



Resolution  
Technology  
Analytics, LLC

# QUARTERLY WORLDWIDE OPEN SOURCE IED ROUND-UP

**August 2017 through October 2017**

# OUTLINE

- ◎ Quarterly Media Reported RCIED Occurrence Totals
- ◎ Quarterly RCIED Information of Interest
- ◎ Additional RCIED-related Information of Interest
- ◎ Information for the Record
- ◎ Quarterly Media Reported Non-RCIED Occurrences & Information of Interest
- ◎ Contact Information

# BRIEF CONTENT

## Disclaimer:

The information contained here within is obtained from the news media and other open/unclassified sources. The accuracy and comprehensiveness is dictated by the media/sources and their interests, abilities, and accesses. The unverified information is presented at “face value” with comments as necessary. The information should be used to obtain a general picture of the (RC)IED and related environment over time and/or to initiate further study.

## Source:

The information contained here within is from the *GETS* open source database and has not been part of any classified/restricted documents. Requests for *GETS* information can made to the author. (see contact information)

## Photos:

The author attempts to verify that photos are correctly linked to news articles, but news organizations sometimes link similar photos without indicating they are file photos.

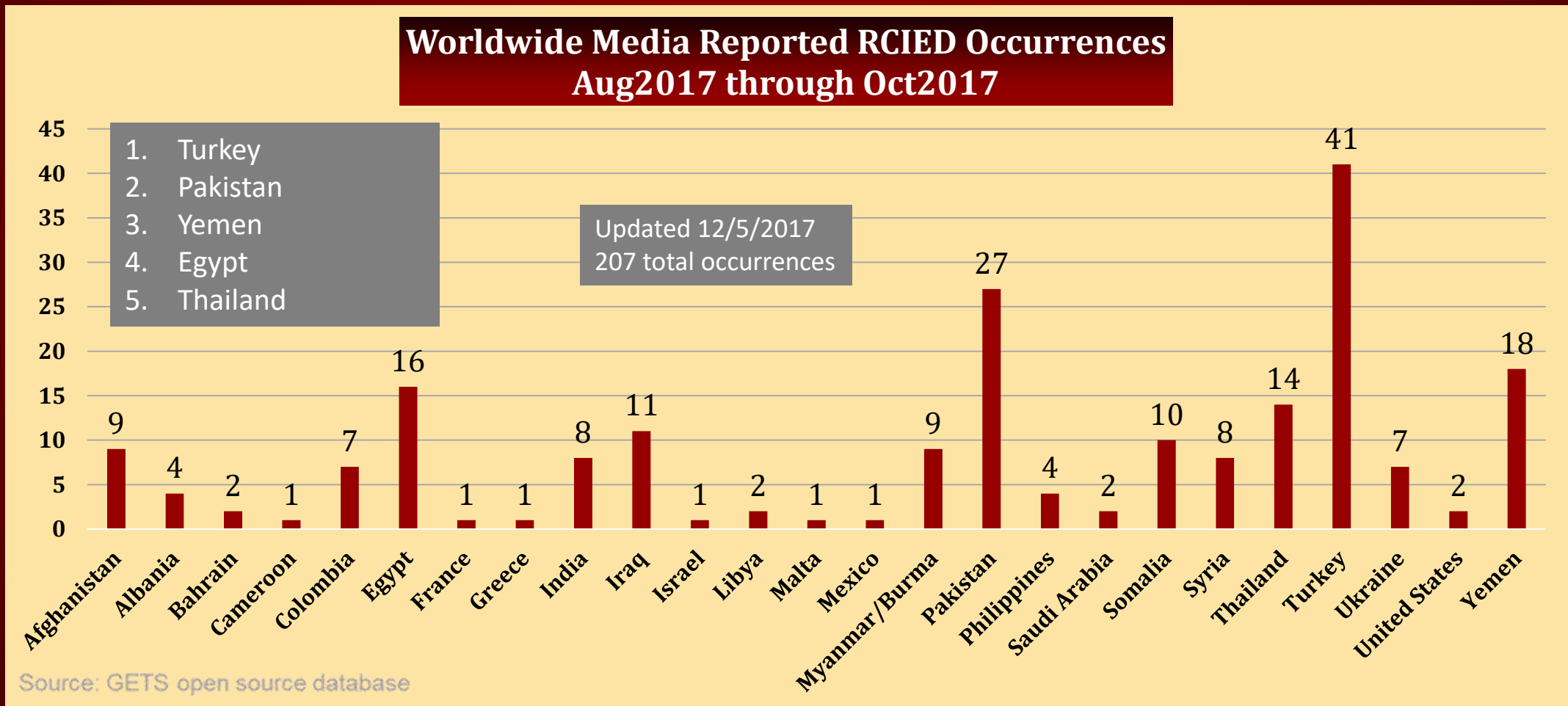
# QUARTERLY REPORTED RCIED OCCURRENCE TOTALS BY COUNTRY

Aug17 – Oct17  
May17 – Jul17  
Feb17 – Apr17  
Nov16 – Jan17  
Aug16 – Oct16

# DATA EXPLANATION

- ◎ IED material is considered an RCIED occurrence in the following cases:
  - IED with remote control trigger reported/shown as completed and found at cache site or during transit
  - Find of emplaced IED with remote control trigger type
  - Post-blast of IED reported as remote control triggered or wireless components reported as linked to device
- ◎ Multiple RCIEDs found or used in same event are reported as separate occurrences.
- ◎ The term “remote control” is taken to mean “wireless,” but wired remote control is possible and command-wire and time-based devices are sometimes referred to as “remote control.”

# WORLDWIDE MEDIA REPORTED RCIED OCCURRENCES AUG2017 THROUGH OCT2017



# AUG17 – OCT17 NOTES

The following lists more specific information that is within the overall numbers of the total RCIED occurrences per country. It is presented to provide a “snap shot” of trigger types reportedly used.

- Afghanistan – Nokia phone (1), Nokia 1280 (1)
- Albania – Nokia phone (3)
- France – mobile phone (1)
- Greece – mobile phone (1)
- India – possible appliance controller (1)
- Iraq – Nokia 105 (1), Nokia phone (1), mobile phone (3)
- Israel – mobile phone (1)
- Malta –mobile phone (1)
- Mexico - possible DB04r remote control firing system (1)
- Myanmar/Burma –vehicle entry system (6)
- Philippines –mobile phone (4)
- Syria –two-way radio (5), vehicle entry system (1)
- Thailand – two-way radio (10), TYT TH-F8 (1), TYT radio (1), probable Baofeng UV-82 (1)
- Turkey – two-way radio (5), Cobra FRS-type radios (5), Alphafire devices (4), probable two-way radio (2), Baofeng UV-3
- Ukraine – mobile phone (2), D-Link WiFi Router (1)
- United States - probable fireworks wireless firing device (1)
- Yemen – Nokia phone (3), Nokia 105 (1)

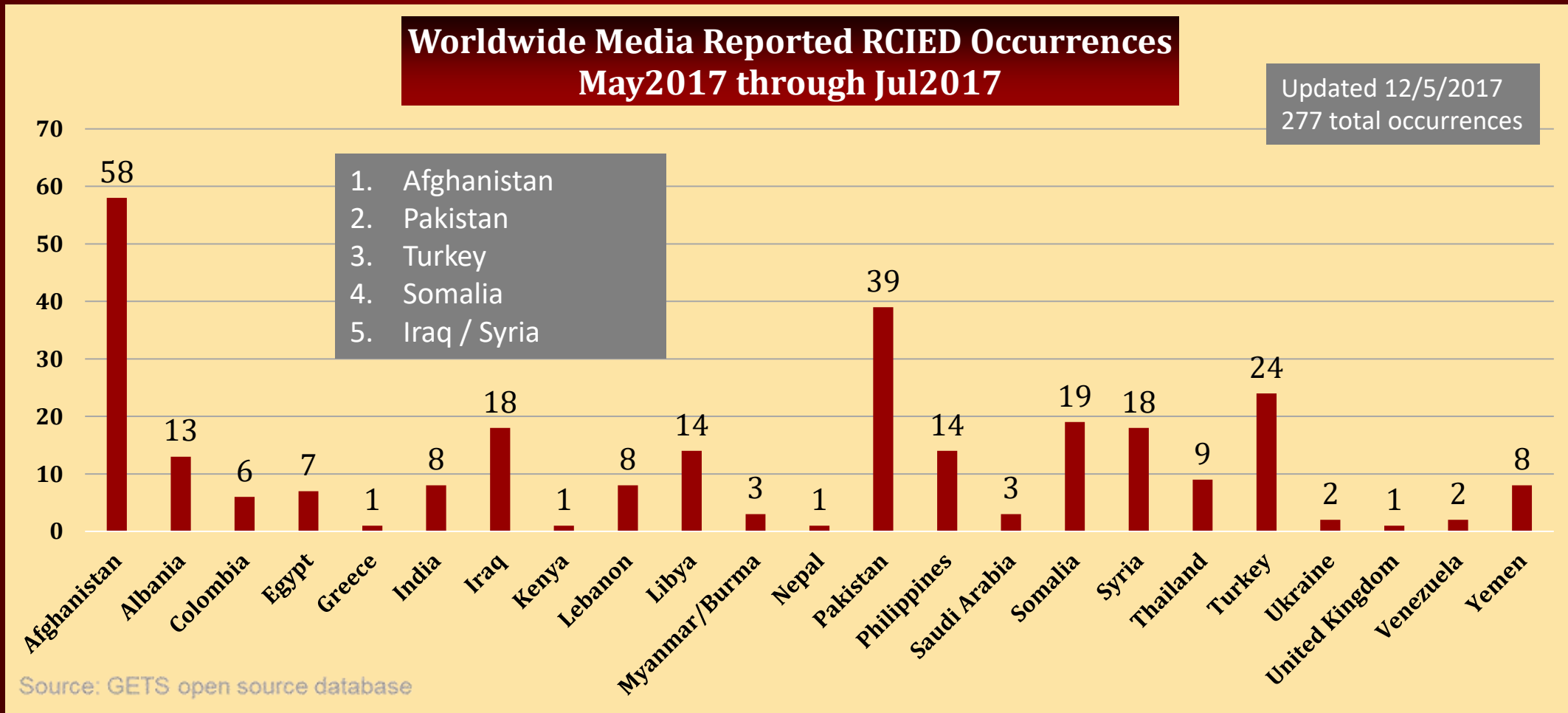


# AUG17 – OCT17 NOTES

- Afghanistan – Negating a very large cache from the previous quarter, the number of reported IEDs is only slightly reduced.
- Albania – Continues to see organized crime use of RCIEDs.
- Bahrain – Shia groups continue to use small numbers of “heartbeat” RCIEDs.
- Cameroon – First reported use by a separatist group of an RCIED.
- Egypt – Despite a small uptick, the number is lower than quarters over the last several years. 15 of 16 were in the North Sinai
- Iraq – With all the ISIS safe havens gone, the numbers are slightly reduced, but still under reported.
- Libya – Numbers are slightly reduced as extremists are forced out of populated areas.
- Myanmar/Burma – Numbers were up slightly due to ethnic/religious tensions. Numbers are likely under reported.
- Philippines – Numbers are reduced with the defeat on ISIS in Marawi and government “marshal law.”
- Somalia – The number of reported RCIEDs is down, but this could be due to lack of reporting specificity.
- Syria – The number of RCIEDs incidents continues to be underreported.
- Thailand – The number of RCIEDs continues to be below the quarterly norm for the past several years.
- Ukraine – There was a slight uptick in the number of RCIED occurrences.



