wounds at the hospital.

(U) KEY OE CONDITIONS

- (U) POLITICAL: During election season the NPA increased attacks targeting politicians and civilians in an effort to stop the population from participating.
- (U) POLITICAL: Due to election season and the increased violence, security patrols in the area increased in an effort to stem the violence. Consequently, the PNP SAF may have set a recognizable pattern of travel along this particular route.
- (U) MILITIARY/POLITICAL: The government of the Philippines has issued press releases arguing that the NPA rebels violate the Republic Act 9851 (RA 9851) and the Comprehensive Agreement on the Respect for Human Rights and International Law (CARHRIHL) by using landmines as IEDs.

(U) US CENTRAL COMMAND

(U) Most active CENTCOM OEs. The most active OEs in CENTCOM are Pakistan, Syria, Yemen, Lebanon, and Egypt. This study did not include IED events in Afghanistan and Iraq, given that such attacks are well-covered in numerous other sources.

(U) Most common IED targets. Military and security forces to include US forces, government infrastructure, targeted political figures, and civilian non-combatants are the most common targets of IED attacks in CENTCOM.

(U) Overview of attacks. Most attacks are not complex. There are, however, notable examples of more complex operations involving considerable planning, synchronization, and implementation. Most of the TTP in CENTCOM were PBIEDs, VBIEDs, or RCIEDS.
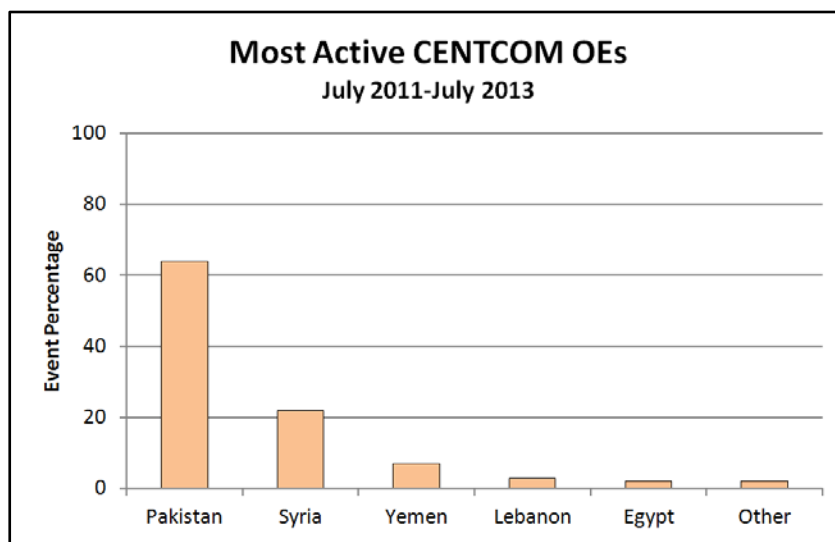
(U) Threat actors using IEDs. Al-Qaeda in the Islamic Maghreb (AQIM), the Taliban, al-Qaeda in the Arabian Peninsula (AQAP), Jabhat al-Nusra, al-Qaeda in Iraq (AQI), Harakat Ahrar al-Sham al-Islamiyya, Hezbollah, Tehrik-e-Taliban Pakistan (TTP), and Lashkar-e-Jhangvi (LeJ) all use IEDs across CENTCOM.

(U) Six case studies were selected to show the range of complexity and the various target types common to the IED attacks. SVBIEDs, PBIEDs, IEDs, and IEDs thrown from a motorcycle reflect the wide variety of IED TTP currently seen in CENTCOM.
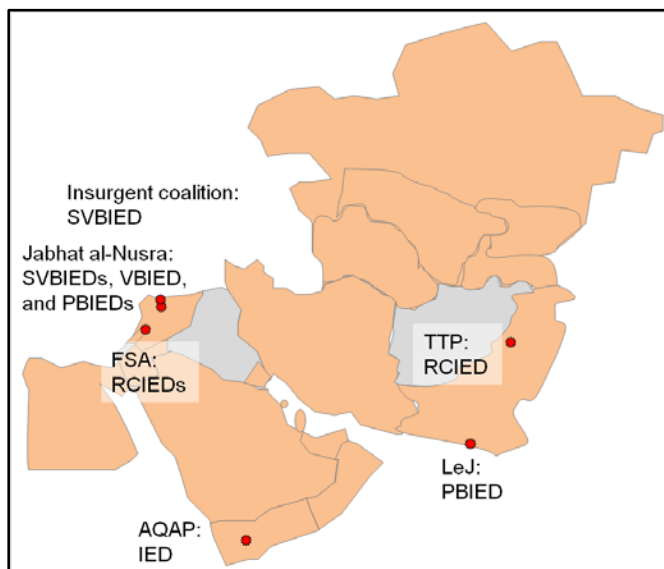
(U) CENTCOM CASE STUDY 1: COMPLEX IED ATTACK ON MILITARY AND CIVILIAN BUILDINGS IN SYRIA

(U) This incident was selected as an example of a complex IED attack common across CENTCOM. Such an attack required planning and synchronization of PBIEDs, SVBIEDs, and VBIEDs. The primary targets were military facilities and personnel, a hotel, and several government buildings.

(U//FOUO) Of note, the number of car and truck bombs used in Syria has skyrocketed in 2013. The number of larger VBIEDs (an al-Qaeda tactic) increased to 62 in the first four months of 2013, up from 16 during the same period in 2012.[47]

(U) Threat Actor Profile: Jabhat al-Nusra is an extremist Islamist organization that operates in Syria. The primary objective of the group is to overthrow the government of President Bashar al-Assad and establish an Islamic state. The US Government designates this group as an alias of al-Qaeda in Iraq (AQI). **Jabhat al-Nusra primarily employs VBIEDs and suicide IEDs (both SVBIEDs and PBIEDs) targeting government and military buildings and security force personnel**.

(U) Who: Jabhat al-Nusra

(U) Where: Aleppo, Syria
   36.2068N 037.1481E
   36.2027N 037.1533E
   36.2068N 037.1495E

(U) When: 030750L OCT 12 – 031035L OCT 12

(U) Target: Military club, hotel, and government buildings

ACTION SEQUENCE:

1. At 0750 hours, three suicide bombers detonated three separate SVBIEDs, targeting an Army Officers Club, the Touristic Hotel, and the Jouha Café.

   A nearly simultaneous assault at this location by three insurgents engaged with small arms fire. The insurgents were killed before they could detonate their suicide vests.

2. At 0817 hours, a fourth SVBIED detonated outside the Aleppo Municipal/Governate building.

3. At 1035 hours, a remote-controlled VBIED was detonated near the al-Amir Hotel, the Aleppo Chamber of Commerce, and the Central Bank as a Syrian military engineering unit tried to dismantle the explosive device inside a vehicle.

   IED Casualty Effects:
   KILLED: Approximately 48 individuals
   INJURED: Over 122 individuals

(U) IED ATTACK TTP

(U) Prior to day of attack

- (U) Assault element conducted area reconnaissance on the attack site.
- (U) Assault element acquired official Syrian military uniforms.

(U) 3 October 2012 (0750)

- (U) Three suicide bombers detonated three separate SVBIEDs with combined explosives estimated at more than 1,000 kilograms on the east edge of Saadallah al-Jabri Square.
- (U) The bombers targeted the Officers Club, the Touristic Hotel, and the Jouha Café.

- (U) The assault element almost simultaneously attacked with rifles and suicide vests, but its members were killed before they could detonate the vests.

(U) 3 October 2012 (0817)

- (U) A fourth SVBIED exploded outside the Aleppo Municipal/Governate building with an estimated 500 kilograms of explosives.

(U) 3 October 2012 (1035)

- (U) A VBIED was remotely detonated as a Syrian military engineering unit tried to dismantle the explosive device inside the vehicle.
- (U) The vehicle was near the al-Amir Hotel, the Aleppo Chamber of Commerce, and the Central Bank.
- (U) Estimates concluded the vehicle contained about 1,000 kilograms of explosives.

(U) Result

- (U) The Touristic Hotel and the Officers Club were partially damaged, while the Jouha Café was completely destroyed.
- (U) The attack killed as many as 48 people and wounded more than 122.

(U) KEY OE CONDITIONS

- (U) MILITARY: Complex attacks such as this are common across CENTCOM.
- (U) MILITARY/SOCIAL/POLITICAL: Jabhat al-Nusra fighters are driven by aggressive ideology and target government facilities and local businesses.
- (U) MILITARY: Non-Syrian foreign and experienced fighters are operating across Syria.
- (U) ECONOMIC: Fighters likely receive funding and training from al-Qaeda. IED TTP and lessons learned are shared among groups.
- (U) SOCIAL: Attacks are driven by desire to topple current government and establish a sharia-based Muslim government.
- (U) MILITARY: Attackers used Syrian uniforms to gain access to military area.

