Threat Tactics Report:

Islamic State of Iraq and the Levant

TRADOC G-2 ACE Threats Integration

Executive Summary

- ISIL is an evolution of an insurgent group that has changed its name to reflect an increasing geographic vision.
- ISIL's advantage to date has been an increasingly large number of fighters and deep cash reserves to fund its operations. This provides greater capacity to organize, train, and equip like a military organization.
- ISIL executes military tactics to the best of its capability. This is a greater capability than that shown by previous insurgencies in the area, but still not best practice in a number of warfighting functions and key tasks.
- High value targets for ISIL have included such infrastructure as dams and oil refineries, which also contribute to its cash flow.
- Social media use has reached a new level of refinement.
- ISIL's rapid mobility, due to control of key lines of communication (LOCs) in Eastern Syria, is a key strength of the group.[1]
- ISIL's command and control is superior to most other insurgent groups in Iraq and Syria.[2]
- ISIL's command and control is being negatively impacted by coalition airstrikes; however, it has developed techniques such as tunnels to adapt.*
- Fluctuations and reductions in revenue sources, such as oil, have been disruptive.
- ISIL is escalating to higher levels the violent images it distributes via social media.
- While ISIL's momentum in Iraq and Syria has been stalled, its direct and indirect influence internationally has contributed to its ongoing narrative of a worldwide caliphate.

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*Information added in this version of the report appears in blue text.

Cover photo: *ISIS Flag*, August 2014.

Introduction

The Islamic State of Iraq and the Levant (ISIL) has risen to prominence as a danger to peace and a regional threat with global impact. This perception comes, in large measure, because of its successes in Syria and then a rapid takeover of northern Iraq. Its military victories are largely due to successful recruiting, intra-insurgent conflict, large cash reserves, an advanced information warfare (INFOWAR) campaign to win the local populace's support, and ineffective opponents. There is much to learn from how ISIL is fighting. The ready availability of recruits, many of whom are foreigners attracted to ISIL successes, and large amounts of money for payroll and purchasing war materiel are critical considerations, but it is also important to consider how ISIL is fighting on the ground.

This report is intended to identify key aspects of tactics and techniques used in ISIL's actions in Iraq and Syria. ISIL, unlike its predecessors and competitors, is a paramilitary insurgency. While the baseline techniques being used by ISIL do not differ significantly from those it has employed since its early days as an al-Qaeda affiliate in Iraq, its capabilities have increased in scope and complexity. Techniques making use of suicide vehicle-borne IEDs (SVBIED) and vehicle-borne IEDs (VBIED) have become more sophisticated. ISIL's use of INFOWAR has become more refined and pervasive with the adaptation of social media technology and increased technical competency among recruits. ISIL has targeted infrastructure such as dams, oil refineries, and power plants for use in population control and financing. ISIL has also demonstrated the ability to execute military tactics that require a level of competence and control uncommon in recent experience.

Two major shifts in the ISIL operational environment resulted from Operation Inherent Resolve airstrikes against key ISIL targets and a significant drop in revenue, due in part to decreased oil prices. These two variables have caused serious disruptions in the freedom of movement enjoyed by ISIL for most of 2014 and limited its capacity to service areas under its control. Between 8 August 2014 and 7 January 2015, US and allied coalition forces conducted a total of 1,676 air strikes against Islamic State militants in Iraq and Syria in an ongoing campaign to destroy the organization. Air strikes damaged or destroyed 3,222 targets between August and January, to include 58 tanks, 184 HMMWVs, 673 fighting positions, and 980 buildings or barracks.[3]

ISIL's success has been due, in part, to extensive revenues from robbery and extortion, oil sales, ransom payments, stolen assets from banks in occupied areas, and, to a lesser extent, donations from abroad. While revenues from robbery, extortion, and ransoms may remain unchanged, other revenue sources will likely remain volatile and decrease over time. Money from banks can only be replenished by expanding its boundaries where new banks can be plundered. Volatility in the oil market, particularly the recent significant drop in the worldwide price of oil, has cut into a lucrative ISIL revenue source.[4] Coalition air strikes have targeted infrastructure such as refineries and hydroelectric plants, further hampering delivery of basic public services.[5]

