



# Technical Developments in Terror Attacks

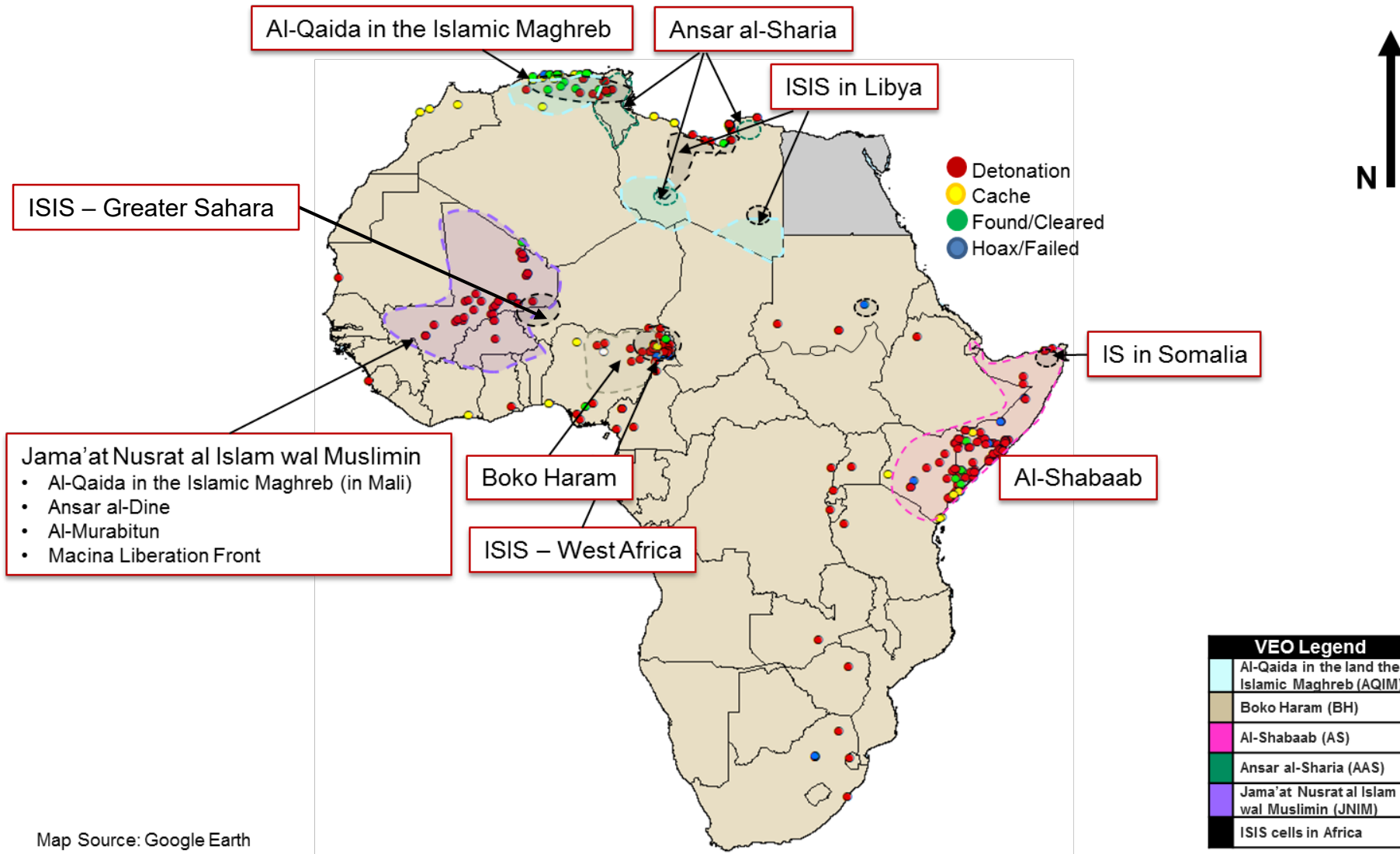
## 2019 WCO Security Conference

### African Perspectives on Security Challenges



DETECT, DETER, DEFEAT

# (U) IED and VEO Overview





# IEDs by VEO

## (U) Al-Qaida Affiliated VEOs in North Africa

AQIM, AAS, and others operating in Algeria, Tunisia, and Libya have been laying low for several years. AQIM has suffered significant losses recently, including the death of its Saharan emir and JNIM co-founder Yahya Abou el Hammam in a French operation north of Timbuktu. These VEO groups take advantage of vast ungoverned spaces and recruit from populations lacking economic opportunities. AQ remains active within Libya in the south-west of the country but operate more of a transit hub than operationally active. AQIM retains a significant presence particularly in the Timbuktu region, and maintains an ability to conduct operations.