(U) CENTCOM CASE STUDY 2: PBIED ATTACK ON MOSQUE IN PAKISTAN

(U) This event was selected as an illustration of a coordinated use of a PBIED by an organization utilizing a two-man support team to suppress local security forces. The support team was successful and the IED detonated at the mosque on 21 June 2013. This case study provides an example of a small cell's ability to do great damage with minimal investment.

(U) Threat Actor Profile: LeJ is a Sunni Muslim militant extremist organization that operates in Pakistan and Afghanistan. The group specializes in attacks and bombings targeting Shia Muslim religious and community leaders. **LeJ's typical IED tactics are PBIEDs and VBIEDs**.

(U) Who: Lashkar-e-Jhangvi (LeJ)

(U) Where: Peshawar, Pakistan
33.8834N 072.3770E

(U) When: Between 211100L JUN 13 – 211200L JUN 13

(U) Target: A Shia seminary and mosque

ACTION SEQUENCE:

1. A two-man support element of a three-man insurgent cell used small arms to engage a policeman and a security guard who were providing security for a Shia mosque/madrassa.

2. After the support element critically wounded the policeman and security guard, the assault member of the cell entered the mosque during Friday prayers and detonated his PBIED.

3. The two-man support element successfully exfiltrated and avoided capture.

IED Casualty Effects:
KILLED: At least 15 Individuals
INJURED: Over 20 Individuals

(U) IED ATTACK TTP

(U) 21 June 2013

- (U) A two-man support element for a three-man cell, using small arms, fired on a policeman and a security guard who were providing security for a Shia mosque/madrassa in Peshawar, Pakistan.
- (U) After the support element critically wounded the policeman and the security guard, the assault element, consisting of one member of the group with a PBIED, entered the mosque during Friday prayers and detonated his PBIED.
- (U) The two-man support element then successfully exfiltrated, avoiding capture.

(U) Result

- (U) At least 15 individuals were killed and more than 20 were injured.

(U) KEY OE CONDITIONS

- (U) POLITICAL/SOCIAL: Radical Sunni sect intent on overthrowing the Pakistani government and imposing sharia law.
- (U) MILITARY/SOCIAL: Sect regularly conducts massacres and targeted attacks against Shia Muslims and vice versa.
- (U) MILITARY: Sect often uses uniforms to gain access to targets.
- (U) MILITARY: LeJ is affiliated with other terrorist organizations regionally.

(U) CENTCOM CASE STUDY 3: RCIED ATTACK ON CONVOY IN LEBANON

(U) This tactic was selected to provide a representative sample of an IED emplaced along a road in CENTCOM. This was the third of four recent (as of 19 July 2013) IEDs targeting Syria-bound Hezbollah convoys or Lebanese security personnel in Lebanon's Bekaa region. These attacks were likely symptomatic of spillover from the Syrian civil wars.

(U) Who: Free Syrian Army (FSA)

(U) Where: Hermel, Lebanon
34.392778N 036.413611E

(U) When: 070755L JUL 13 – 070802L JUL 13

(U) Target: Syria-bound Hezbollah convoys

(U) Threat Actor Profile: The FSA is a Syrian political/militant group that is actively maintaining an armed insurgency within Syria. The main objective of the organization is to overthrow President Bashar al-Assad's government. **The FSA has been targeting government forces, outside supporters of the government, and oil infrastructure with IEDs**.
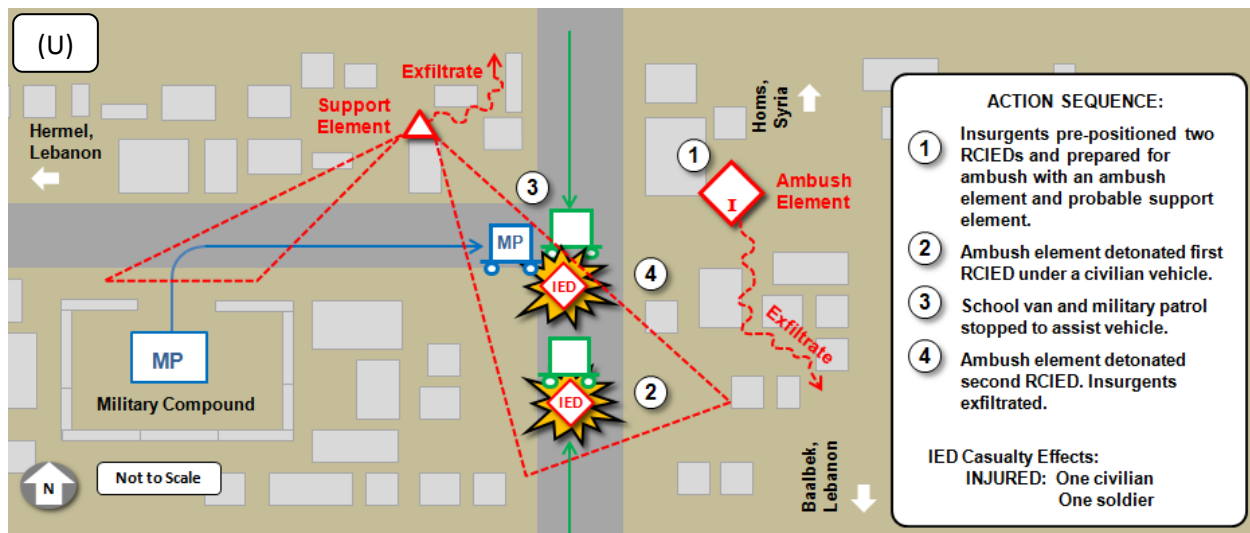
(U) IED ATTACK TTP

(U) 7 July 2013

- (U) The ambush element pre-positioned two IEDs about 50 meters apart at a highway junction on the eastern side of Hermel, Lebanon, and prepared for the ambush.
- (U) Each IED consisted of a 120-mm mortar round connected to a cell phone detonation device.
- (U) Both IEDS were emplaced about 200 meters east of a Lebanese Army checkpoint located adjacent to the road junction.

- (U) The support element observed the military compound.
- (U) The ambush element detonated the first roadside IED under a civilian Honda SUV.
- (U) A school van and a military vehicle stopped to assist passengers of the targeted car.
- (U) Seven minutes later, the ambush element detonated a second IED targeting the van full of children and the military vehicle.
- (U) The ambush element exfiltrated.

(U) Result

- (U) The first blast slightly wounded the driver of the Honda SUV.
- (U) The second blast wounded an officer and a soldier. The van driver and schoolchildren escaped unharmed, but shrapnel damaged their van.
- (U) The location of the mortar rounds—about six inches beneath road surface—limited the destructiveness of the explosions.
- (U) The authorities concluded that the most probable target of this attack was the Lebanese Army.

(U) KEY OE CONDITIONS

- (U) POLITICAL: Bekaa Valley Shia support Assad regime.
- (U) MILITARY: Recent attacks in Bekaa Valley on Lebanese security forces.
- (U) MILITARY/POLITICAL: FSA elements have threatened vengeance on Hezbollah for its role in the Syrian civil war.

(U) CENTCOM CASE STUDY 4: RCIED ATTACK ON FIRST REPONDERS IN PAKISTAN

(U) This event was selected to highlight the increasing use of motorcycles in IED attacks. Between January 2010 and June 2011, 42 IED attacks involving motorcycles were perpetrated worldwide. Seven of the 42 attacks occurred in Pakistan.[48] This event was unique in its use of a firecracker-type device to lure first responders into a kill zone where a much larger pre-positioned RCIED was triggered, killing a former policeman and injuring more than a dozen other personnel.

(U) Who: Tehrik-e-Taliban (TTP)

(U) Where: Karachi, Pakistan
　　　　24.905556N 067.016944E

(U) When: 151200L JUN 13 – 151210L JUN 13

(U) Target: Security checkpoint

(U) Threat Actor Profile: The TTP, also known as the Pakistani Taliban, is a terrorist organization that formed in 2007 in opposition to Pakistani military efforts in the Federally Administered Tribal Areas (FATA). Since 2007, the group has increased in membership and has changed its strategic focus such that it now conducts activities outside of the FATA, targeting government and civilian targets. **The most commonly-used IED tactics for this group are motorcycle-borne VBIEDs, IEDs emplaced along roads, and PBIEDs**.

ACTION SEQUENCE:

① Motorcyclist threw "firecracker" toward security checkpoint and exfiltrated.

② First responders and passers-by congregated at blast site.

③ Ambush element detonated larger IED by remote control, injuring eight (one mortally).