While still controlling significant land, the changing operational environment it finds itself in will cause ISIL to look less like a state and more like a traditional insurgency. The Iraqi military, with air support and training from US and coalition forces and further involvement by Shia militia groups, has at least stalled ISIL's further progress toward Baghdad. Plans are developing to take back key areas currently occupied by ISIL, such as Mosul. Air strikes have limited ISIL's freedom of movement and forced it to move more

cautiously and slowly. Communication between key leaders and fighters will be slow and less effective as leaders are forced into hiding to avoid being captured or killed.[6] Dissatisfaction among people in the occupied areas will drive the ISIL occupiers to become more brutal in their enforcement of rules and regulations, causing even more dissatisfaction and passive and active resistance.

Section 1: Islamic State of Iraq and the Levant (ISIL)

The Islamic State (IS) began as a Jordanian-led extremist organization formed in 1999. It moved to Iraq in 2004 under the leadership of Abu Musab al Zarqawi. Zarqawi named the organization Jamaat al Tawhid wal Jihad or the "Group of One God and the Holy War." After pledging loyalty to al-Qaeda, Zarqawi initially renamed the organization Tanzim Qaedat al Jihad fi Bilad al Rafidayn or "al-Qaeda in Iraq." The Zarqawi-led organization created front groups, the longest surviving of which was the Islamic State in Iraq (ISI) under the leadership of Hamid Dawud Muhammad Khalil al-Zawi, more commonly known as Abu Omar al Baghdadi. In 2013 under al Baghdadi's leadership, AQI became the Islamic State of Iraq and the Levant (ISIL). ISIL briefly allied itself with al-Qaeda's Syrian affiliate al Nusra, but disagreements led to a split between the two groups.[7] In early 2014, the al-Qaeda central leadership rejected ISIL, at which time it became an entity unto itself. After significant success in both Syria and Iraq, ISIL changed its name to the Islamic State, underscoring its determination to not be limited by geographic borders in restoring its vision of the caliphate.[8] Al Baghdadi then changed his name to Caliph Ibrahim and demanded the Muslim world recognize him as the leader of the worldwide Islamic caliphate.[9]

It is worth clarifying at this point some confusion evident in the media and other places over the naming designation of ISIL. The name ISIS is commonly interpreted as the Islamic State in Iraq and Syria. This is incorrect as ISIS should be interpreted as the Islamic State in Iraq and al Sham or, if fully translated, the Islamic State in Iraq and the Levant. ISIL is more appropriate as it does not mix two languages in the acronym. ISIL is the acronym used by both the president of the United States and the US State Department. Its self-proclaimed latest name, the Islamic State, is not currently used in US government communications, therefore, this report follows that pattern by using ISIL. Understanding this larger vision of a caliphate beyond just Iraq and Syria is important in understanding ISIL.[10]

Section 2: ISIL Tactics

Dispersed Attack

The following graphic illustrates some of the actions over several days that resulted in the capture of the city of Mosul by ISIL forces.

ISIL placed enabling forces in key areas of the city in the form of disruption forces. These forces facilitated the attack by providing reconnaissance information and intimidation of security forces and the civilian population. Support forces used by ISIL included mortar and rocket units that conducted attacks on command and control (C2) headquarters and cells that manipulated electricity output. Outside the limits of Mosul, ISIL assault forces seized the Qayyarah Airbase and the Sharqat Airport, limiting air support against the attack. North of Mosul, prisoners in the Bardosh Prison were released, providing recruits to join the fight and creating further confusion and diverting attention and resources away from the main action. Assault forces entered the city of Mosul and occupied key areas of the city—

specifically the Mosul General Hospital, Ninewa Provincial Government building, Mosul Airport, Regional Army Headquarters, police stations, and private banks. Exploitation forces then entered the city and defeated remaining isolated enemy units.