# WORLDWIDE MEDIA REPORTED RCIED OCCURRENCES MAY2017 THROUGH JUL2017



# MAY17 – JUL17 NOTES

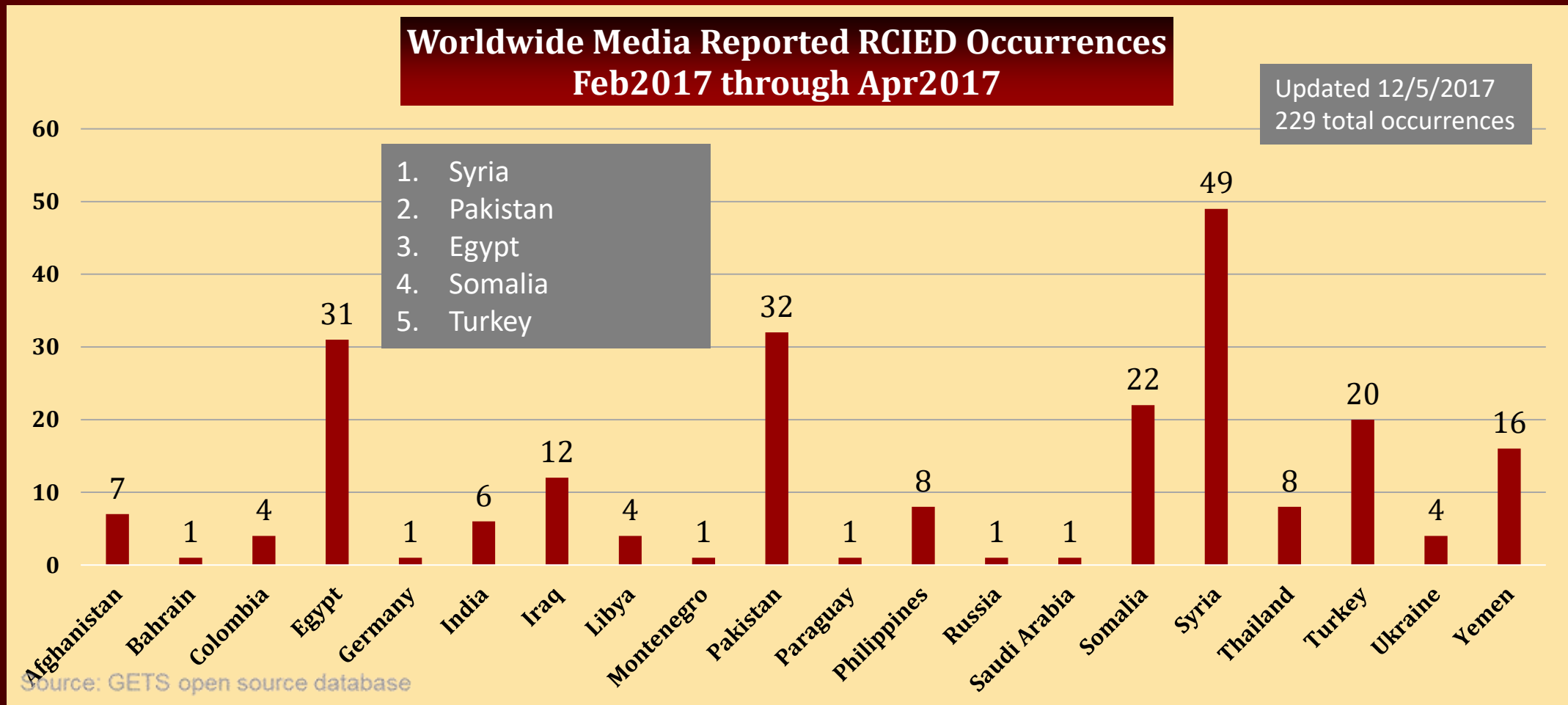
The following lists more specific information that is within the overall numbers of the total RCIED occurrences per country. It is presented to provide a “snap shot” of triggers reportedly used.

- Afghanistan – Nokia phone (1), mobile phone (1), appliance controller (4), probable appliance controller (1)
- Albania – mobile phone (3)
- Egypt – mobile phone (1)
- Iraq – Nokia 105 (6), mobile phone (6), Huawei ETS 2258 cdma phone (1)
- Kenya – probable vehicle entry/security system (1)
- Lebanon – wireless phones (7) [based on translation they could be cordless phones]
- Libya – telemetry/appliance controller device (5), mobile phone (1)
- Myanmar/Burma – probable vehicle entry (1)
- Myanmar/Burma – probable vehicle entry (1)
- Philippines – two-way radio (7), possible two-way radio (1), mobile phone (3), probable vehicle entry system (1)
- Syria – appliance controller (1), Baofeng BF-777S radio (1), two-way radio (1), Baofeng radio (1), Wouxun KG-UV6 (3)
- Thailand – two-way radio (7), TYT TH-F8 (1), mobile phone (1)
- Turkey - Baofeng UV-3R (2), AlphaFire receiver (1), two-way radio (2), unknown telemetry/appliance controller (1)
- Yemen – mobile phone (1)

# MAY17 – JUL17 NOTES

- Afghanistan – A cache with 42 RCIEDs was reported on 18 July; other than that the number of reported RCIED occurrences is consistent with previous quarters.
- Albania – In two cases, 3 and 9 RCIEDs were interdicted when they were being transported by criminal elements.
- Egypt – 6 of the 7 IEDs were in the North Sinai, the number of RCIEDs is greatly reduced as compared to previous quarters indicating Egyptian military progress against ISIS in the Sinai.
- Iraq – The number of RCIEDs is greatly under reported.
- Lebanon – The number of RCIEDs is slightly elevated due to cache finds in the north-western part where extensive operations were conducted against ISIS and Al Nursa Front terrorists.
- Libya – RCIED numbers are slightly elevated with most RCIEDs occurring in Benghazi where 'government' LNA forces battle Islamic extremists.
- Syria – The number of RCIED incidents continues to be underreported.
- Thailand – The number of RCIEDs is below the quarterly norm for the past several years.
- Turkey – The number of RCIED occurrences is reduced as compared to the same quarter last year. This could be due to effectiveness of counter PKK operations and/or that PKK fighters are more focused on Iraq and Syria.
- Venezuela – Two RCIEDs were reported. They were linked to tensions arising from government efforts to increase authoritarian control. The author is aware of no RCIEDs in the several years previous to these.
- Yemen – Although the number of RCIED reports in general are greatly underreported, the number reported this quarter was about half the average. This appears, in part, to be due to reduced AQAP usage during the period.

# WORLDWIDE MEDIA REPORTED RCIED OCCURRENCES FEB2017 THROUGH APR2017



# FEB17 – APR17 NOTES

The following lists more specific information that is within the overall numbers of the total RCIED occurrences per country. It is presented to provide a “snap shot” of triggers reportedly used.

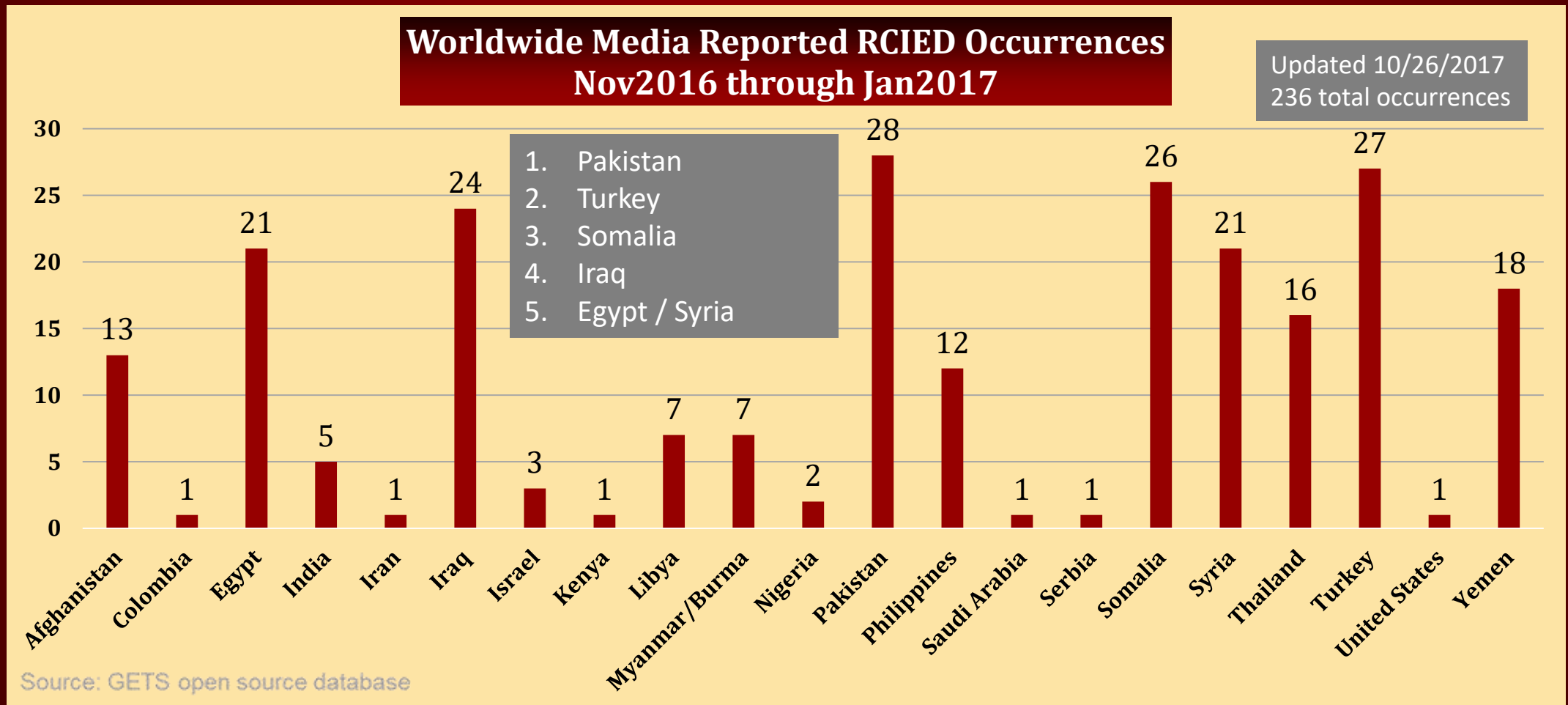
- Colombia – Motorola MR350 FRS radio (1)
- Egypt – mobile phone (2)
- Germany – mobile phone (1)
- India – vehicle entry system (1)
- Iraq – mobile phone (2)
- Libya – unknown receiver in plastic enclosure (3)
- Pakistan – mobile phone (1), 4 circuit device (1)
- Philippines – mobile phone (5), probable TYT two-way radio (1)
- Russia – mobile phone (1)
- Saudi Arabia – possible telemetry (1)
- Somalia – appliance controller (2), mobile phone with possible broadcast receiver (1)
- Syria – two-way radio (1), possible telemetry receiver or two-way radio receiver (32), “mobile device” (1)
- Thailand – two-way radio (4), TYT TH-F8 radio (1), mobile phone (1), Baofeng radio (1)
- Turkey – two-way radio (5), telemetry or appliance controller device (2), VX-6R radio (1)
- Yemen – Nokia 105 (1)



# FEB17 – APR17 NOTES

- Afghanistan - The numbers of RCIEDs incidents continues to be underreported.
- Egypt – about 85% of RCIEDs occurred in the North Sinai governorate.
- Iraq – The number of RCIEDs is greatly under reported. A large part of this is due to lack of specificity of investigation/reporting. It also appears that ISIS favors suicide attacks and VOIEDs/booby-traps that do not need personnel to be present to be triggered.
- Montenegro – 2 RCIED occurrences since August 2016 have been crime related.
- Pakistan – The numbers of RCIED occurrences appears to have stabilized around 30-40 after a five year quarterly average of more than twice that.
- Paraguay – Between 1 and 16 RCIEDs were reportedly used in a MAJOR robbery of a armored car company by organized crime gang.
- Philippines – ISIS-linked terrorists captured the town of Marawi and in response the PI government declared emergency law in portions of the PI. RCIEDs have been reportedly used, but few specifics have been forthcoming. Also, other Islamic extremists groups are likely hanging low during emergency law.
- Somalia – RCIED occurrences have been slightly elevated the previous 6-9 months, likely due to a reduced security environment.
- Syria – The numbers of RCIEDs incidents continues to be underreported.
- Thailand – RCIED numbers are slightly reduced as compared to a year ago.

# WORLDWIDE MEDIA REPORTED RCIED OCCURRENCES NOV2016 THROUGH JAN2017





# NOV16 – JAN17 NOTES

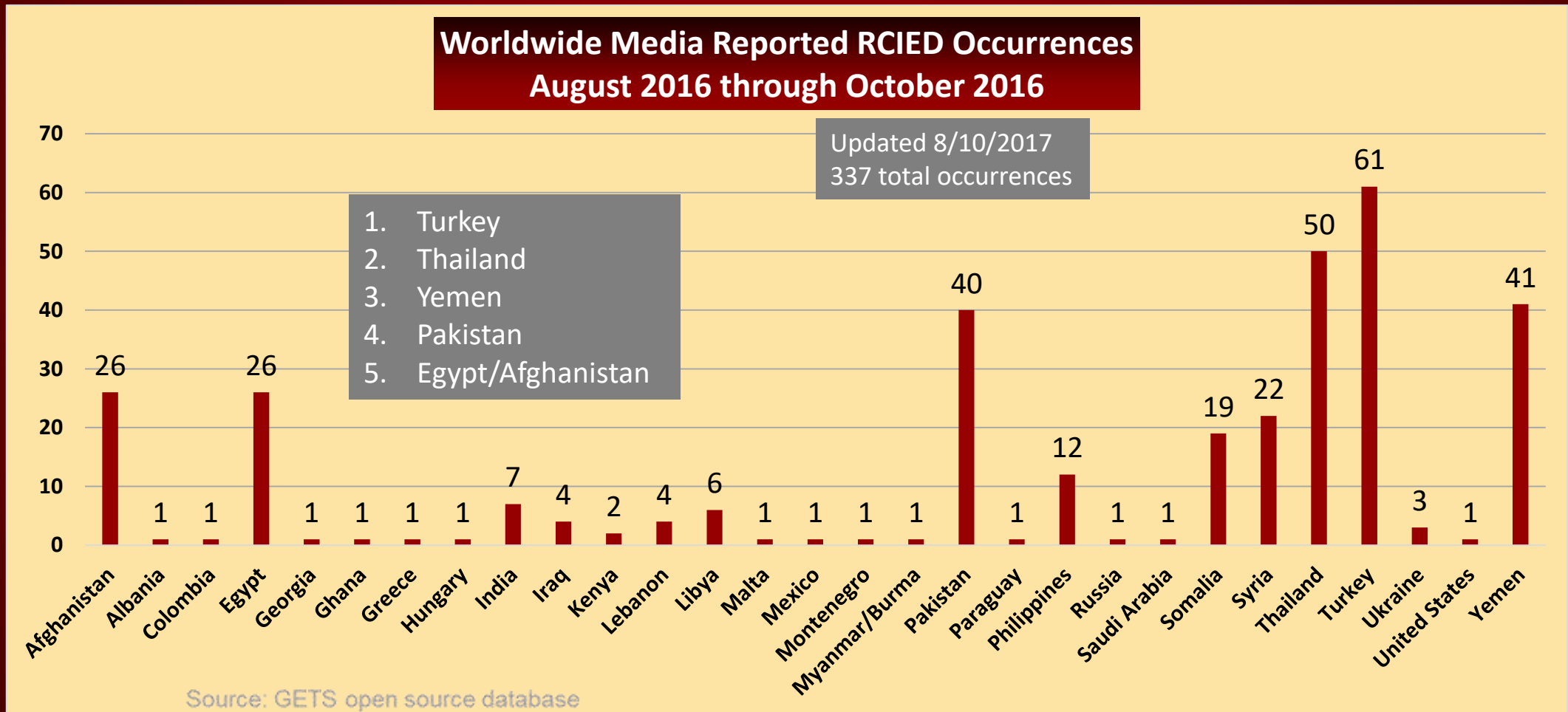
The following lists more specific information that is within the overall numbers of the total RCIED occurrences per country:

- Afghanistan – 4-button appliance TX/RX (6)
- Egypt – Motorola MT-777 (2)
- Iraq – mobile phones (numerous)
- Israel – mobile phone (1), appliance controller TX-RX (1+)
- Libya – ICOM IC-V90 (1)
- Myanmar/Burma – possible appliance controllers (5)
- Pakistan – mobile phone (1)
- Philippines – mobile phone (9)
- Serbia – mobile phone (1)
- Syria – probable appliance controller receiver (2), Uniden FRS-type radio (1)
- Thailand – two-way radio (9), TYT TH-F8 radio (2), mobile phone (2), TYT [unspecified model] radio (1)
- Turkey – AlphaFire (1), Baofeng UV-3R radio (1), Cobra FRS-type radio (1)
- United States – mobile phone (1)
- Yemen – mobile phone (1), possible telemetry receiver (1)

# NOV16 – JAN17 NOTES

- Egypt – The downward trend in RCIED numbers continued with about 80% of RCIEDs occurring in the North Sinai governorate.
- Iraq – The number of RCIEDs is greatly under reported. A large part of this is due to lack of specificity of investigation/reporting. It also appears that ISIS favors suicide attacks and VOIEDs/booby-traps that do not need personnel to be present to be triggered.
- Myanmar/Burma – Five of the seven RCIED occurrences were found in one area clearance mission. All RCIEDs were supposedly from the Kachin Independence Army (KIA). There has been some reporting of Islamic extremist support to the Rohingya Muslim ethnic group in the country, but no reported linkage between Islamic extremism and the KIA.
- Pakistan – The numbers of RCIED occurrences continue a year long trend of reduced numbers compared to the five year quarterly averages.
- Serbia – The one RCIED occurrence may be due to Russian destabilization efforts.
- Somalia – RCIED occurrences were elevated as compared to the numbers from the previous 4 quarters. This is likely a reflection of a deteriorated security environment.
- Syria – The numbers of RCIEDs incidents continues to be underreported.
- Thailand – The number of RCIED occurrences was reduced. This could be related to attempted peace talks between the Thai government and southern Islamic separatists.
- Turkey – The number of RCIED occurrences is reduced as compared to the previous 2 quarters, but this is likely significantly impacted by bad weather conditions during winter months in Kurdish areas of Turkey.

# WORLDWIDE MEDIA REPORTED RCIED OCCURRENCES AUG2016 THROUGH OCT2016



# AUG16 – OCT16 NOTES

The following lists more specific information that is within the overall numbers of the total RCIED occurrences per country:

- Afghanistan – 4-button appliance TX/RX (6), mobile phone (3), possible vehicle entry system (1)
- Colombia – mobile phone (1)
- Egypt – mobile phone (1)
- India – appliance controller (1)
- Lebanon – possible appliance controller (1)
- Libya – possible telemetry receiver (1)
- Malta – mobile phone (1)
- Mexico – wireless fireworks system (1)
- Pakistan – mobile phone (1), remote control receivers (2)
- Philippines – mobile phone (9), probable Nokia 105 (1), FRS-type radio (1), probable Baofeng UV-5 (1)
- Syria – probable appliance controller receiver (1), two-way radio (5)
- Thailand – two-way radio (30), TYT TH-F8 (3), mobile phone (2), Samsung Hero phone (3)
- Turkey – mobile phone (1), FRS-type radio (4), two-way radio (1), possible two-way radio (1), Aselsan Cobra MT-975 (1)
- United States – mobile phone (1)
- Yemen – Nokia 1616 or C1 (1), Nokia mobile phone (1), probable Nokia 105 (1), mobile phone (1)

# AUG16 – OCT16 NOTES

- Egypt – There appears to be a downward trend in the number of IEDs with about 90% in the North Sinai
- Georgia & Ghana – Each had their first RCIED reported in the past 3 years. They were likely political in nature.
- Iraq – The number of RCIEDs is greatly under reported. A large part of this is specificity of investigation/reporting, but it also appears that ISIS favors suicide attacks and VOIEDs/booby-traps that do not need personnel to be present to be triggered.
- Pakistan – RCIED numbers continue to be well below pre Operation Zarb-e-Azb levels. Approximately 1/3 to 1/2 of RCIED incidents were due to the Balochistan Liberation Army.
- Paraguay – The first RCIED attack in last 3 years was a terrorist attack by the Paraguayan People's Army (EPP).
- Thailand – Even though the number of RCIED incidents was up compared to previous quarters about 75% occurred in August before a round of peace talks started.
- Somalia – There is a slight trend upwards in RCIED occurrences.
- Syria – The numbers of RCIEDs incidents continues to be underreported.
- Turkey – The number of RCIEDs was large with the majority being from the PKK. The large number is due to increased tensions between the Kurds and Turkish government and the more favorable operating environment for the PKK in the summer.
- Yemen – The number of RCIED occurrences was elevated, even with underreporting of Houthi RCIED usage against Yemeni/Saudi coalition forces.



# RCIED INFORMATION OF INTEREST REPORTED IN THE MEDIA

Aug2017 through Oct2017  
(and older event information  
not previously reported)

# ALGERIA

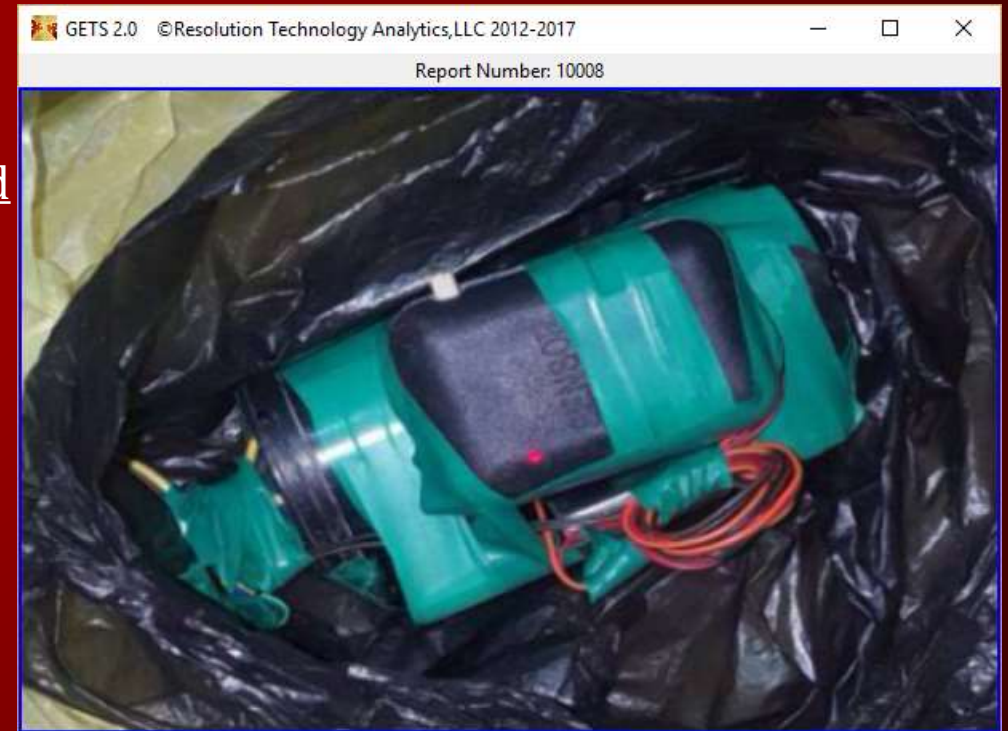
- ◎ August 4, 2017 – [translation] Two terrorist hideouts containing 34 mines, explosive materials, explosive devices, and ammunition seized – Algeria Press Service
  - Comments: *One of the caches had 12 mobile phones “equipped for detonation.” The Algerian government rarely provides specifics as to the types of triggers found in caches and IED events.*



# BELIZE

## ◎ September 12, 2017 - *Another explosive found raises serious concerns – LoveFM*

- “Authorities are seriously concerned over the recent assessment of what has been classified as a remote controlled explosive device. That device, though not fully assembled, was reportedly handed over to Corozal Police sometime late last week.”
- ““It was the construction of what looked like an improvised explosive device or what you would call a bomb. What was missing was the explosive so they had a cellphone, they had a sensor and they had a capacitor, three things that could be used in a remote controlled bomb but they didn’t have the explosive in it but it was well constructed and the person knew what he was doing and probably did some research to get it constructed but it’s a difference in sophistication from what we have seen before with other things that have been constructed.”
- *Comments: About a week earlier another device was found. The first device was a type used for seismic testing and lacked a detonator. These sensors are used for seismic testing and it is unclear how they were used in “RCIEDs.”*



# FRANCE

- ◎ October 4, 2017 - *Five held, grilled over wired explosives found planted in posh Paris neighborhood – Reuters*
  - “French counterterrorism investigators questioned five people on Tuesday after police over the weekend found what appeared to be a ready-to-detonate bomb at an apartment building in one of Paris’s poshest neighborhoods.”
  - “Interior Minister Gerard Collomb said one of those arrested was on an intelligence services list of “radicalized” persons — a list that includes the names of potential Islamist militants.”
  - “Judicial sources said the explosive device included two gas canisters inside the building in the affluent 16th district of western Paris and two outside, some of them doused with petrol and wired to connect to a mobile phone.”

# GERMANY

- ◎ October 31, 2017 - *German police arrest Syrian suspect, avert 'major terrorist attack' – Reuters*
  - “German police arrested a 19-year-old Syrian suspected of planning an Islamist-motivated bomb attack in Germany with the aim of killing as many people as possible, the federal prosecutor’s office said on Tuesday.”
  - “The man, identified as Yamen A., had been in contact online with jihadists including one who described himself as a “soldier of the caliphate”, a spokeswoman for the federal prosecutor’s office said.”
  - “He had ordered chemicals over the internet that could be used to make the explosive TATP, short for triacetone triperoxide, the spokeswoman for the prosecutor’s office later added. He had also acquired two radios, batteries and a cellphone battery, suggesting he planned a remote-controlled explosion by radio or mobile telephone.”
  - *Comments: No one for a 'lone attacker' to talk to on the radios; they must have been intended as triggers.*

# GREECE

- ◎ September 29, 2017 – [translation] Greece avoids bomb attack on president – Durres Lajm
  - [synopsis of translation] Highway maintenance workers found a bomb comprised of dynamite and a mobile phone along the Corinth-Tripoli highway. The bomb was detonated in a controlled manner shortly before a motorcade carrying the Greek president passed.
  - Comments: *Another source said that as found the mobile phone was off and officials speculated that the device may have been dumped to avoid discovery at a police check point.*



# INDIA

## ◎ August 15, 2017 - *Two cops among three held in Kakwa blast – Impact TV*

- “Imphal West arrested three persons in relation with the second blast of Kakwa Naorem Leikai yesterday. Huge quantity of bomb making materials were recovered from the culprits, Imphal West superintendent of police XXX told a press conference”
- “He further said they exploded the IED by using a remote control device from a distance of about 300 metres.”
- “Police recovered bomb making materials from their disclosure such as 81 number of Gelatin sticks (power gel), two TNT cases of 500 grams each of military grade, six electronic circuits, one remote control device, three mobile phones, and five subscriber identity module (SIM) cards.”
- *Comments: The trigger for the RCIED was likely an appliance controller like the one shown in the cache. Notice that the 6 receiver circuits are comprised of 2 groups of 3 similar devices. Although the picture is of poor quality, the circuits each appear to have a spiraled wire antenna as is commonly used with appliance receivers.*