IED Casualty Effects:
　　KILLED: One civilian
　　INJURED: Seven civilians

(U)
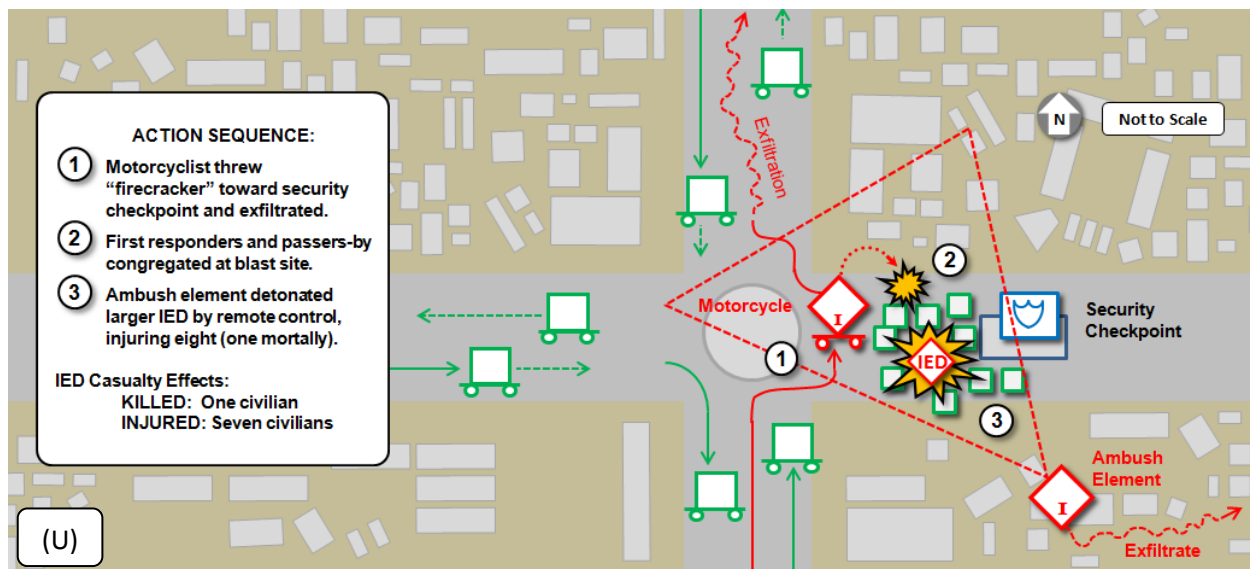
(U) IED ATTACK TTP

(U) 15 June 2013

- (U) A passing motorcyclist tossed a large firecracker-type device toward a security checkpoint near a traffic circle in downtown Karachi. The motorcycle then successfully exfiltrated the area.
- (U) This initial firecracker contained approximately 500 grams of explosives and produced no casualties.
- (U) First responders, security personnel, and curiosity seekers, lured by the sound of the explosion, converged on the scene.
- (U) Ten minutes after the first blast, an ambush element detonated an RCIED that was concealed in a concrete block near the security checkpoint.

(U) Result

- (U) The second explosion inflicted multiple injuries on eight individuals, including one who later died of his wounds.
- (U) The types of injuries indicated that the RCIED had been packed with ball bearings to maximize casualties.
- (U) The RCIED, concealed near the security checkpoint, contained approximately two kilograms of explosives.
- (U) The tactics, techniques, and procedures used in this incident are consistent with skill sets and methods associated with the Tehrik-e-Taliban.

(U) KEY OE CONDITIONS

- (U) MILITARY: Tehrik-e-Taliban is the deadliest terrorist group inside Pakistan. It is an amalgam of 13 groups under central leadership. Tehrik-e-Taliban's goal is to wage defensive jihad against regional security forces. IEDs are a critical weapon in this fight.
- (U) PHYSICAL ENVIRONMENT: Tehrik-e-Taliban was organized in South Waziristan in December 2007.
- (U) PHYSICAL ENVIRONMENT/MILITARY: Pressure from security forces in FATA drove Tehrik-e-Taliban leaders and members to Karachi.
- (U) POLITICAL/SOCIAL/MILITARY: Tehrik-e-Taliban has a broad support base from five million Pashtun expatriates in Karachi.

(U) CENTCOM CASE STUDY 5: IED ATTACK ON ENERGY INFRASTRUCTURE IN YEMEN

(U) This incident was selected as a representative example of the increasing IED attacks targeting energy infrastructure in Yemen and across CENTCOM. AQAP and two other threat actors have frequently attacked oil and gas pipelines over the past two years, placing the Yemini economy under extreme stress. The pipeline attacked in this case was the country's main oil export conduit to the Red Sea. A prolonged closure of this pipeline in 2011 forced Yemen to import fuel from Saudi Arabia. The majority of IEDs in Yemen targeted security forces, critical energy infrastructure, and political figures. This trend will most likely continue in the foreseeable future.

(U) **Who: AQAP**

(U) **Where: Marib, Yemen**
       15.6833N 045.3333E

(U) **When: Between 140400L SEP 13 – 141000L SEP 13**

(U) **Target: Yemen's main oil pipeline**

(U) *Threat Actor Profile*: AQAP is a franchise of al-Qaeda operating in the Arabian Peninsula that seeks to establish an Islamist caliphate. The group is known to conduct terrorist attacks against foreign targets. These attacks include suicide bombings and assassination attempts. Additionally, the group targets Yemeni government and security forces—with very little concern for civilian casualties—through the use of rockets and minefields. **The most commonly-used IED tactics of the group are suicide bombs (both SVBIEDs and PBIEDs) and VBIEDs.**

(U//FOUO)

ACTION SEQUENCE:
1. Insurgents conducted reconnaissance along pipeline and government security positions.
2. Under cover of darkness insurgents emplaced and concealed IED.
3. Timed IED detonated.
4. Insurgents exfiltrated.

IED Effects: Infrastructure damage/disruption

(U) IED ATTACK TTP

(U) Prior to day of attack

- (U//FOUO) The insurgents conducted reconnaissance of oil pipeline infrastructure and security positions.

(U) 14 September 2013

- (U//FOUO) Under cover of darkness, the insurgents dug a hole to expose the pipeline.
- (U//FOUO) They emplaced an IED with timed activation device in the hole next to the exposed pipe, covered their work, and departed the area.
- (U//FOUO) The emplaced IED detonated.
- (U//FOUO) The support element watched as the IED detonated.
- (U//FOUO) The support element exfiltrated the area undetected as first responders attempted to bring the resulting fire under control.

(U) KEY OE CONDITIONS

- (U) ECONOMIC/MILITARY/POLITICAL/INFRASTRUCTURE: Oil pipeline bombed frequently since anti-government uprising began in 2011.
- (U) MILITARY/INFORMATION: AQAP vows to attack infrastructure, foreigners, and security forces with IEDs and other types of attacks.
- (U) POLITICAL/MILITARY: Three separate threat actors are active in the OE: al Houthi rebellion in the north; Southern Movement in the south; and AQAP throughout the country.
- (U) POLITICAL: Collapse of the central government would permit AQAP to use Yemen as international base of operation.

(U) CENTCOM CASE STUDY 6: SVBIED ATTACK ON AIRBASE IN SYRIA

(U) The final case study for CENTCOM was selected to highlight an innovative utilization of captured materials, and to recognize the significant increase in VBIEDs in Syria. The boost in the use of IEDs is likely the result of the greater influence of al-Qaeda-affiliated groups and their foreign fighters in Syria.

(U) Who: Insurgent coalition

(U) Where: Menagh Air Base, Aleppo, Syria
   36.519363N 037.039790E

(U) When: 05 AUG 13, time unknown

(U) Target: Menagh Air Base

(U) Threat Actor Profile: As the civil war in Syria has continued, international groups that support the FSA's cause have gathered in Syria and have effectively created an insurgent coalition. The attack on the Menagh Air Base is an example of the coalition's efforts. **The FSA, in conjunction with the Islamic State of Iraq and the Levant (ISIL) and other Islamist groups, conducted a multi-day assault on the airbase that culminated with a BMP SVBIED attack on Syrian government troops.**

ACTION SEQUENCE:

1. The final assault of a year-long siege was preceded by a three-day barrage of artillery, mortars, and heavy machineguns.

2. On the day of the final assault, a Saudi suicide bomber drove and detonated a specially-prepared BMP SVBIED close to the buildings occupied by the last of the government troops.

3. Insurgent forces attacked along three axes and prevailed after a day of heavy fighting.

IED and Action Casualty Effects:
   KILLED: At least 40 Syrian defenders

(U) IED ATTACK TTP

(U) Background

- (U) For a year, beginning in August 2012, insurgents conducted a siege and executed multiple attacks on the Menagh Air Base in Aleppo Governate, Syria.
- (U) The ISIL claimed it had taken the lead in attacking the airfield, supported by units from the FSA and other Islamist organizations.
- (U) The air base was little more than an outpost with only about 75-100 defenders still remaining when it finally surrendered to the insurgent forces on 5 August 2013.
- (U) The final assault was preceded by a three-day barrage of artillery, mortars, and heavy machine gun fire.