Iraqi forces did not immediately capitulate, initially conducting clearing operations supported by air assets. ISIL exploitation forces contended with these until capture or retreat of the Iraqi security forces. Within a matter of a few days, ISIL forces were able to take complete control of Mosul.[11] Iraqi forces were completely defeated by the dispersed attack tactical offensive action, which is characterized by—

- Isolation of enemy combat units
- Disruption of effective C2 and sustainment
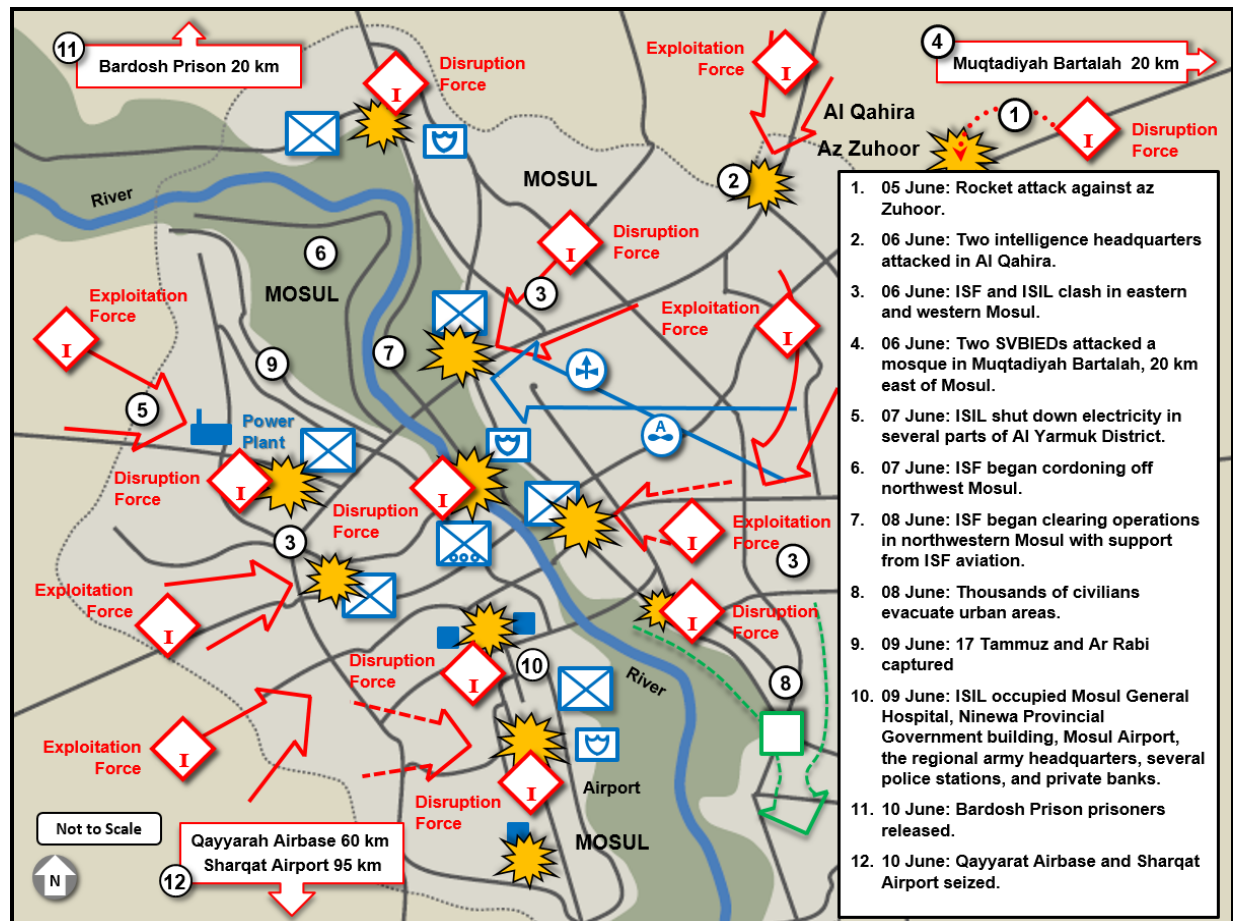- Simultaneous attack by multiple action forces