## (U) ISIS Somalia (ISIS-S)

A group of al Shabaab fighters split off and pledged allegiance to ISIS. They operate in northern Somalia, conducting sporadic PBIED attacks and at least one unknown roadside IED attack against military forces in Puntland. US operations and internal fighting with al-Shabaab has greatly affected the groups operational capability.

## (U) ISIS Libya (ISIS-L)

Since they lost their foothold in Libya, ISIS Libya has reverted to periodic IED, VBIED and PBIED attacks against military targets/checkpoints. They remain confined to the south eastern desert areas and maintain a limited operational capability.

## (U) Boko Haram (BH)

Female and or children used as suicide bombers have become BH's signature tactic. They often send two or more to a target at a time. Their targets are usually civilian markets, mosques, and bus stations or other civilian frequented locations.

## (U) Al Shabaab (AS)

VBIED/SVBIED attacks in Mogadishu have received the most attention because of the high casualty counts that accompany them. Al Shabaab also conducts lesser known attacks in other regions of Somalia and Kenya as well. AS campaign is to remove all foreign influence from Somalia and rebuild a new Somali government. AS targets AMISOM forces and Somali government forces, often using RCIEDs. Some of these RCIEDs are attached to, or placed under the car of a particular military officer, government official, or journalist. AS has and will use suicide bombers to include female operatives.

## (U) ISIS West Africa (ISIS-WA)

ISIS West Africa split from BH over the methods BH used. ISIS did not like the use of children and females, and did not want to target civilians. ISIS West Africa still uses suicide bombers, but tend to target military forces though recent operations have seen them targeting select civilians.

## (U) ISIS Greater Sahara (ISIS-GS)

ISGS fighters were responsible for the deadly attack that killed four American soldiers and five Nigerien soldiers at Tongo Tongo in the province of Tillabéry, as well as dozens of attacks against Nigerien, Malian, and Burkinabe troops, militias like the Mouvement pour le Salut de l'Azawad (MSA), and Groupe d'Autodéfense Tuareg Imghad et Alliés (GATIA).

## (U) Jama'at Nusrat al Islam wal Muslimin (JNIM)

An umbrella organization that encompasses four VEOs, who have been operating in Mali for many years, JNIM conducts on average, three to five IED attacks on MINUSMA, Malian, Nigerian or Burkinabe forces every week. VOIEDs, emplaced along known supply routes is the usual method of attack. Mode of attacks have been complex with small arms fire. JNIM has conducted multiple base over runs. In Burkina Faso, JNIM is using key terrain to limit government response as it expands its operational influence into Burkina Faso. JNIM continues to use the Burkina Faso, Mali and Niger border regions as safe havens in order to continue its operational expansion deeper into these countries.



# (U) Most Commonly Used IEDs in Africa

## (U) Person Borne IEDs (Suicide Vests/Belts)

- Used in offensive operations, most prevalent in the Lake Chad region
- Suicide bombers are often women or children in groups of two to four



Image Source: <http://www.olufamous.com/>

## (U) Suicide Vehicle Borne IEDs (SVBIED) and Vehicle Borne IEDs (VBIED)

- Used in offensive operations, often to breach a building or checkpoint and sometimes in assassinations



An SUV prepped as a VBIED found in Mali.

Image Source: <https://africa.liveuamap.com/>

## (U) Radio Controlled IEDs (RCIED)

- Used both offensively and defensively
- Motorcycle alarm fobs are regularly used as triggers
- Found in Mali, Somalia, Nigeria, and Libya



Image Source: USAFRICOM IED Recognition Guide

## (U) Victim Operated IEDs (VOIED)

- Most often used in defensive operations to protect key terrain and infrastructure



A pressure-plate found in Nigeria

Image Source: USAFRICOM IED Recognition Guide



# (U) Types of Explosives Used by VEOs

(U) Africa has the largest mineral industry in the world, mineral mining and several other industries in Africa require bulk mining explosives (BME). Some of these explosives are skimmed and sold on the black market, or stolen by VEOs and used in IEDs.