# IRAQ / ISIS

## ◎ RCIED related caches from 1Aug through 31Oct:

- 7Aug – Nineveh – 3 mobile phones, 2 brown project boxes with copper wire antennas
- 7Aug – Baghdad – mobile phones
- 11Aug – Nineveh – mobile phones, possible telemetry devices
- 2Sep – Diyala – 7+ mobile phones
- 11Sep – Baghdad – 3 possible telemetry devices, 1 Senao SN-258+New handset
- 9Oct – Al Anbar – 2 mobile phones
- 10Oct – Diyala – 11 mobile phones
- 15Oct – Babil – 2 FRS-type radios, 1 Senao SN-258+New handset, 45 electronic circuits

# IRAQ / ISIS

☉ August 7, 2017 – [translation] Nineveh operations finds ISIS arms in tunnel southeast of Mosul – Al Mawsleya TV

- Comment: *Cache had 3 phones and 2 brown project boxes with copper wires.*



☉ August 11, 2017 – [translation] Bomb belts and explosives found hidden in a cemetery in Western Mosul – Al Baghdadiya News

- Comments: *Picture from cache shows mobile phones with likely DTMF decoders along with what appear to be two-way radio boards or telemetry boards with two-way radio antennas. If the boards are telemetry with two-way radio antennas that could mean they operate in the 434 MHz ISM band.*







# ISRAEL

## ◎ August 10, 2017 – *A pipe bomb at the beach – Arutz Sheva*

- “A lifeguard at a Haifa-area beach on Wednesday morning found a pipe bomb floating in the water, 300 meters from the beach.”
- “XXX...was watching the ocean when he spotted a cooler floating on the waves. Upon investigation, the cooler was discovered to contain a pipe bomb, made of a pipe connected by wires to an old cell phone. The pipe itself seemed to be loaded with explosives.”
- “Police suspect the bomb may have floated southwards from Lebanon.”
- Comments: *It is unclear if the beach was the final destination for the IED or if someone was en route with it, but was separated from it. It seems unlikely that it would float down from Lebanon on its own. Was it remotely delivered somehow?*

# LIBYA

## ☉ [old] December 9, 2015 - *Libya EOD soldier defuses radio-controlled IED bomb in Benghazi – Janus Nameless YouTube*

- *Comments: This low quality video from December 2015 shows the inside one of the appliance controller project boxes that have been seen in Libya for the last almost 3 years. The antenna configuration of this device is slightly different from some of the other devices. The picture on the left shows the telescoping metal antenna that connects to the project box via a joint. The picture on the right shows a relay, probable RF daughter board (top of green board, perpendicular to board) and “SMA type” cable connecting board to antenna. This device is almost certainly a Chinese product.*





# MEXICO (UAVS)

◎ October 21, 2017 – [translation] An Explosive Drone, the latest device of organized crime in Mexico – MSN

- [synopsis of translation] The authorities of Mexico were surprised Friday to seize, for the first time, a drone with explosives and fitted with an RF detonator in Guanajuato state. Four men were arrested in a stolen car. The drone was found in the trunk of the car. In addition to the drone, a rifle and 4 mobile phones were seized.

- Comments: *The drone appears to be a 3DR Solo which has a 20 minute flight time with an advertised 0.93 lb. payload. The tape and bulge on top of the drone is likely to secure the explosive and initiator. Next to the 'explosive ball' appears to be a wireless fireworks initiator receiver, such as the DB04r shown. The initiator is not an optimal integration of a triggering system; was the intent to 'place' the IED and detonate it later?*



# MEXICO

- ◎ October 25, 2017 – [translation] Explosive device with remote detonator secured in Apaseo el Alto, Guanajuato – MX Politico
  - [synopsis of translation] An explosive device, wrapped in a black plastic bag was found on the sidewalk. It was later moved to a safe location for a controlled detonation after it was confirmed by Mexican military explosives experts to be real.
  - Comments: *The IED was found in the same Mexican state as the drone, just 4 days later. The remote fireworks initiation system receiver may be the same in each incident.*





# MYANMAR / BURMA

◎ August 31, 2017 – Khant Myo Htet Twitter

- “#IED made by #Rohingya #Terrorist to deter the security force is seized in #Arakan #Myanmar #bbc #CNN @YangheeLeeSKKU”



# MYANMAR / BURMA

## ◎ October 19, 2017 – *Explosives, drugs seized in Maungdaw* – DVB Multimedia Group

- “A small cache of homemade explosives and landmines were seized in a village in Maungdaw Township on Tuesday”
- “Acting on a tip-off from residents in Letphwekyia Village, security forces uncovered the cache of weapons beside a riverbank on Tuesday evening. Military authorities reported they had seized: six homemade landmines with remote controls; long iron pipes; two round mines; a car piston; eight transmitter remote controls; two receiver circuits; more than 100 feet of wiring; and a damaged CDMA 450 MHz phone.”
- *Comments: Notice the numbering scheme on the RC triggers. I’m thinking the bulky cdma phone is not a trigger.*





# PHILIPPINES

## ◎ August 3, 2017 - *NPA expert bomber arrested* – Update Philippines

- “Joint forces of the Philippine National Police and Armed Forces of the Philippines have captured an expert bomber of NPA terror group along with one other at Purok 8, Brgy Kiburiao, Quezon, Bukidnon on August 2, 2017.”
- “Government forces also seized one (1) 57 RR , 24 pcs of IEDs, two (2) Cal. 38 revolver, ten (10) meters safety fuse, 200 meters detonating chords, five (5) blasting caps, switch boxes, three (3) Laptops, fifty one (51) rounds of cal. 30 ammunition, other IED Paraphernalia, and subversive documents.”
- Comments: *The ‘switch boxes’ appear to be the RCIED transmitters and receivers shown. The circuit board in the top of the picture appears to be what is inside the brown project boxes. This circuit board has a daughter board with a tunable inductor that is indicative of a super-regenerative receiver typically used with these types of devices. Three Yaesu FT-270 VHF radios, likely used for communications, were also found.*



# SYRIA / ISIS

- August 3, 2017 – [translation] ISIS cell arrested in Jassim, Daraa – All4Syria
  - [summary of translation] The headquarters of an ISIS affiliated cell was raided after a local rebel group leader was assassinated. Explosives and RC triggers, shown in the pictures, were seized.
  - Comments: *The pictures show 3 different model radios, including what appears to be Baofeng BF-888 and BF-777 radios. Appliance controller TX and RX devices along with probable DTMF decoders can also be seen.*





# SYRIA / ISIS

## ◎ September 21, 2017 – IED Awareness Facebook

- “A captured motorbike IED and several suicide vests shown in new HTS media release about internal security fighting against IS sleeper cells”
- Comments: *HTS operates primarily in the Idlib/Aleppo areas. The pictures show indications of two-way radio and appliance controller triggers.*



# SYRIA

- ◎ October 24, 2017 - *Authorities seize a car rigged with explosives in Lattakia – SANA*
  - “Authorities on Tuesday seized a pickup car rigged with 50 kg of the high-explosive C4 material near the hospital of al-Othman Surgical Hospital at Tishreen Suburb on the outskirts of Lattakia City, SANA reporter said.”
  - Comment: *The trigger appears to be a vehicle entry system.*



# THAILAND

## ☉ August 9, 2017 - *Ambushed soldiers survive double bombing, gunmen* – Bangkok Post

- “The first bomb that exploded damaged the pickup, but it was able to keep going, authorities said.”
- “The second bomb then went off a little further up the road. It felled an electricity pole, partially blocking the road.”
- “Gunmen emerged from the opposite side of the road and opened fire on the truck with assault rifles.”
- “Bomb disposal officers examined the area of the attack and reported the bombs were placed in steel boxes, probably weighed 10 kilogrammes each, and were detonated by radio signals.”
- *Comment: An undamaged TYT TH-F8 tuned to 148.255 MHz was recovered from the debris.*





# THAILAND

☉ August 16, 2017 – [translation] Prepared for car bombing, evidence found in car  
– Tnews

- Comments: *Southern Islamic separatists stole 5 vehicles. They placed a bomb in one of the cars that was intercepted. The bomb was a gas cylinder surrounded by gas canisters. The black box with an antenna sticking out is the probable two-way radio trigger. The radio on the ground appears to be a Baofeng UV-82 dual band radio. The Baofeng UV-82 can transmit at 136-174 MHz and 400-520 MHz. It also has a capability to listen on two frequencies “simultaneously” and switch quickly between two transmit frequencies.*



# THAILAND

- ◎ August 23, 2017 – [translation] Teachers and security staff bombed in the southern border area – Special Tubnar
  - Comments: *Picture shows the debris of a radio used for the trigger. Notice the 136-174 MHz label inside the TYT TH-F8 radio.*



# THAILAND

## ◎ September 22, 2017 - *Ranger patrol bombed, 4 killed, 6 hurt in Pattani – Bangkok Post*

- “Four ranger volunteers were killed and five others and a civilian hurt when an improvised bomb buried under the road was detonated in Sai Buri district on Friday morning.”
- “A plastic box containing electrical circuit boards and batteries was found near the scene of the attack.”
- *Comments: The radio appears to be a Baofeng UV-82 and is set to 155.508 (75) MHz.*





# TURKEY

- ◎ September 10, 2017 – [translation] roadside explosive trap destroyed – Yenısafak
  - Comments: *The directional IED device shown below was reportedly found roadside in Hakkari province. The tube was 10 cm in diameter and 80 cm in length. A Baofeng (UV-3?) radio was apparently the trigger.*



# TURKEY / ISIS

- ◎ October 31, 2017 – [translation] Plan of massacre emerged! Bomb-filled microwave ovens... - Kanala Haber
  - [synopsis of translation] Istanbul anti-terror teams launched operations against two ISIS cells planning an elaborate terror attack at an Istanbul shopping mall. Four suspects were arrested.
  - A car bomb and a motorcycle bomb and 4 suicide vests were seized and defused. After reviewing surveillance videos of the terrorists, it was discovered that they had “returned” four microwave ovens. It was reported that they claimed the microwaves were defective when returning them.
  - Later, after examining the boxed microwave ovens, it was discovered that an RCIED was in each oven.
  - *Comments: The ISIS terrorist had an extremely thought-out plan for mass casualties. They intended to blow-up the microwave ovens causing initial casualties and panic. As people ran from the shopping mall they would be attacked by the remote controlled car and motorcycle bombs and suicide attackers. No word at this time on what the RC triggers were.*



# TURKEY

- October 31, 2017 – [translation] Antalya terror operation news: 5 arrested – Yenisafak
  - Comments: *About 8 kg of PETN was found in a fire extinguisher and bags along with two RC Toys that were intended as RC triggers according to the article. Another article said that the materials were spread over 2 caches and that there were actually 3 wireless RC toy cars, 2 at one location and one at another. None of the RC cars appeared wired.*



# TURKEY

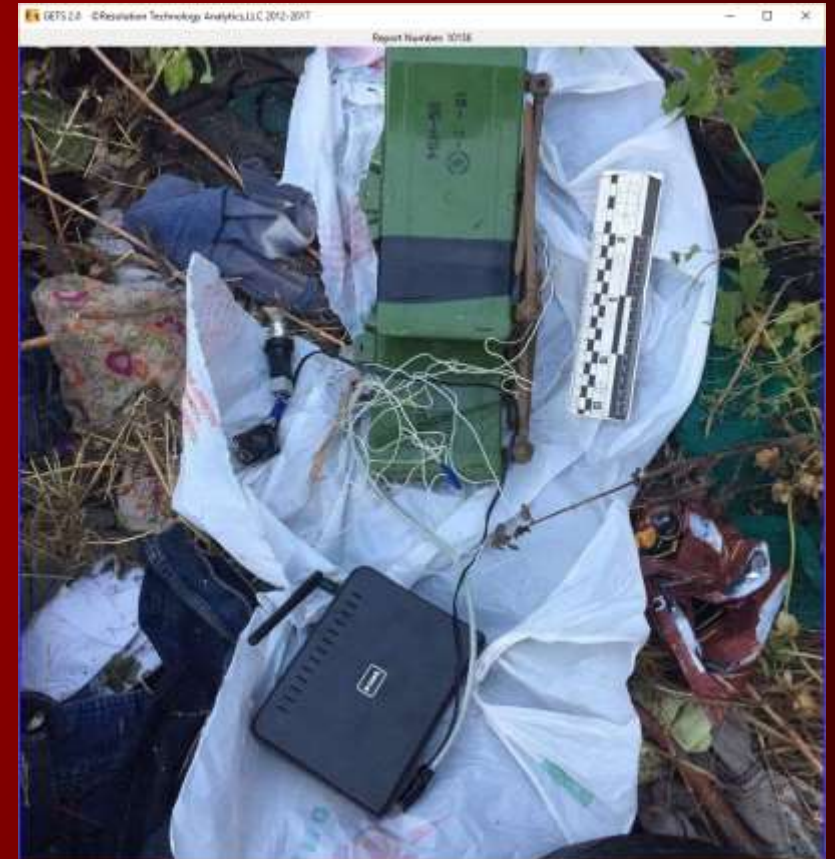
- ◎ November 1, 2017 – [translation] Big blow to terrorist organizations in Hakkari – Turkish Armed Forces You Tube channel
  - Comments: *The Turkish military found a large number of PKK hideouts during operations in Hakkari province, bordering Iraq, in September and October. Several RCIED related items were found, along with 22,300 m of cable. The video of the operations shows 9 Alphafire receivers along with a transmitter in original packaging. The screen grab below also shows some other devices. The device on the left appears to be a (telemetry?) project box RCIED trigger often seen. It is unknown what the three boxes to the right are, but they are possibly RCIED triggers. Based on the type/size of the antenna and SMA connector they likely are >800 MHz in frequency.*