(U) 5 August 2013

- (U) A Saudi suicide bomber drove the specially-prepared BMP SVBIED close to the buildings where the government troops resided.
- (U) The suicide bomber then denoted the VBIED.
- (U) Insurgent troops, attacking along three axes that converged where the government forces had consolidated at the airbase, prevailed after a day of heavy fighting.

(U) KEY OE CONDITIONS

- (U) MILITARY/SOCIAL: Disparate secular and Islamist insurgent groups cooperated in a successful year-long siege.
- (U) MILITARY: Innovative use of a modified BMP as an SVBIED.
- (U) MILITARY: Increased capability of insurgents to shoot Syrian air assets from the sky, reducing Syrian Air Force resupplies and attack capabilities.
- (U) MILITARY/POLITICAL: Menagh Air Base became less strategically substantive and more psychologically and symbolically important over the course of the siege.

(U) US AFRICA COMMAND

(U) Most active AFRICOM OEs. Almost two-thirds of attacks studied occurred in Nigeria (34%) or Somalia (29%), and one-quarter happened in Kenya (16%) or Libya (10%). The remaining 12% were in Mali, Algeria, South Africa, Niger, Tanzania, Tunisia, and Ghana. Attacks in Libya started April 2012 and appear to be increasing. Attacks in Mali started in February 2013, and were likely the result of French military action; the rebels were outmatched and switched to hybrid threat tactics.

Most Active AFRICOM OEs
July 2011-July 2013

(U)
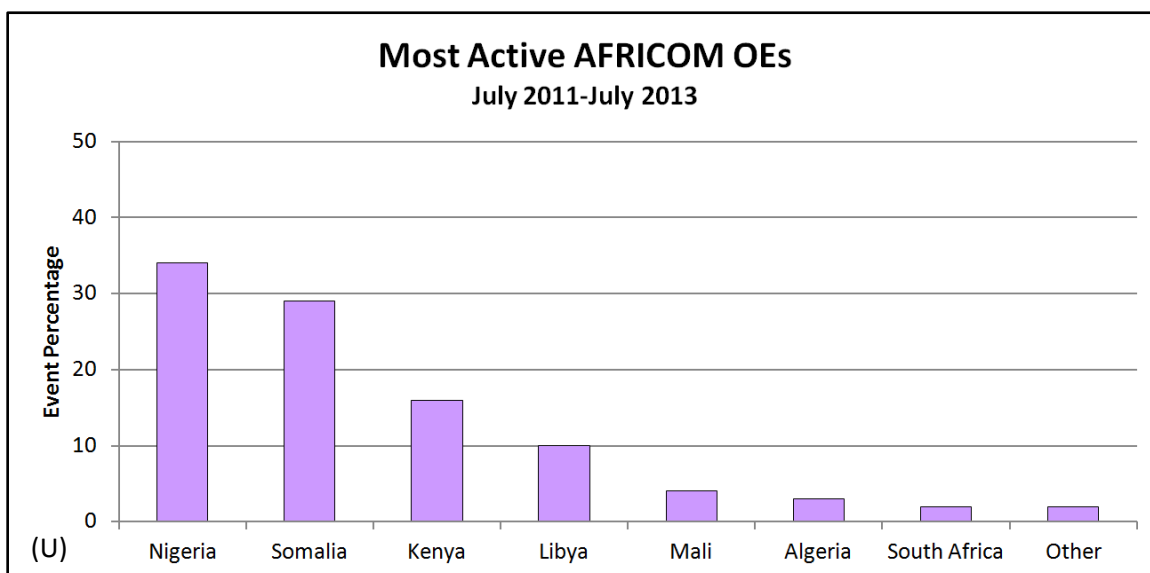
(U) Most common IED targets. Security forces were the most common known target (43%), followed by civilian non-combatants (34%). Non-security government personnel accounted for 10%. The remaining 13% were multiple targets (e.g. political and military), foreign, media, education, infrastructure, and NGOs.

(U) Overview of attacks. Most IED attacks were very simple in nature, with one perpetrator and no weapon other than the IED (or multiple "grenades"). The plurality of IEDs were stationary and placed at a specific location, such as in a shop, by a road, or next to a building. IEDs that were thrown by individuals, often from vehicles, were also favored by perpetrators. Other common IED types were PBIEDs, SVBIEDs, and
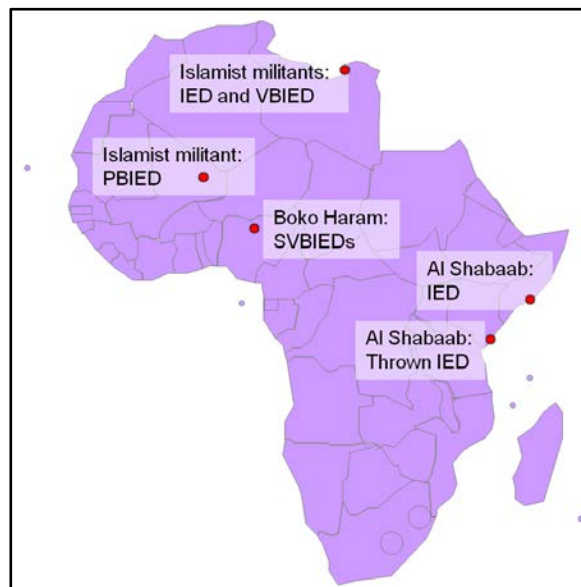
VBIEDs. Of note, "grenade" attacks were included, as homemade grenades are common in AFRICOM and reporting often did not distinguish between IED grenades and the commercial variety. Less than 20% of attacks were complex and encompassed situations such as multiple perpetrators; multiple IEDs; SAF combined with IEDs; simultaneous attacks on multiple targets; and first-responder attacks.

(U) Threat actors using IEDs in AFRICOM. Of note, almost all IED activity of known or suspected origin was performed by **Islamic individuals/groups**. Groups known or suspected were **al Shabaab** (Somalia, Kenya, Mali); **Boko Haram** (Nigeria); **Movement for Unity and Jihad in West Africa (MUJAO)** (Algeria, Mali, Niger); **AQIM** (Algeria); and **Saccawu**—a labor union (South Africa). Of interest, al Shabaab is continuing to conduct more high-profile attacks and is expanding "its footprint to parts of northern Somalia."[49]

(U) Five case studies were selected for AFRICOM. Each case represents common TTP used across the COCOM.

(U) AFRICOM CASE STUDY 1: IED ATTACK ON CIVILIANS

(U) This attack is an excellent example of a threat assault element throwing an IED from a vehicle. Similar attacks have been conducted across AFRICOM, specifically in Nigeria, Somalia, and Kenya.

(U) Who: al Shabaab (possibly)

(U) What: IED thrown from minibus

(U) Where: Mtwapa, Kenya
03.949907S 039.744649E

(U) When: Approximately 311900L MAR 12

(U) Target: Christian civilians

(U) Threat Actor Profile: Al Shabaab is a violent extremist organization that has led an insurgency using guerrilla warfare and terrorist tactics against the government of Somalia since 2006. The group regularly uses intimidation and violence to recruit new members and scare activists working to bring peace. They are responsible for many assassinations of government officials, civil society figures, and journalists. Al Shabaab's IED use has increased since 2012 due to its capability to wage conventional attacks being greatly diminished. **Typical tactics used are IEDs emplaced along roads, PBIEDs, and SVBIEDs.**
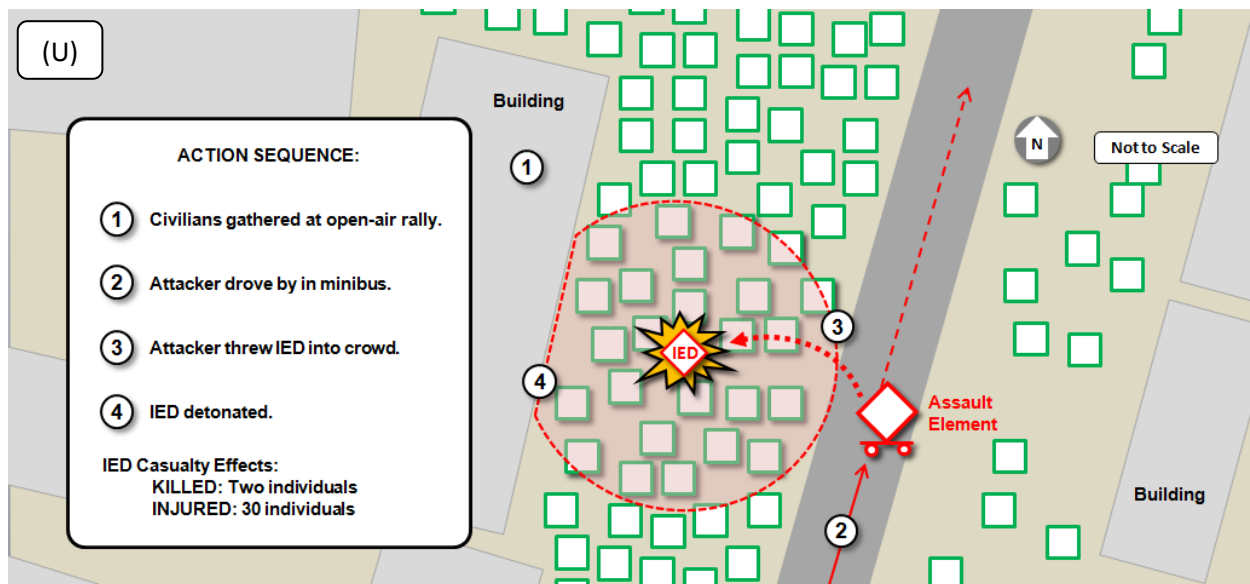
(U) IED ATTACK TTP

(U) Prior to day of attack

- (U) The assault element likely conducted area reconnaissance where the meeting was to occur. The rally had likely been publicized in advance.