Figure 1. Dispersed attack on the city of Mosul

Integrated Attack

Al Asad Airbase, ISIL-occupied Qaim, Haditha, and Hit

1

Exploitation Force

4

WP

Assault Force

1. ISIL forces fixed Iraqi Security forces by:
   a. capturing and threatening surrounding areas over the preceding months;
   b. beginning the attack during a sand storm, limiting Iraqi and US air response; and
   c. attacking security elements as the operation began.
2. Anbar government complex attacked using suicide VBIED assault forces and follow-on fighters as an exploitation force.
3. Anbar Operation Command Center attacked using suicide VBIED assault forces at the gate and penetrated with exploitation force fighters.
4. Ramadi camp of the Iraqi 8th Army Brigade attacked using an assault force of suicide VBIEDs and an exploitation force of follow-on fighters.

Internally Displaced Persons

Assault Force

Assault Force

Internally Displaced Persons

Exploitation Force

Exploitation Force

Euphrates River

Tamim

Sufiya

RAMADI

Mala'ab

Hawz

Internally Displaced Persons

Dhubbat

Albu Jabr

Anbar University
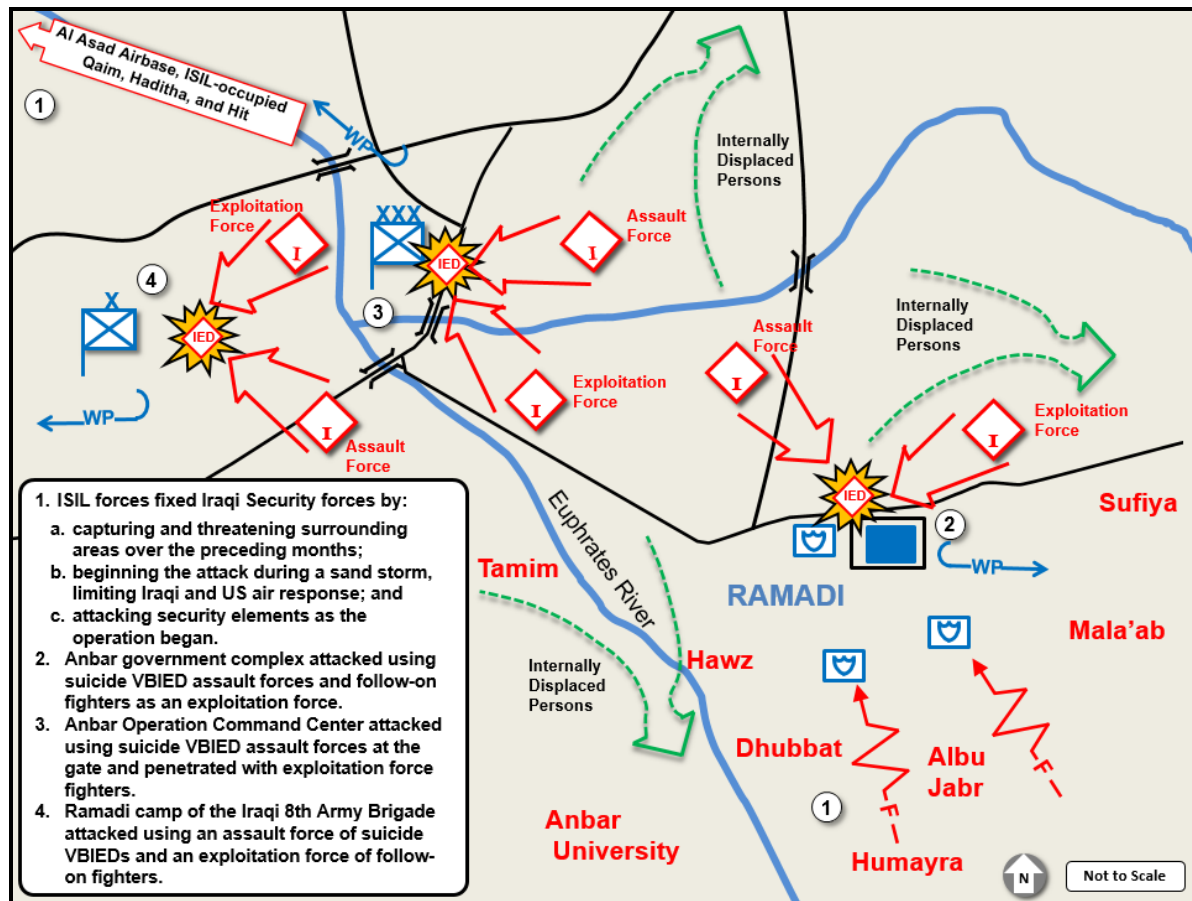
Humayra

N

Not to Scale

Figure 2. Integrated attack on the city of Ramadi

The capture of Ramadi, the provincial capital of Anbar province located 80 miles west of Baghdad, has always been a part of an ISIL strategy to take control of Anbar province. Among other reasons, ISIL control of Anbar province gives it maneuver room to threaten and attack Baghdad. There are also reasons why Ramadi is important to the Iraqi government. The city is positioned on significant routes between Baghdad and Jordan and Syria—important resupply routes for ISIL. The Ramadi dam and the reservoir south of the city on the Euphrates River control the flow of both drinking and agricultural water to much of southern Iraq.[12] Ramadi is the largest population center in the Sunni-dominated province and the home of the Dulaymi tribe, a group whose support ISIL will need to be able to effectively govern the area.[13]

ISIL has had a presence in Anbar province, taking advantage of Sunni discontent with the Shia-controlled government. The group openly presented itself in Ramadi as early as 2013. During a 28 October 2013 anti-government protest in Ramadi, two masked ISIL members stood on either side of the ISIL flag. In the latter part of 2013, ISIL increased attacks in the southern part of Ramadi. From September to