# UKRAINE

## ◎ October 11, 2017 – [translation] Two citizens detained while preparing attacks in Mariupol - Pravda

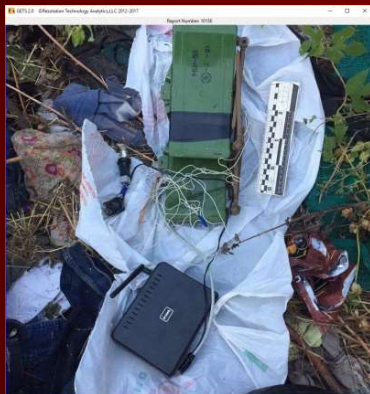
- [summary of translation] On October 9 two individuals were arrested while preparing for IED attacks in Mariupol. The first planned attack was to be at the Mariupol train station. The saboteurs were to attack public locations on orders from Ukrainian separatists in order to create an environment of insecurity. Two MON-50 mines with a remote trigger were seized. The detainees surveilled the train station during planning.
- Comments: *The remote trigger appears to be a D-Link WBR-1310 or similar wireless router. See next slide for more detail on picture.*



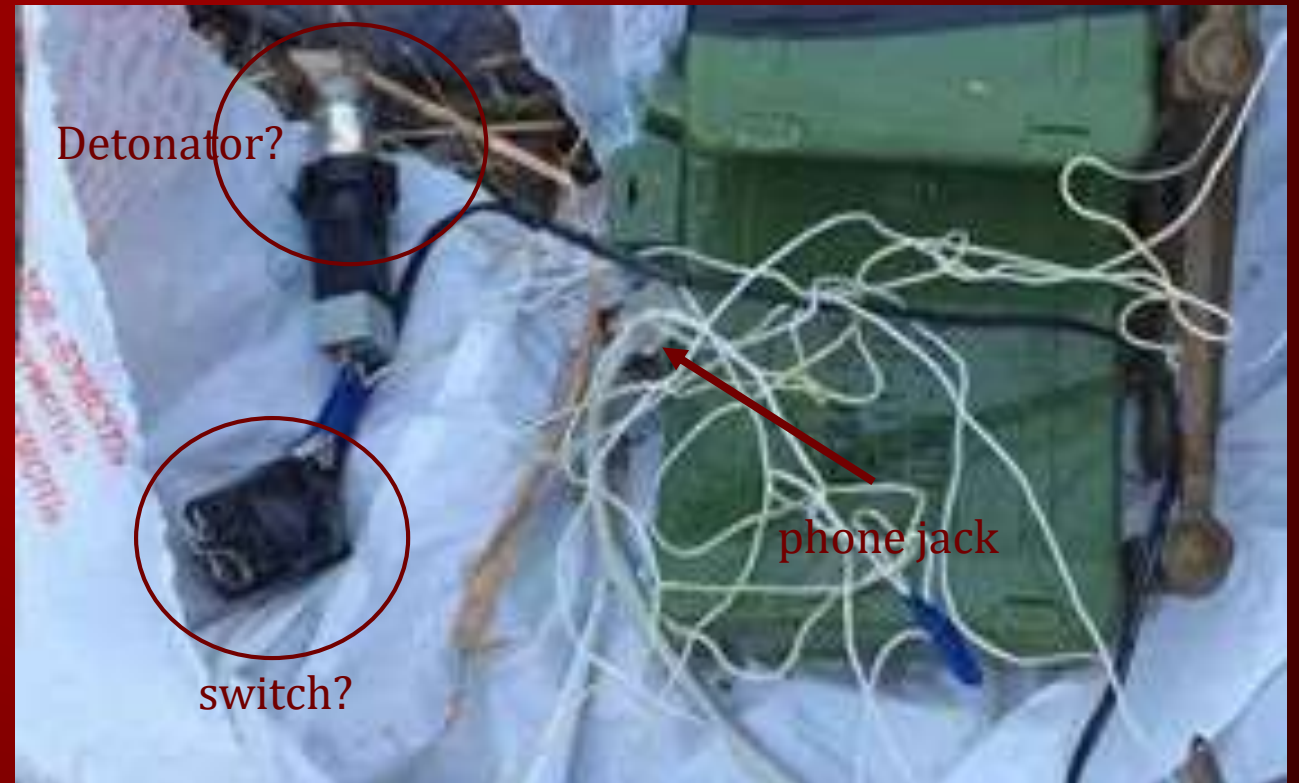


# UKRAINE

🕒 October 11, 2017 – [translation] Two citizens detained while preparing attacks in Mariupol - Pravda



D-Link WBR-1310  
Wireless Router?



# UKRAINE

◎ October 21, 2017 – [translation] SBU uncovered a military member selling IEDs in Odessa – SSU Website

- [summary of translation] Police arrested a military officer with basic knowledge of electrical engineering who was manufacturing improvised explosive devices to sell to criminal elements in the region.
- Comments: *When arrested the detainee had 4 wired older model mobile phones and a wall plug with improvised wiring. It is unknown what the function of the wall plug was, but it could be for a remote trigger or for a power converter and source for IED.*





# UNITED STATES

- ◎ October 19, 2017 - *FBI was watching Washington Co. man for weeks before explosion, docs say* - KGW Portland
  - “The suspect who allegedly ran from police and was injured by a small explosion in his vehicle in Washington County appeared in court for the first time since the blast.”
  - “The FBI in September learned that XXX had purchased hexamine, which can be used to make a chemical used in homemade explosives for suicide bombings. XXX also purchased remotes intended to set off fireworks from a distance, and more than 100 *electric matches*, court documents said. Investigators determined XXX's apartment had explosives that could be detonated remotely.
  - Comments: *Sounds like he had something similar to an Alphafire wireless firing system. Pictures show an example of electric matches available on eBay that work with a wireless firing system.*



# YEMEN

## ◎ October 2, 2017 - Demolinari Twitter

- “Commander XXX of Security Belt 1st Support Brigade survived 3 roadside IEDs after raid on #AQAP in #Mudiyah #Abyan. #Yemen”
- Comment: *One of the alleged IEDs, appearing to have a vehicle entry system trigger, is shown.*



## ADDITIONAL RCIED-RELATED INFORMATION OF INTEREST

The following information is intended highlight RCIED-related tactics or illustrate capabilities and factors that could drive changes to RC trigger types.

# INTERNATIONAL

- ◎ August 11, 2017 - 3rd gen Nokia 105: Now even more affordable at P850 – InterAksyon
  - HMD Global, the home of Nokia phones, recently announced that the third generation Nokia 105 is now available in Philippines nationwide at an affordable price of P850 (~\$16).
  - Comment: *The Phone is GSM with no Wi-Fi, but still has the potential to be a popular IED trigger like the previous Nokia 105 generation.*





# MALTA

- ◎ October 19, 2017 - *Maltese journalist probably killed by remotely detonated bomb –govt – Reuters*
  - “Police believe a bomb that killed a prominent journalist in Malta was attached beneath her car and triggered remotely, a government spokeswoman said on Thursday, giving first details of the investigation.”
  - ““Emerging evidences make us think that the bomb was placed under the car and was set off with a remote trigger,” the spokeswoman said.”
  - “She said foreign experts should be able to help identify the mobile phone which was used to detonate the bomb.”
- ◎ October 21, 2017 - *‘Suspicious’ vehicle seen before Daphne's car bomb detonated – Times of Malta*
  - “Investigators said work had started with the Federal Bureau of Investigation to triangulate mobile phone activity in the area and locate the exact spot the bomb was detonated from.”
  - Comment: *Likely a ‘burner’ phone, but will a (successful?) investigation persuade ‘organized crime’ to not use mobile phones?*

# PAKISTAN

- ◎ September 20, 2017 - *Jammers for official vehicles in Bajaur* – Dawn
  - “The authorities on Tuesday decided to install jammers in the vehicles of all the senior officials of the political administration and Bajaur Levies in order to protect them from bomb explosions.”
  - “An official told Dawn here that the decision was taken at a high-level meeting. He pointed out that such devices had already been installed in some vehicles of the officials, but these failed to jam cell phone signals because of their poor quality.”

# SYRIA / HEZBOLLAH

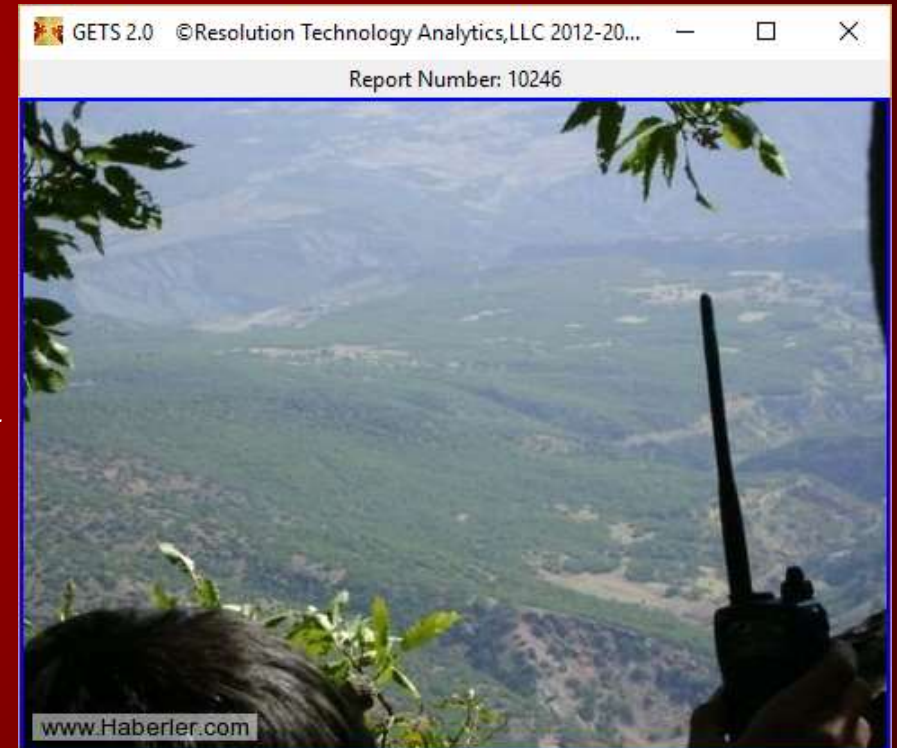
- ◎ September 2, 2017 – [translation] Security chaos in Daraa and the nature of each party behind it – All4Syria
  - [summary of translation] In the past few days, Daraa governorate witnessed a wave of bombings targeting vehicles belonging to the rebel battalions, in addition to a number of assassination operations in the liberated areas. The IEDs and IED tactics of each party [pro-Assad regime groups and ISIS] has its own character.
  - Since the de-escalation zones have been setup, pro-Assad forces have stepped up use of IEDs. The person interviewed for the article said that the IED ‘footprint’ for Assad forces is fake rock IEDs planted roadside. Assad forces monitor the roads with thermal cameras and then use special teams to place remotely detonated fake rocks.
  - The article says that ISIS on the other hand uses MAIEDs to attack rebel group leaders in the towns they operate in.
  - Comment: *The Iranian supported groups tactics could be a precursor to a “Internet of Things” based IED approach. In another article a rebel spokes person said 90% of the laid IEDs are from the Syrian regime forces.*

# TURKEY

## ☉ [old] February 23, 2016 – [translation] Female terrorist seized with photos – Haberler

### ▪ Comments:

- *A female PKK member was captured along with photos (and camera?). The photos show various activities of the PKK including preparing IED explosives and triggering an IED, as shown in the photo. The article presents commentary with some of the photos. The caption for one of the photos says that the PKK places RCIED trigger receivers at the end of 0.5-1 km cables to avoid Turkish jamming systems. The caption also states that the terrorist detonates the bomb by pressing the radio button.*
- *I have seen the CW to RC tactic used on at least 2 occasions.*





# TURKEY

- ◎ August 14, 2017 – [translation] Improvised explosive devices and a large number of ammunition seized in Silvan, Diyarbakır – Haber Diyarbakır
  - Comments: *During a road clearing operation a large IED was found along the Diyarbakır-Silvan highway. The 500 kg plus IED was hidden in concrete and covered with fresh concrete. With the IED was reported a RF radio ignition system, 3 battery packs each with 8 D-cells, 600 m of cable and 2 current boosting ignition systems. The RF radio ignition system was reported to have a radio, a circuit board, and a “tol series device”. It is unclear what the “tol series device” is, but it has been associated with RCIED reports in which AlphaFire receivers have been used. The report does not say if the 600m cable was in series or parallel with the RF triggering system.*

# INFORMATION FOR THE RECORD

The following slides serve as a repository of documentation of various RCIED related bits of information that:

- are considered already known (continued known usage)
- are new, but that the information is vague enough that future amplifying information is required (possible new device)

# AFGHANISTAN

- The following RCIEDs, found in the time period of this report, are typical and are present as a record of continued usage.