(U) 31 March 2013

- (U) The assault element drove the minibus on the main road close to the gathered civilians.
- (U) An assault element member threw the IED out of the open window of the minibus.
- (U) The IED, possibly a home-made grenade, detonated in the middle of the crowd.
- (U) The assault element departed the scene.

(U) Result

- (U) Casualties were one civilian killed and 31 wounded. One of the wounded individuals subsequently died of his injuries.
- (U) Roadblocks were set up after the attack and three suspects were eventually arrested.
- (U) Al Shabaab released a statement regarding the attack, but stopped short of claiming credit.
- (U) Attacks using both similar IEDs and TTP have occurred in Nairobi and Mombasa, and were generally credited to al Shabaab.

(U) KEY OE CONDITIONS

- (U) ECONOMIC/SOCIAL/MILITARY: Open-air meeting offering ease of access and civilian targets. Such meetings are common in Kenya.
- (U) PHYSICAL ENVIRONMENT/INFRASTRUCTURE: Mtwapa is located in southeastern Kenya, 15 km north of Mombasa. The town is located on the coastline and is a common destination for tourists. Attack site was located on the main road in a commercial district.
- (U) MILITARY: Kenya had sent troops into Somalia to fight al Shabaab five months prior to the attack.
- (U) MILITARY: Kenyan military involvement in Somalia gave al Shabaab justification for the attack.
- (U) POLITICAL/SOCIAL: Several hundred Kenyan civilians were attending an open-air Christian rally.

(U) AFRICOM CASE STUDY 2: PBIED ATTACK FOREIGN FIGHTERS IN MALI

(U) The incident was selected as an example of typical PBIED TTP used across AFRICOM.

(U) Who: Islamist militant (probable)

(U) What: PBIED

(U) Where: Kidal City, Mali
       18.4278N 001.4086E

(U) When: Between 120800L APR 13 – 121200L APR 13

(U) Target: Chadian soldiers
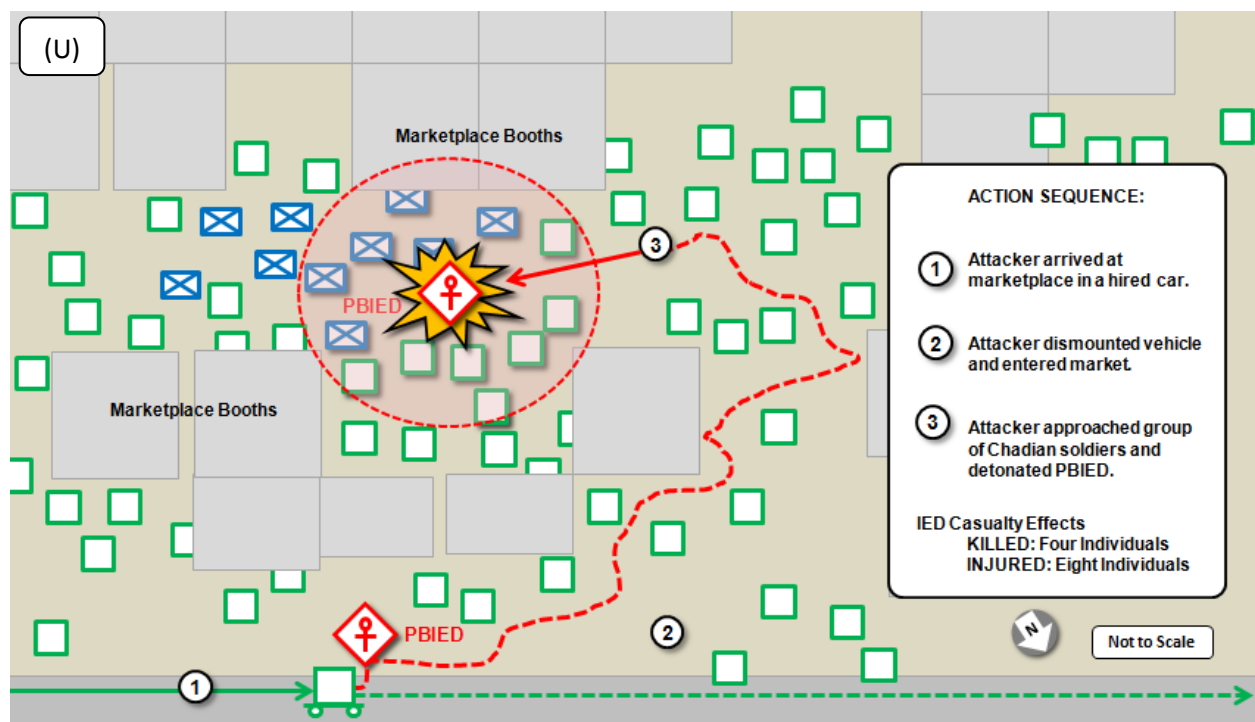
(U) IED ATTACK TTP

(U) Prior to day of attack

- (U) Militant reconnoitered the marketplace and investigated transportation options.
- (U) The militant noticed that Chadian soldiers were frequent customers of the marketplace shops.

- (U) The militant planned the attack and acquired a PBIED.

(U) 12 April 2013

- (U) The militant took a car (most likely a taxi) to the target site.
- (U) The militant arrived mid-morning, when the Chadian soldiers were most likely to be shopping in the marketplace.
- (U) The militant approached a group of soldiers on foot and then detonated his PBIED.

(U) Result

- (U) Casualties were the bomber and three soldiers killed, four soldiers wounded, and five civilians wounded. One of the wounded soldiers subsequently died of his injuries.
- (U) The city center was closed off and all vehicles searched after the attack.

(U) KEY OE CONDITIONS

- (U) MILITARY: The immediate area hosts bases for French and Chadian soldiers, while the city itself is controlled by the National Movement of the Liberation of Azawad (MNLA), a Tuareg rebel group.
- (U) SOCIAL/MILITARY: The foreign forces and MNLA dislike each other. Both have been the target of previous suicide attacks in the area.
- (U) INFRASTRUCTURE: The Kidal market is a large, open-air market that is located in the city center.
- (U) PHYSICAL ENVIRONMENT: Kidal City is located in northern Mali, 1,500 km northeast of Bamako.
- (U) ECONOMIC/SOCIAL: Open-air markets allow easy access and opportunity.
- (U) MILITARY/POLITICAL: Presence of foreign soldiers in Mali.
- (U) MILITARY: Lack of cooperation between foreign and Tuareg security forces.
- (U) MILITIARY/ECONOMIC: Need for soldiers to purchase their supplies locally.

(U) AFRICOM CASE STUDY 3: IED ON CONVOY IN SOMALIA

(U) This incident was selected to provide an example of IEDs emplaced along roads to directly attack military forces. These types of roadside IED TTP are common in AFRICOM. In this case, the unit attacked was part of a multinational force. The convoy, carrying mostly African Union Mission in Somalia (AMISOM) troops, was attacked while en route to a base in Mogadishu's northern Shibis neighborhoods. The attackers successfully exfiltrated after detonating the IED.

(U) Who: Al Shabaab

(U) Where: Mogadishu, Somalia
        02.0414N 045.3535E

(U) When: 17 MAR 12, time unknown

(U) Target: AMISOM convoy

ACTION SEQUENCE:
1. Ambush element pre-positioned IED.
2. Support element positioned to view IED detonation and effects.
3. AMISOM convoy drove past the IED along route to a neighborhood base.
4. Ambush element detonated IED.
5. Ambush and support elements successfully exfiltrated.

IED Effects:
    Convoy vehicles and one civilian vehicle damaged.