December 2013, attacks in Ramadi's southern urban center doubled to 20 per month. From January to April 2014, attacks more than doubled to 44 a month. On 3 January 2014, ISIL launched simultaneous attacks on Ramadi and Fallujah. During those attacks, ISIL captured municipal buildings and the police headquarters in Ramadi. Before the end of January 2014, local militias and Iraqi security forces pushed ISIL out of Ramadi's city center.[14]

ISIL's strategy included offensive operations over a period of months that captured key cities and neighborhoods surrounding Ramadi. By October 2014, ISIL had captured the cities of al Qaim, Haditha, and Hit along the route between Ramadi and the Syrian border.[15] On 12 February 2015, ISIL fighters took the town of al Baghdadi, less than ten miles from the al Asad Airbase. The airbase, the home of the Iraqi 7th Infantry, had for several months been the target of mortar fire. About 0720 local time on 13 February 2015, 20–25 ISIL fighters wearing Iraqi Army uniforms attacked the al Asad Airbase in two waves. The first attackers, the assault element, detonated suicide vests, followed by an exploitation element of 10–15 fighters who briefly penetrated the perimeter. Iraqi soldiers killed the attackers before they could do any damage. Iraqi military reinforcements that would be needed to defend against an attack on Ramadi would likely come from al Asad. With pressure on the airbase through repeated attacks, ISIL effectively fixed Iraqi forces there, significantly improving the chances for a successful attack on Ramadi.[16]

From its controlled villages south of Ramadi, Albu Jabr and al Humayra, ISIL launched attacks into al Hawz, al Mala'ab, Fursan, and al Hayy Dhubat. By November 2014, it controlled Hawz, Tamim, and Anbar University—areas south of Ramadi's government complex. By the start of 2015, ISIL controlled or was seriously contesting more than half of the area around Ramadi. During the period 11–14 March 2015, ISIL conducted eight suicide bombings in and around Ramadi. By mid-April, the group had executed attacks on neighborhoods in the southeast suburb of al Sufiyah. On 27 April 2015, ISIL called for fighters in Syria to join the fight for Ramadi, implying the need for suicide bombers in the coming attack. ISIL continued attacks into Ramadi on 10 and 14 April 2015 and again on 5 and 9 May 2015.[17]