# BAHRAIN

## ◎ August 24, 2017 - *10-member terror cell busted* – Bahrain News Agency

- “As part of counter-terrorism operations and to ensure the safety and protection of citizens and residents, an investigation has been carried out which resulted in the discovery of a 10-member cell suspected of carrying out terrorist activities.”
- “Those locations were meant to make and store bombs and 127kg of high-grade explosives and bomb-making material were seized from there, including more than 24kg of C4, TATP and nitro cellulose, in addition to chemicals and ready-to-use bombs, automatic and other homemade weapons, electric detonators, grenades and ammunition.”
- *Comments: 4 unknown probable IED-related devices are shown. It is unknown what the function of the devices is. The single white cable could be either a cable with connector or some sort of sensor. The quality of the packaging indicates either a commercial Chinese-made product or something ‘mass produced’ (in Iran?) specifically for IEDs.*





# ALBANIA

- ◎ September 13, 2017 – [translation] Selling remote mines, images of the arrest criminals from Tirana – Balkan Web
  - Comment: *The mobile phone triggered MAIEDs were seized from likely couriers. RCIEDs continue to be seized from organized crime elements in Albania.*



# IRAQ / ISIS

- Pictures of ISIS RCIEDs in Iraq during August to October time period.



# PAKISTAN

- ◎ August 3, 2017 – [translation] Terrorism plan foiled on Independence Day – Samaa TV
  - Comments: *Pakistani security forces allegedly foiled a Balochistan separatist group's terrorists plans for Balochistan Independence Day. Two Alphafire receivers commonly used by the separatists were found in the cache.*





# PAKISTAN

- ◎ September 2, 2017 – IED Awareness Facebook page
  - “An #IED rendered safe in Hangu, #Pakistan by Bomb Disposal Unit”
  - Comments: *The type of circuit board is unknown, but appears different than typically used and possibly more advanced. The metal looking module could be an RF section.*

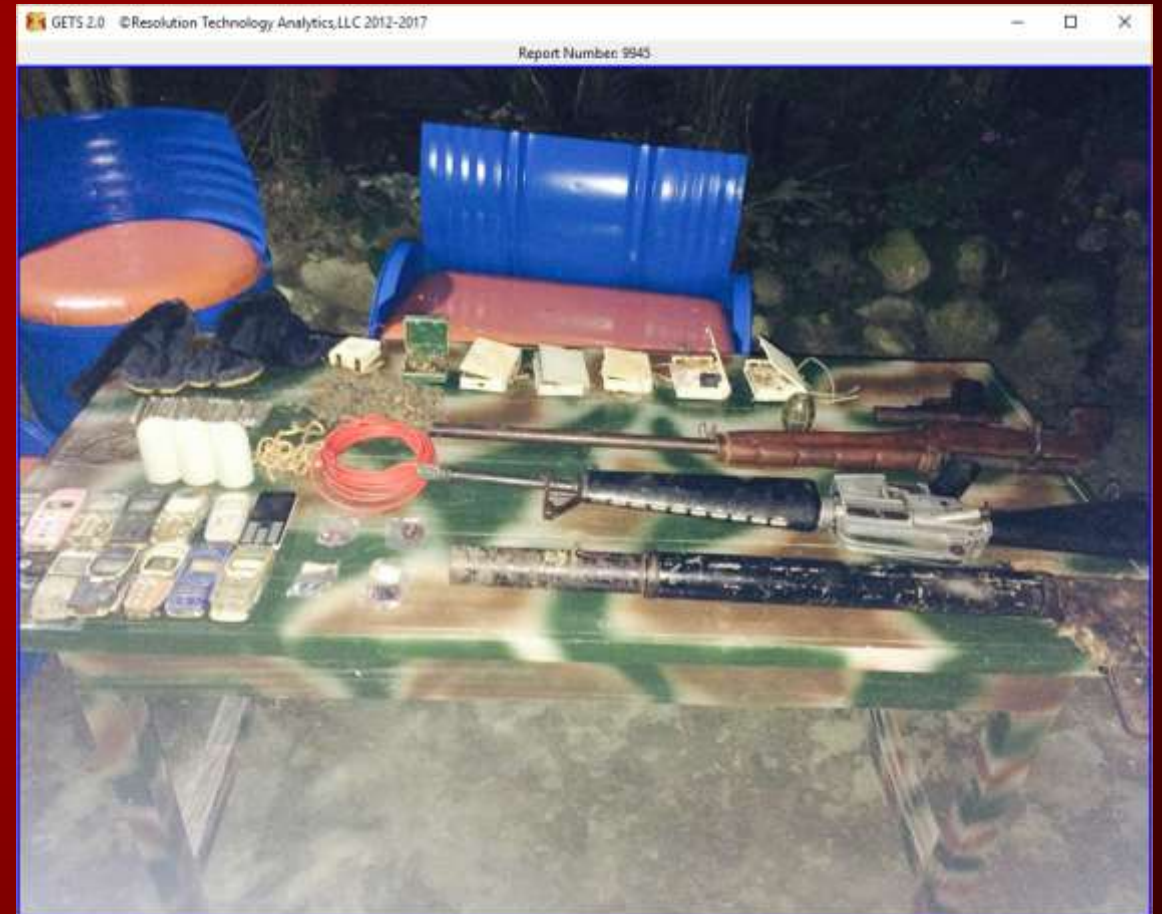




# PHILIPPINES

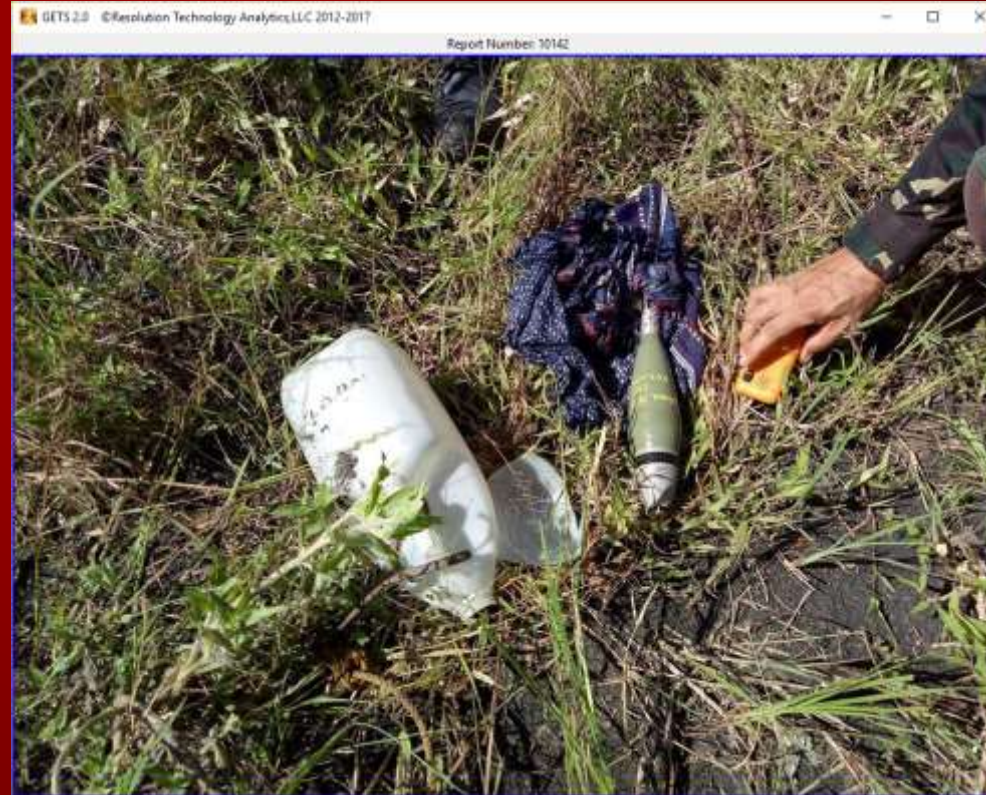
## ☉ August 30, 2017 - *One dead as government troops clash with BIFF - Kampilantroopers Facebook*

- “Firefight between the troops of 40th Infantry Battalion and Bangsamoro Islamic Freedom Fighters (BIFF) erupted at Barangay Tukanalipao, Mamasapano, Maguindanao today (August 30, 2017).”
- “The government troops also recovered one M16, one shotgun, one RPG launcher, one hand grenade, assorted ammunitions and IED making components.”
- *Comments: The picture shows 5 identical devices and 2 additional electronic items. These could be RCIED triggers. The phones appear to be for communications.*



# PHILIPPINES

- ◎ October 7, 2017 - *Army seized suspected shabu and IED from DAESH inspired local terrorist group – Kampilantrooper Facebook*
  - Comment: *Bar phone trigger.*





# SYRIA

- ⦿ August 2, 2017 – [translation] Alasayish defuse powerful explosive in Al Hasakah – Asayish Rojava
  - Comment: *The probable RCIED shown was found in the Kurdish area of Syria.*



Another ISIS RCIED Found in Manbij in September

- ⦿ Comment: *The alleged ISIS RCIEDs in the Kurdish areas seem to have different triggers than those in the areas contested by pro-Assad and Sunni-rebel groups.*

# TURKEY

- Comment: *Alphafire devices, FRS-type radios and professional grade radios continue to be used by the PKK.*





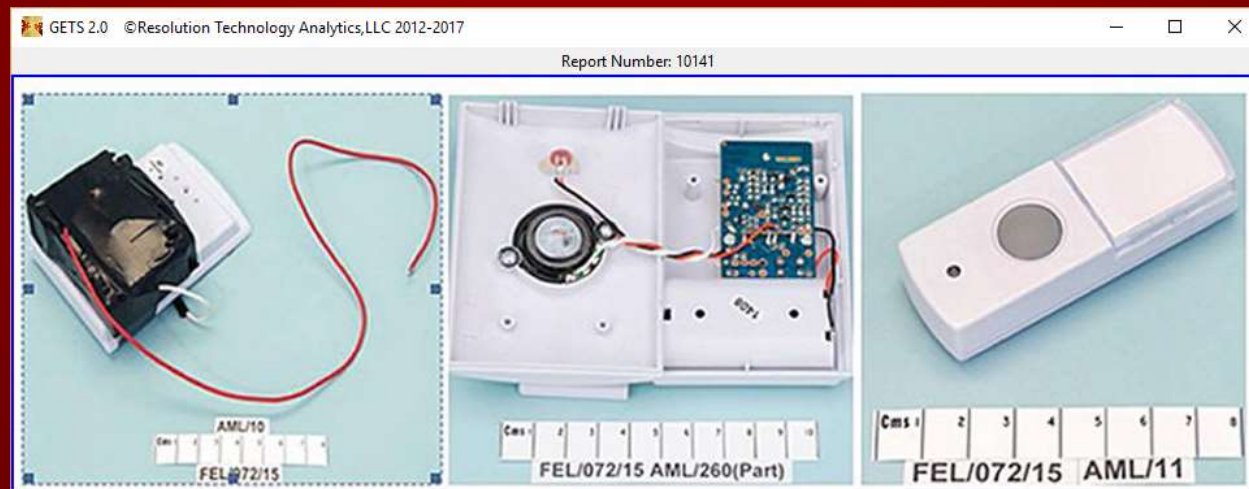
# TURKEY

- More of the same with the exception of a mobile phone trigger found in PKK cache in Istanbul province. The PKK rarely uses mobile phone triggers outside of the larger cities in western Turkey. (Izmir/Istanbul)



# UNITED KINGDOM / ISIS

- [old] October 9, 2017 – LIGHTS OUT ISIS-obsessed fairy lights ‘bomber’ caged for life after chilling plot to attack high-speed train line having become ‘bedroom radicalised’
  - “Ex-doorman XXX had attempted to create a remote-control detonator with a wireless doorbell, and had successfully manufactured four igniters from fairy lights.”
  - *Comment: The arrest occurred in August 2015, but this entry is included for a record of the picture of the wireless doorbell.*