(U)   Not to Scale   N
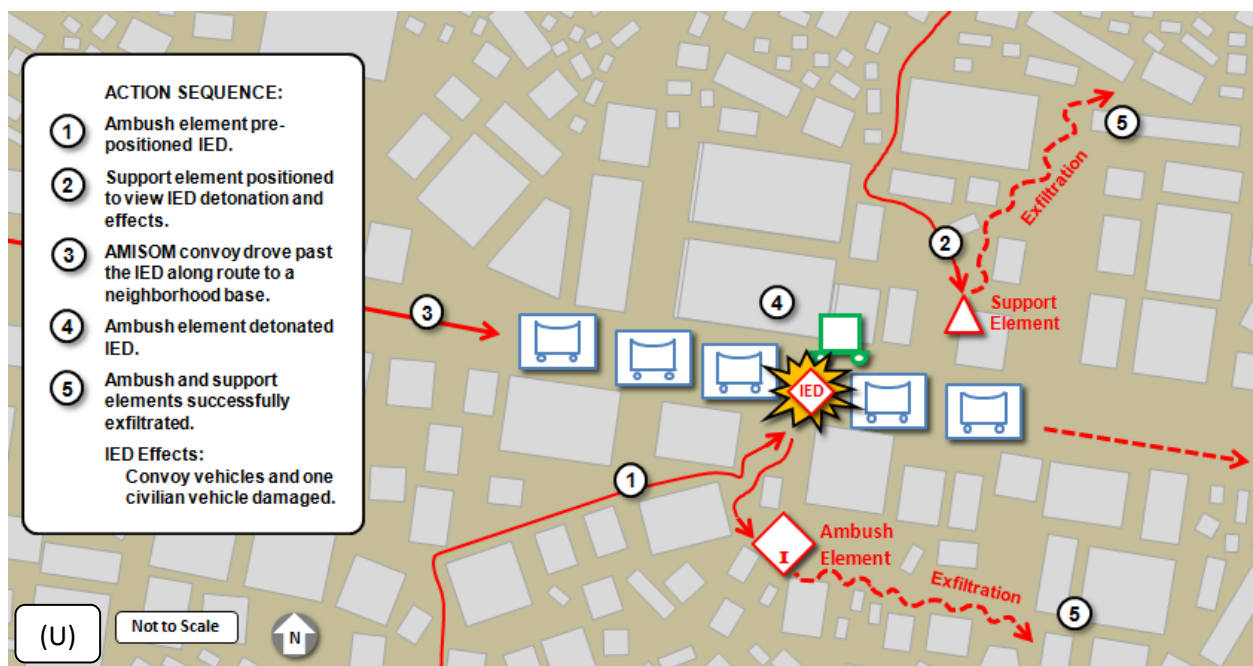
(U) IED ATTACK TTP

(U) 17 March 2012

- (U) An al Shabaab ambush element prepositioned an IED on a main route known to be used by multinational forces.

- (U) The support element positioned itself in order to view IED detonation and aftermath of the attack.
- (U) An AMISOM convoy drove past the IED en route to a local base.
- (U) The IED detonated. The ambush element most likely triggered the IED.
- (U) Both ambush and support elements exfiltrated the area of attack.

(U) Result

- (U) The bomb damaged convoy vehicles and one civilian car.

(U) KEY OE CONDITIONS

- (U) MILITARY/POLITICAL: Al Shabaab controlled Mogadishu until a January 2012 offensive pushed the last of the terrorist organization from the capital.
- (U) POLITICAL: Fragile host nation government.
- (U) ECONOMIC/SOCIAL: War-weary and economically destitute population.
- (U) MILITARY: Multinational peacekeeping force of over 10,000 troops.
- (U) MILITARY: Receding, but active and experienced terrorist organization.
- (U) MILITARY: Regular attacks on civilian, government, and military targets.
- (U) MILITARY/POLITICAL: Despite successful AMISOM offensive operations, al Shabaab still controls large rural areas and threatens the fragile government with regular attacks against civilian, government, and military targets.

(U) AFRICOM CASE STUDY 4: SVBIED ATTACK ON TELECOMMICATIONS INFRASTRUCTURE IN NIGERIA

(U) This event was included as an example of a typical SVBIED attack common to AFRICOM.

(U) Who: Boko Haram

(U) Where: Kano, Nigeria
>   12.0060N 008.5404E
>   12.0030N 008.5398E

(U) When: 220800L DEC 12 – 220830L DEC 12

(U) Target: Cell phone switch stations

(U) Threat Actor Profile: Boko Haram is a militant Islamist group operating in Nigeria. Its main objective is to establish an Islamic state in Nigeria and institute sharia law throughout the country. The group primarily targets security force personnel, local officials, and civilians. **Typical IEDs used by Boko Haram are suicide IEDs (usually SVBIEDs) and VBIEDs**.
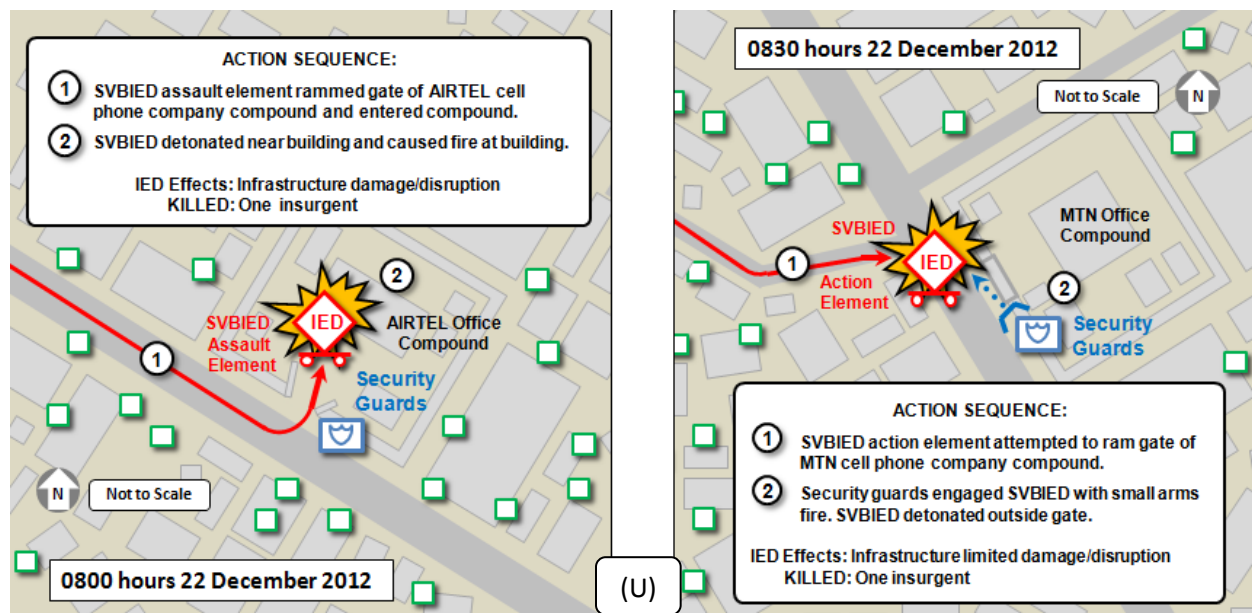
(U) IED ATTACK TTP

(U) 22 December 2012

- (U) At 0800 hours, an SVBIED driver approached and rammed a gate leading to the AIRTEL office building.
- (U) The attack occurred on a Saturday when only one security guard was on duty at the gate.

- (U) The SVBIED driver breached the gate and detonated his explosives close enough to the building to cause it to catch fire.
- (U) At 0830, a second SVBIED attempt was made at the offices of MTN, the largest cell phone company in Nigeria.
- (U) Security guards engaged the SVBIED driver with SAF.
- (U) The driver was unable to breach the gate and exploded his vehicle at the gate.

(U) Result

- (U) There were reports of a limited interruption of cell phone service following the explosions.

(U) KEY OE CONDITIONS

- (U) POLITICAL/ECONOMIC: Corrupt oil-rich government fosters unstable conflict-prone environment.
- (U) SOCIAL: Historically-based tensions between Christians and Muslims.
- (U) MILITARY/SOCIAL/POLITICAL: Small, indigenous Islamist terrorist organization geographically based in ideologically safe areas.
- (U) MILITARY: Targets include random civilian, Muslim, Christian, and political leaders; Westerners; journalists; churches; mosques; and schools.

(U) AFRICOM CASE STUDY 5: IED AND VBIED ATTACK ON GOVERNMENT BUILDINGS IN LIBYA

(U) This attack represented common TTP of VBIEDs and smaller IEDs used across AFRICOM. It also had the characteristics of IED attacks perpetrated by international Islamist terrorist organizations across various OEs. This example highlights the focused targeting of political and governmental infrastructure.