(U) The explosives in a PBIED attack Boko Haram conducted in Nigeria in August 2014 were traced to a cement factory theft in May 2014.

(U) Al-Shabaab used military-grade TNT in the laptop IED employed in the airliner attack in February 2016. TNT can be taken from ordnance in minefields across the Sahel or extracted from Gadhafi-era munitions that were trafficked in North Africa after Gadhafi was killed.

(U) Homemade explosives (HME) has been made of urea nitrate and ammonium nitrate fertilizers used throughout Africa.



TNT-filled 155mm shells

Image Source: [www.Middleeasteye.net](http://www.Middleeasteye.net)



Image Source: <http://cnn.com>



Image Sources: <https://aesys.biz>; [www.omnia.co.za](http://www.omnia.co.za); <http://yara.com>



Image Source: <http://yara.com>



Image Source: [www.google.com/search?q=urea+nitrate](http://www.google.com/search?q=urea+nitrate)

# UAS Tactics, Techniques and Procedures

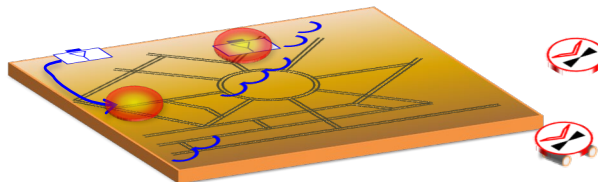


## Tactical and Operational UAS TTPs

- Tactical ISR of all types
  - Point, Area and Route Reconnaissance
- Varied Attack Types:
  - Munitions Drop
  - Trojan Horse
- Integration of:
  - UAS ISR ISO Ground Maneuver (SVBIED navigation – avoid barriers)

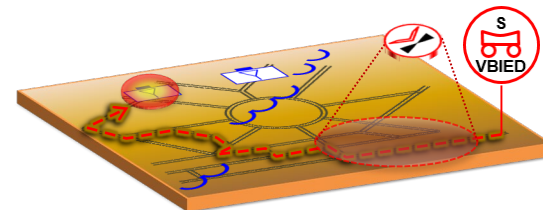
### Tactical UAS

- ATK – Tactical Munitions Drop






### Tactical UAS

- ISR – Vector SVBIED



### Legend

-  Unmanned Aircraft (UA)
-  Rotor Wing
-  Fixed Wing



Video: ISIS Propaganda – UAS TTPs



# (U) Significant African IED Attacks in 2019



Image source: www.africanews.com

**(U) SOMALIA:** Complex Attack, with SVBIED, followed by attackers with SVEST and small arms. 28 Feb 2109; the event began with a SVBIED followed by six to eight armed Al Shabaab attackers taking over building in central Mogadishu for over 24 hours.

**26 Killed; 56 Wounded (Civilians & Military)**



South China Morning Post

Image source: www.scmp.com

**(U) NIGERIA:** Complex Attack, PBIED and small arms. 29 Jul 2019; ISIS West Africa splinter group from Boko Haram likely targeted village leaders returning from funeral for opposing them in the region.

**65 Killed; Unknown number wounded**



Image source: mali24.info

**(U) MALI:** Complex Attack, IED and small arms. 20 Jan 2019; Al Qaida affiliated group Jama'at Nusrat ul-Islam wa al-Muslimin (JNIM) claimed attack on Chadian MINUSMA convoy in Aguelhok, Kidal Region, of Mali.

**10 Military Killed; 25 Military Wounded**



Image source: www.cnn.com

**(U) NIGERIA:** Three PBIEDs by child soldiers. 17 Jun 2019; Boko Haram in Konduga, Borno State continues use of child soldiers strapped with bombs against civilian populace. Two girls and a young boy on this attack.

**30 Killed; 39 Wounded**



Image source: www.aa.com.tr

**(U) BURKINA FASO:** Complex Attack, IED and small arms. 7 Nov 2019; likely JNIM targeted Quebec based Semafo mining buses which had military escort. Semafo forced to close mining operations in Burkina Faso after this event.

**37 Killed; 50 Wounded (Military and civilians)**



Image source: www.voanews.com

**(U) SOMALIA:** PBIED - Al Shabaab Insider. 24 Jul 2109; a female Al-Shabaab SVEST operative gained access to the government HQs in Mogadishu where she killed the Mayor Abdirahman Omar Osman and several city district and regional chairmen.

**10 Killed; 4 Wounded**