# YEMEN / AQAP

## ◎ October 12, 2017 – Demolinari Twitter

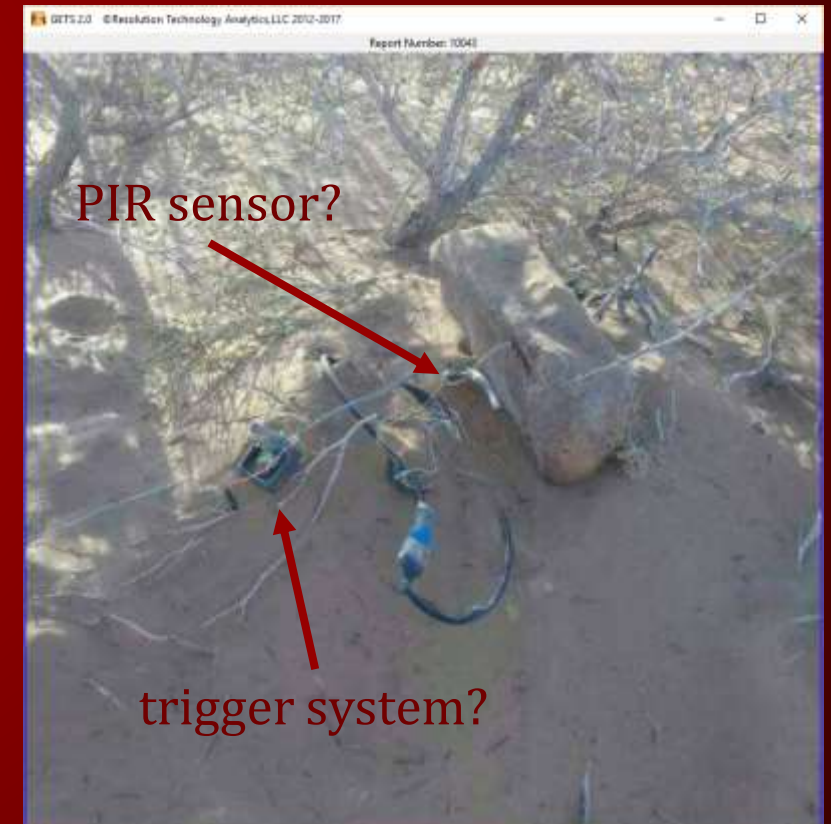
- “Security Belt forces seized explosives, IED components, documents, & propaganda from home of senior #AQAP militant in #Mudiyah #Abyan”
- Comment: *Typical AQAP RCIED items...*





# YEMEN

- ◎ September 19, 2017 – [translation] Coalition renews bombing in Shabwa; killing 6 including Houthi leader and capturing 8 – Al Omana
  - Comment: *In the article it mentions that dozens of anti-personnel, anti-tank, and remote-controlled mines were dismantled. This picture appears to show a ‘fake rock’ IED.*





# YEMEN

More (AQAP?) RCIED triggers reported during the August – October timeframe:

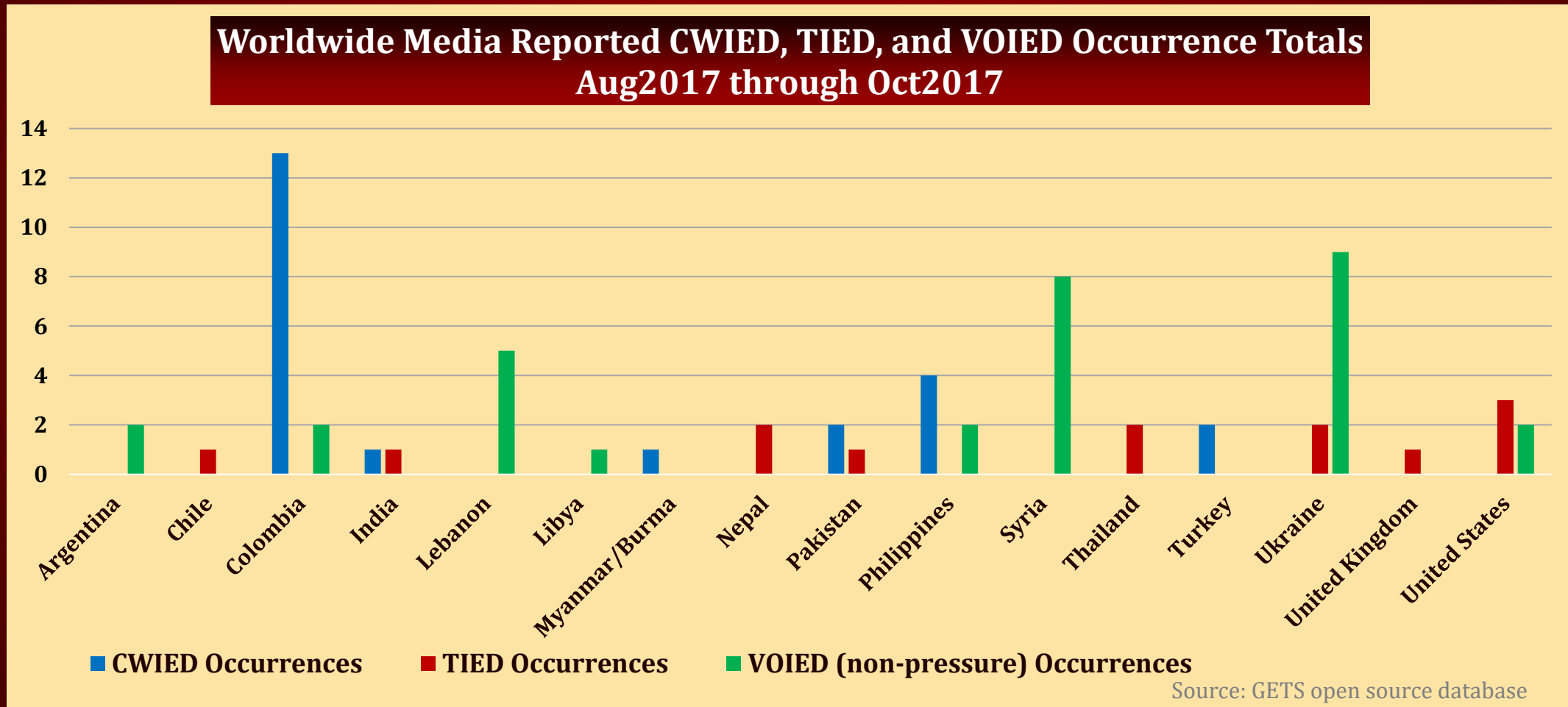


# NON-RCIED TOTALS & INCIDENTS OF NOTE

## CWIED, TIED, and VOIED chart notes:

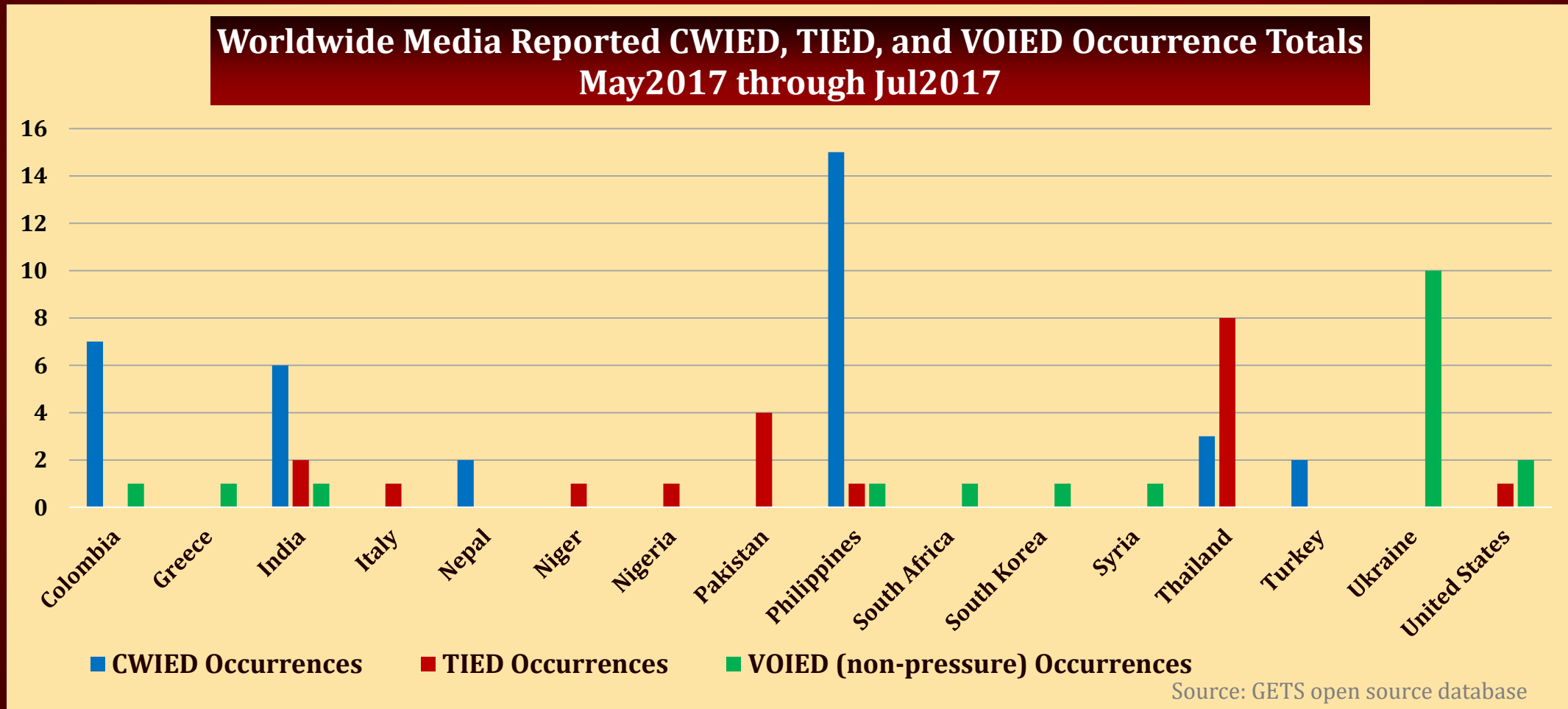
- CWIED occurrences are cases stated as CWIED or something similar or in which “long” wires are found and the scenario seems to back-up CWIED usage.
  - CWIED cache numbers are generally not included because it is difficult to determine CWIED intent and numbers.
- TIED occurrences include completed electronic and mechanical devices that operate in absolute or relative time.
- IEDs using mobile phones are grouped with RCIEDs unless specifically stated as being used in timer/alarm mode.
- VOIEDs do not include Pressure IEDs or landmines and focus on tripwires and booby-trapped/sensor devices.