(U) **Who: Islamist militia**

(U) **Where: Benghazi, Libya**
        32.120199N 020.057243E
        32.114804N 020.062218E

(U) **When: 281940L JUL 13**

(U) **Targets: Courthouses and elements of the judicial system**
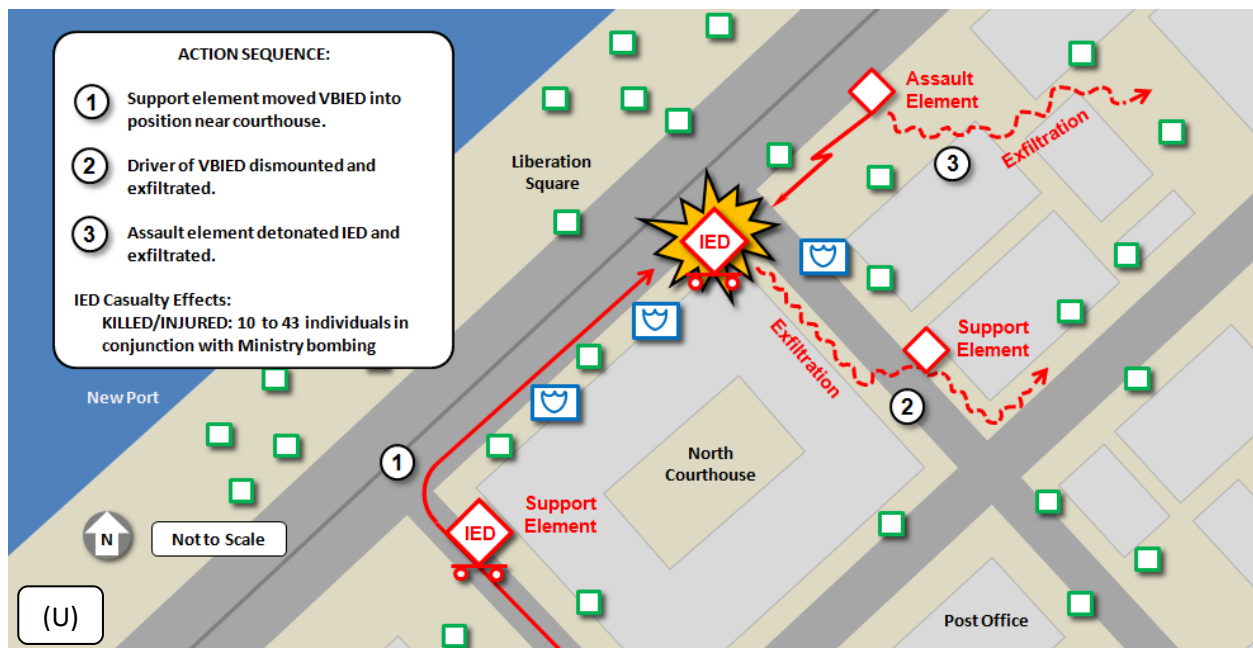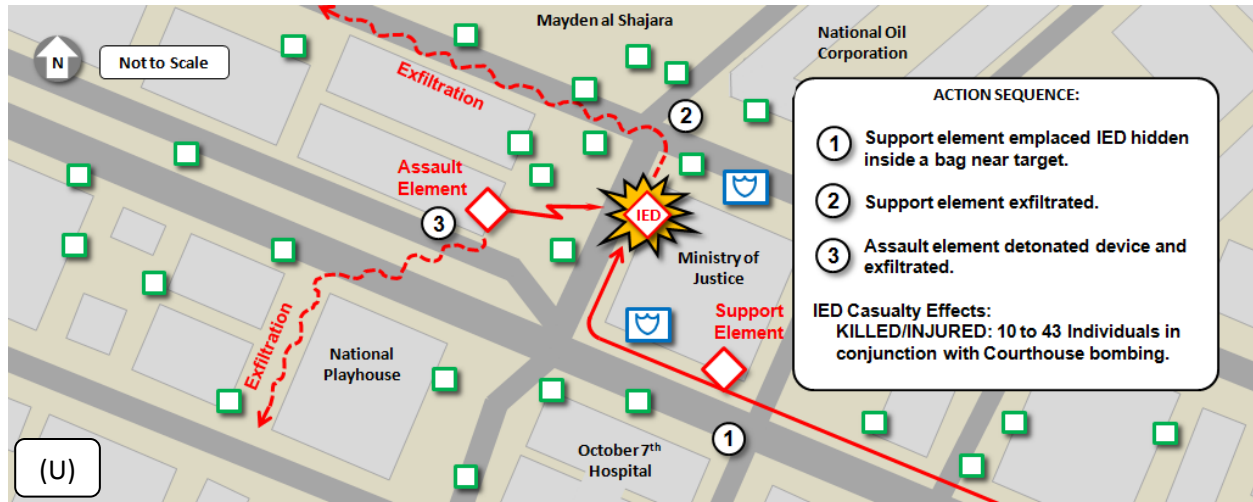
(U) IED ATTACK TTP

(U) Prior to day of attack

- (U) The action and support elements reconnoitered the area of attack.

(U) 28 July 2013

- (U) The support elements moved the VBIED and smaller IED into position.
- (U) The support elements exfiltrated the area.
- (U) The action elements conducted simultaneous high-profile attacks at multiple locations.
- (U) The targets were the locations of the 2011 initial protests of the Arab Spring. They were possibly targeted to undo support for the new government.
- (U) Bombings occurred at 1900 hrs, after evening prayers and before a planned rally commemorating the death of a regime official that was martyred after defecting to the rebellion.
- (U) The initial attack was a VBIED that was remotely detonated in front of the North Courthouse in Liberation Square.
- (U) The second attack was against the Ministry of Justice building. This IED was a simple bag filled with explosives.

(U) Result

- (U) The explosion also damaged a hospital and the offices of the National Oil Corporation.
- (U) Initial reports from security personnel included 10 casualties, revised by the Ministry of Health to 43.

(U) KEY OE CONDITIONS

- (U) POLITICAL: Libyan government in transition and struggling to maintain legitimacy.
- (U) MILITARY/ECONOMIC: Bomb making common among local population.
- (U) MILITARY/POLITICAL: Variety of foreign and domestic elements competing for power.
- (U) POLITICAL: Rule-of-law institutions targeted to support extremist narrative for an Islamist state.

(U) MIGRATION OF IED TTP

(U) IEDs are an enduring feature of the majority of the OEs where US forces may conduct combat operations. As discussed previously, IEDs are relativity easy to construct, depending on the type of device, and are generally effective on multiple levels. IEDs can be used at a tactical level with the target(s) being maimed or killed, or at a strategic level with the IED instilling terror in the population that influences political policy. IEDs are a dynamic threat, but are not a new threat to the US or allied forces.

(U) Historical examples show usage of improvised explosives by groups like the IRA or the Viet Cong (VC) for multiple purposes, though the history of the IED dates back further than these examples. IEDs have been known by other terms such as car bombs, pipe bombs, and explosive booby traps, but the wars in Iraq and Afghanistan brought the subject to the forefront of global attention along with the term "IED." Recent years indicate a definite increase in the frequency of IED attacks on a global scale. The question now is, how are IED TTP migrating from one point to another across the global OE?

(U) This section explores and presents a plausible explanation of how IED TTP migrate from one OE to another, broken down into two broad categories of regional and global. The migrating IED TTP are also very much related to the conditions of each OE. Further discussion of support components of IED TTP migration are also covered in the section below.

(U) Regional IED Migration

(U) Research illustrates that in multiple cases, the proximity of a physical environment is especially significant in the migration of IED TTP. It is logical that the closer an object or concept is, the easier it is to obtain or grasp in most situations. Most groups can move by vehicle, animal, or on foot transmitting TTP or bringing lethal aid from point of origin to the desired location. The following are factors that facilitate the migration of IED TTP:

- (U) Porous borders
- (U) Ill-equipped or corrupt security forces
- (U) Economical disparity
- (U) Social upheaval or outright conflict
- (U) Social similarities and group dynamics (such as religion, background, or fundamentalist ideology)
- (U) Financial gain
- (U) Groups with something to gain by sharing
- (U) Like-minded individuals/groups (ideologically) migrate and link up in different countries

(U) Recent examples of regional IED migration due to physical proximity:

- (U) Iraq to Syria (Al-Nusra Front, AQ, and the Syrian rebels)
- (U) Algeria to Mali and Niger to Nigeria (AQIM and Boko Haram)
- (U) Pakistan to Afghanistan

(U) Global IED Migration

(U) The observations above examined regional IED proliferation/migration as a result of geographical proximity. The next step is to examine IED TTP migration on a global level, noting that TTP often migrate between OEs that are not physically close. Technology has played a considerable role in making the world a smaller place by connecting people thousands of miles apart. The development of the Internet, email, and social media outlets such as Skype, YouTube, and Facebook have linked the global community. Information, positive or negative, can be transmitted across the globe in a matter of seconds, allowing the worldwide migration of IED TTP. These new technologies can also be used as a tool for fundamentalists to recruit and/or radicalize individuals (e.g. the homegrown terrorist or lone wolf scenarios). Technological advancements with regards to social media have played a pivotal role in the IED becoming more precise, deadly, and widespread. Now a large population worldwide (even with a limited Internet connection) can find information on IEDs within seconds; there are even newsletters like AQ's *Inspire* magazine that make the information readily available.

(U) In addition to connecting through electronic means, infrastructure improvements such as airports have made global travel less expensive and more accessible in previously remote parts of the world. Travel enables people to go to training schools in other countries to learn how to make IEDs, but it also makes it easy to promulgate IED attacks on distant locations. For example, a group can use an agent that will not draw attention during travel, such as in the case of AQAP's Christmas bomber failed airline attack. In 2010, AQAP concealed IEDs in printer cartridges inside packages aboard airfreight airlines. Other recent examples are the Faisal Shahzad VBIED in New York City and the Boston Marathon Attack (see NORTHCOM Case Study 3).

(U) Like-minded groups with established cyber connections facilitate the migration of IEDs, including key pieces of the IED puzzle such as financing, weapons implementation, weapons structure, lethal aid, and facilitators/advisers. Two examples of groups that posses these unique skill sets and have access to global networks can be found with the Iranian Revolutionary Guard Corp (IRGC)/Hezbollah operatives and the IRA.

(U) The IRGC/Hezbollah has a global reach illustrated by the prosecution of a Hezbollah operative in early 2012 for "several thousand kilograms of explosives and bomb-making material" in Bangkok, Thailand. Iranian influence "is suspected of directing terrorist attacks in Georgia, India, Thailand, and Kenya in 2012."[50] In 2001, a relationship was discovered between the IRA and the FARC when IRA members were arrested in southern Colombia coming from FARC-controlled territory. Two individuals known as the "IRA's leading explosives engineer and a mortar expert"[51] were found with traces of explosives on their clothing and baggage. They were likely acting as advisers on weapons implementation.

(U) The examples above illustrate dynamic relationships among terror groups across a global spectrum. The circumstances within a country or region can determine the likelihood of the migration of IED TTP. Close proximity many times drives the movement of IED TTP across borders of nearby countries.

(U) Additionally, new technologies and infrastructure improvements—such as the Internet, social media networks, and improved transportation networks—increases the amount of IED information that can be passed from threat group to threat group on a global scale.

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(U) RELATED PRODUCTS

(U) Follow these links to view related CTID products:

- (U) Pattani Thailand IED Attacks Threat Report (May 2013; report is U//FOUO)

- (U) Kachin Independence Army (KIA) Threat Report (April 2013)

- (U) Jabhat al Nusra Threat Report (May 2013)

- (U) Menagh Airbase Siege: Menagh, Syria Threat Report (Sept 2013)

(U) See also the Red Diamond Newsletter, which contains current articles on a variety of topics useful to both Soldiers and civilians ranging from enemy TTP to the nature and analysis of various threat actors.

(U) For detailed information on weapons and equipment, see the Worldwide Equipment Guide.

(U) POCs

TRADOC G-2 Intelligence Support Activity (TRISA)
Complex Operational Environment and Threat Integration Directorate (CTID)
803 Harrison Drive, BLDG 467
Fort Leavenworth, KS 66027
913-684-7920 (COMM)
552-7920 (DSN)

(U) SYMBOLOGY GLOSSARY

(U)   **Guide to Symbols and Control Measures in *Global IED Study***

Symbol		Description
	PBIED	Personnel Borne IED
		Explosion
	IED	General diameter of IED casualty effects
		Improvised Explosive Device
	VBIED	Vehicle Borne IED
		IED emplaced but not armed
	Motorcycle	
		IED armed and ready to detonate
	SVBIED	Suicide Vehicle Borne IED
		IED detonation
	VBIED BMP	Vehicle Borne IED Armored Personnel Carrier
		IED executed

Note. This symbol depicts the location of an IED that has been detonated.

Note. These symbols are present in the graphics of the *Global IED Study*. Source documents are DOD Military Standard 2525-C (2008) and Army Reference Doctrinal Publication (ADRP) 1-02 (2013). ADRP 1-02 is in review for update with projected publication in 2014. Symbol adaptations are applied when necessary to clarify elements of an incident within this study .

(U)   **Guide to Symbols and Control Measures in *Global IED Study***
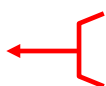
Attack by Fire Position (Planned)

Attack by Fire Position (Engaging)

Support by Fire Position (Planned)

Support by Fire Position (Engaging)

Ambush Position (Planned)

Ambush Position (Engaging)

Infiltration   Infiltration

Exfiltration   Exfiltration

Electronic Detonation [when identified as such with an IED]
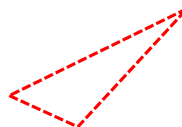
Observation-Surveillance arc

Indirect Fire (Planned)

Indirect Fire in Progress (Engaging)

Direct Fire (Planned).

Direct Fire in Progress (Engaging).

Hand-thrown [when identified as such with an IED]

Note. To present an element as engaging a target with fires, use a circle-dotted line and the arrowhead type as in Microsoft Power Point® found at "Shape Outline- Arrows- More arrows-Line Style- Arrow setting, End type = "Stealth Arrow."

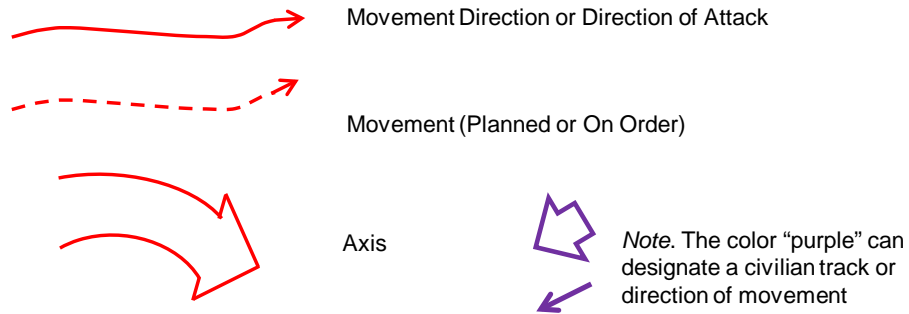(U)   **Guide to Symbols and Control Measures in *Global IED Study***

◇ I	Insurgent	⊠	Soldier or Unit [Enemy-Blue Color]
◇	Threat Individual	⊠	Soldier or Unit [Neutral-Green Color]
◇ SAFE	Safe House		Law Enforcement [Enemy-Blue Color]
△	Observation Post		Law Enforcement [Neutral-Green Color]
◇	Light Mortar	□	Civilian (Neutral) [Green color]
◇	Medium Rocket Launcher		Vehicle (Neutral) [Green color]

Note. Other irregular forces that could be encountered in similar conditions include guerrillas and/or criminals. Those symbols are included as information:
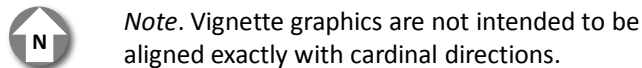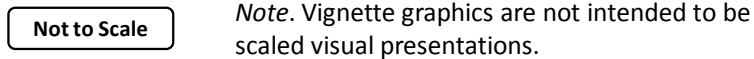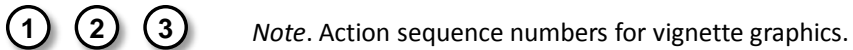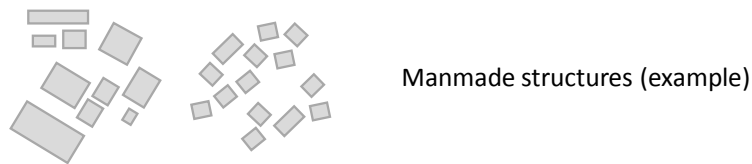
◇ G   : Guerrilla

◇ GANG   : Criminal

	Law Enforcement Vehicle
MP	Military Police Vehicle
B	Bus
	Utility Wheeled Vehicle (Personnel or Cargo)
✤	Composite Unit (Rotary-Fixed Wing)

(U)   **Guide to Symbols and Control Measures in *Global IED Study***

Movement Direction or Direction of Attack

Movement (Planned or On Order)

Axis

Note. The color "purple" can designate a civilian track or direction of movement

Note. The color "red" represents an opposing force (OPFOR) symbol or control measure. The color "blue" represents an enemy of the OPFOR, whereas the color "green" is considered neutral within a relevant population. A neutral element can be considered an OPFOR target based on OPFOR purpose and intent.

Manmade structures (example)

Oil Rig

Pipeline

① ② ③   *Note*. Action sequence numbers for vignette graphics.

Not to Scale

Note. Vignette graphics are not intended to be scaled visual presentations.

N

Note. Vignette graphics are not intended to be aligned exactly with cardinal directions.

(U) END NOTES

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[4] RAPID, "Weekly News Update," 18 October 2013.

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[7] JIEDDO and Defense Intelligence Agency (DIA), "Weapons Technical Intelligence (WTI) Improvised Explosive Device (IED) Lexicon," October 2012.

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[9] Jeffery T. Wickett, "IEDs: A Global Threat Requiring a Global Response," Counteriedreport.com, Spring/Summer 2013.

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[36] RAPID, "PACOM IED Overview," 22 March 2013.

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