# WORLDWIDE MEDIA REPORTED NON-RCIED OCCURRENCES AUG2017 THROUGH OCT2017

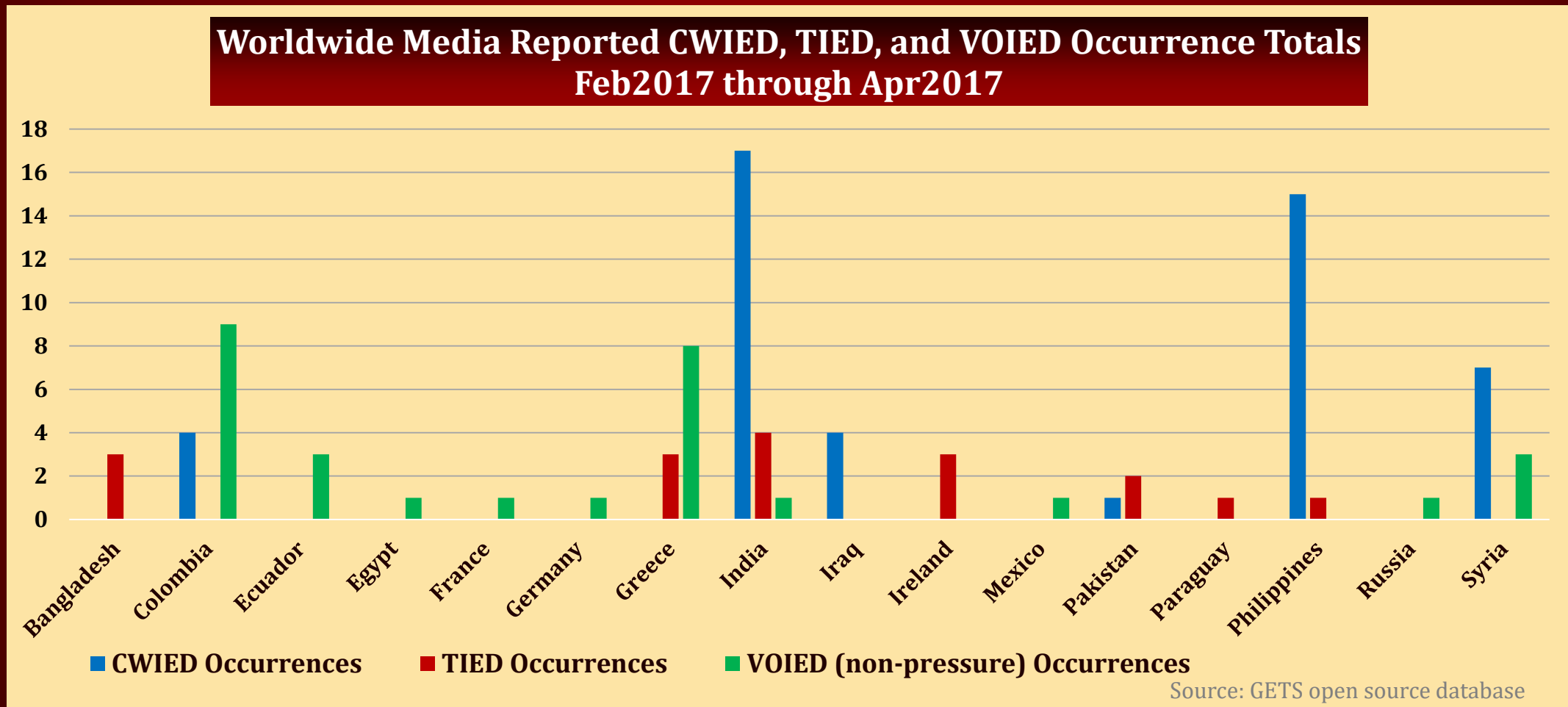




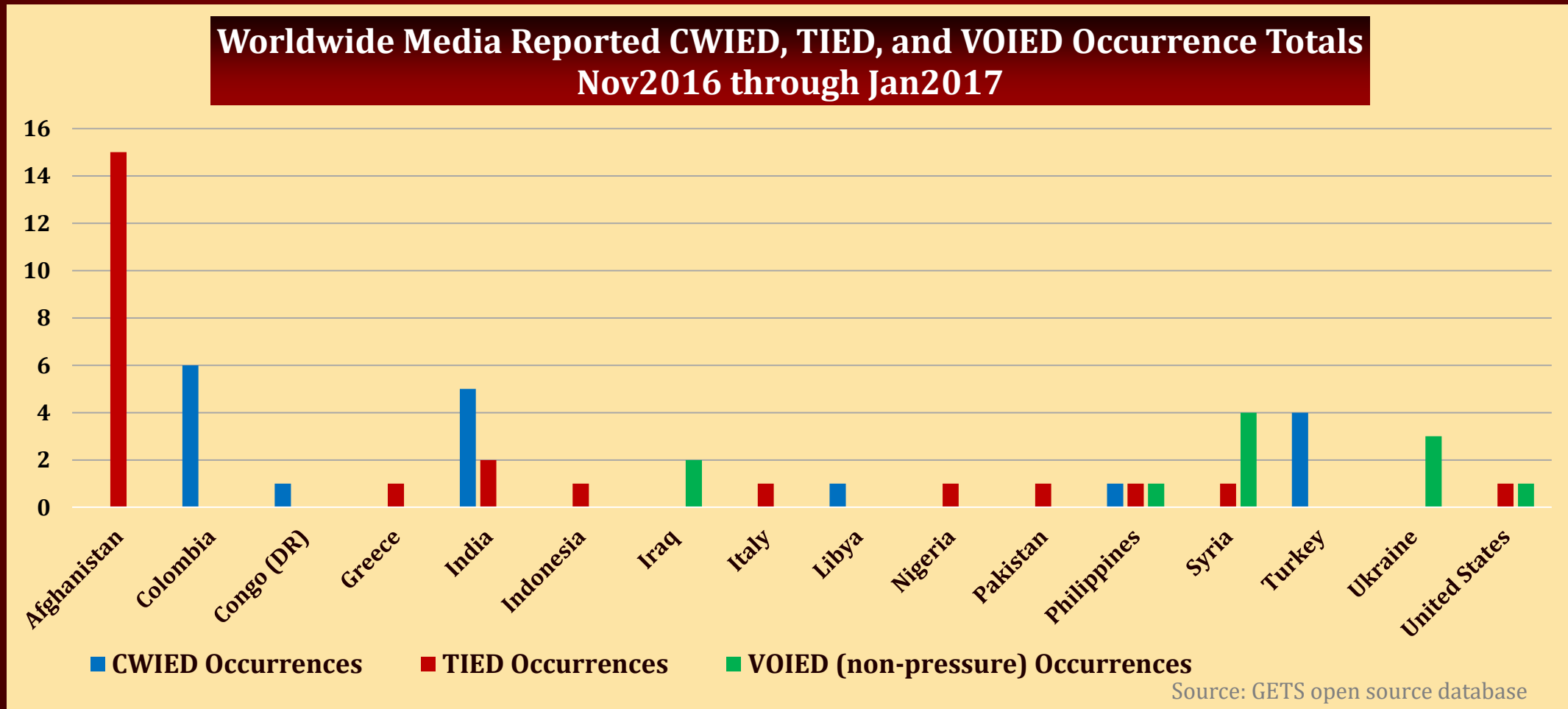
# WORLDWIDE MEDIA REPORTED NON-RCIED OCCURRENCES MAY2017 THROUGH JUL2017



# WORLDWIDE MEDIA REPORTED NON-RCIED OCCURRENCES FEB2017 THROUGH APR2017

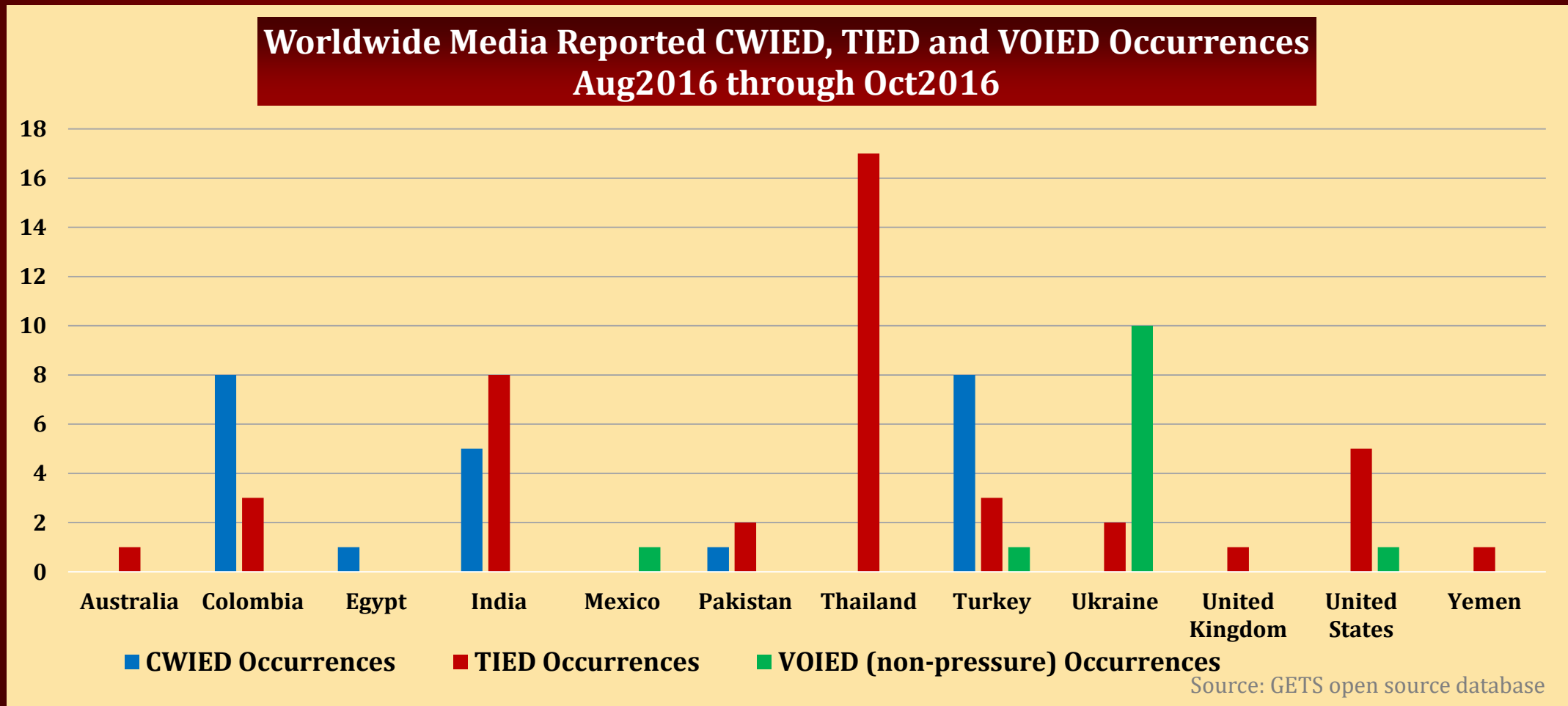


# WORLDWIDE MEDIA REPORTED NON-RCIED OCCURRENCES NOV2016 THROUGH JAN2017





# WORLDWIDE MEDIA REPORTED NON-RCIED OCCURRENCES AUG2016 THROUGH OCT2016



# AFGANISTAN

- ◎ October 9, 2017 – [translation] mine and suicide vest construction plant discovered in Kabul – Afghan NDS
  - *Comment: A large number of large circuit boards were found. Based on the boards, what was missing, and other items found, I suspect they were removing speaker magnets to use for MAIEDs.*



# ARGENTINA

- ☉ August 10, 2017 – *2 Hurt by parcel bomb at Argentine office of Spanish firm – News 4 Europe*
  - “Two people suffered non-life-threatening injuries Thursday when a parcel bomb detonated inside the offices here of Spanish IT giant Indra, the firm said.”
  - “Indra has the contract to provide IT and tabulation services for the upcoming Argentine legislative elections.”
  - Comment: *The booby-trap mechanism used a mouse trap.*



# ARGENTINA

- ◎ September 22, 2017 – [translation] homemade bomb "cazabobos" defused at entrance to University City – PERFIL
  - [synopsis of translation] A booby-trap was found in a box at the entrance of the City College of the city of Buenos Aires. After the suspicious box without an origination address was found, the police were called. Police deactivated the homemade booby-trap bomb, which was powerful enough to kill or disable a person.
  - Comments: *The unknown type switch is likely in the center of the end of the box between the pipe bomb and battery. The article did not say if the letters shown in the box are related to whomever placed the IED.*





# INDONESIA

- ◎ August 26, 2017 - *Indonesian militants planned 'dirty bomb' attack – sources – GMA Network*
  - “Indonesian militants planned to detonate a radioactive dirty bomb, security sources said, highlighting the rising ambitions of extremists to wreak destruction in the world's largest Muslim-majority nation.”
  - “But experts cast doubt on their expertise, equipment and chances of success.”
  - “The plot was foiled when police raided homes and arrested five suspects in Bandung, West Java...After the raids, police spoke of a plan to explode a "chemical" bomb but provided no other details.”
  - “The three counter-terrorism sources, speaking on condition of anonymity, said the militants had hoped to transform low-grade radioactive Thorium 232 (Th-232) into deadly Uranium 233 (U-233).”
  - “The highly radioactive uranium would be combined with the powerful home-made explosive triacetone triperoxide (TATP) to create a "nuclear bomb", according to an instruction manual used by the militants and reviewed by Reuters.”
  - “Thorium-232 can be transformed into Uranium-233 but requires the Thorium to absorb a neutron, a process that needs powerful irradiation, generally from a nuclear reactor, according to three analysts contacted by Reuters and the website of the World Nuclear Association”
  - *Comment: Sounds like their plan was somewhat impractical and there was no word on what type of triggering device they were considering.*

# IRAQ / ISIS

## ☉ September 8, 2017 - *The ruins of Mosul have exposed the future of high-tech warfare – Wired*

- “Five years ago, Daesh was yet to appear in its current incarnation, but its precursor organisations were well established in Iraq and had perfected horrifyingly effective IEDs. Ibrahim usually encountered three different types, activated by either tripwires, pressure plates or mobile phones.”
- “Daesh seized Mosul and formed its self-declared caliphate in 2014. EOD teams began to encounter increasingly advanced explosive devices, triggered by movement or a shadow cast across them.”
- *Comments: The device on the right was found among ISIS IED materials, but not yet used. It appears to be similar to a basic “nightlight” in that when a light path is blocked to a sensor (photoresistor) a light is illuminated. For an IED the light would be a trigger.*



# SYRIA

- ◎ August 31, 2017 – [translation] 6 explosive devices planted by terrorists dismantled in the countryside of As-Suwayda
  - Comment: *The Arabic language article says that the IEDs were 15 kg, circular, had radar connected to wires and, also, had tripwires. Based on where the IEDs were found, they may have been planted by anti-Assad forces, and not ISIS. Although the term radar is used they likely mean active or passive PIR.*

# HEZBOLLAH / SYRIA

## ☉ October 27, 2017 – Qalaat Al Mudiq Twitter

- “N. #Daraa: #FSA dismantling a Hezbollah "stone-IED" in Kafr Shams area (with bare hands).”
- *Comments: The twitter video shows someone dismantling the IED. The first picture below shows the “front” of the upside down fake rock with possible sensor opening. The picture on the left shows inside the IED. The sensor was not shown clearly, but based on viewing the entire video it appears to be inside the green plastic/rubber cup. The IED had two of the similar looking green cups that were both connected to the same black object. The white chord running from the middle of the picture to the bottom middle is likely a power cord and similar cords and connectors have been seen in other fake rock IEDs.*





# UNITED STATES

- ◎ October 20, 2017 - *Bomb squad called for booby trap found on Kalamazoo walking trail – WWMT News Channel 3*
  - “A bomb squad rushed to a trail on Kalamazoo's east side after someone out walking called to report finding an explosive device.”
  - “XXX and YYY were walking along the trail when she spotted the device, describing it as shotgun shells spring loaded to a mouse trap with duct tape.”
  - ““somebody took some time and crafted it and made it. I guess you could call it like a booby-trap type of device.””
  - “bomb technicians determined it was not an explosive device but could have caused harm, because the shotgun shell was live.”





Resolution  
Technology  
Analytics, LLC

[info@rtechanalytics.com](mailto:info@rtechanalytics.com)  
[rtechanalytics.com](http://rtechanalytics.com)