The stage was now set for an ISIL offensive to finally take Ramadi itself. Iraqi security forces were concentrated in three main areas, with a few small security contingencies scattered throughout the city. The Anbar Operations Command Center (AOCC) was a corps-level command located in northwestern Ramadi. Camp Ar Ramadi, the home of the 8th Iraqi Army Brigade, was located west of the city. The Ramadi Government Center complex, which also contained provincial government offices, was located inside Ramadi.[18]

Before and during the attack on Ramadi, ISIL was able to fix Iraqi forces in three ways. As mentioned previously, it fixed Iraqi forces positioned at al Asad Airbase through numerous direct attacks and the capturing of surrounding towns. An early morning sandstorm on 14 May 2015 allowed ISIL to get the upper hand on Iraqi security forces. In January 2015, ISIL had also used a sandstorm to mask its attack on Kurdish units in Kirkuk. Without fear of air attacks by Iraqi and US air assets, ISIL began the attack on Ramadi unimpeded. By the time the sandstorm cleared, Iraqi and ISIL units were too closely intertwined to effectively engage the assailants from the air. Lastly, ISIL fighters attacked police stations and other security units to fix these resources and prevent their supporting the Iraqi forces that were defending the three primary ISIL objectives.[19]

ISIL first targeted the Ramadi Government Center Complex. On 14 May 2015, a single armored bulldozer worked without opposition for nearly an hour to clear defensive concrete barriers blocking the road to the police station located next to the governance building complex. When the bulldozer reached the police station, the driver detonated the bulldozer as an SVBIED. ISIL also targeted two other buildings within the complex with VBIEDs. Once the way was cleared, ISIL utilized six 15-ton trucks with payloads capable of demolishing portions of neighborhoods. ISIL fighters detonated a total of at least 27 vehicles loaded with explosives during the attack. Utilizing SVBIEDs as an initial assault force with a follow-on exploitation force, ISIL took the Government City Center Complex, causing security forces to withdraw under pressure.[20]

On 17 May 2015, ISIL fighters attacked the AOCC. The attack began with three SVBIEDs detonating explosives at the front gate, killing five Iraqi soldiers and wounding twelve. ISIL fighters followed the SVBIEDs, penetrating the perimeter. Iraqi forces retreated from the center, leaving ISIL in control of the command center.[21] The attackers used the familiar technique of sending SVBIEDs as an assault force to open a window of opportunity for the exploitation force to achieve the primary mission, which in this situation was the capture of the AOCC.

After capturing the AOCC, ISIL captured the Ar Ramadi camp of the 8th Iraqi Army Brigade using similar tactics. During the days leading up to the attack on Ar Ramadi, ISIL had shown no interest in taking prisoners. ISIL fighters brutally killed and captured Iraqi security personnel as well as local leaders. An information operations campaign that emphasized the group's brutality worked effectively, as ISIL captured Ramadi and then turned its attention to the Ar Ramadi camp. Those who could escape did so, leaving behind equipment, weapons, and ammunition in their wake.[22]

During and after the Ramadi attacks, thousands of internally displaced persons (IDPs) fled the battlefield, stressing a Shia-led government in Baghdad. Fears about potentially embedded insurgents among people leaving Ramadi created bottlenecks at checkpoints, caused denial of passage into safe areas for many of those fleeing, and tied up security forces in IDP operations. An already-large humanitarian crisis was amplified as the number of Iraqis in need of support increased by thousands. In addition to the distraction and diversion of Iraqi security force resources to IDP operations, ISIL can use the Iraqi government failures on Ramadi in its ongoing information operations narrative to attack the Iraqi government's credibility.[23]

ISIL has regularly used offensive tactics consistent with the hybrid threat doctrine outlined in TC 7-100.2, Opposing Force Tactics. During the Ramadi operation, ISIL utilized enabling and action forces. The enabling forces consisted of fixing forces and assault forces. The fixing forces prevented Iraqi security units from effectively maneuvering to support the defense of ISIL's three primary objectives while the assault forces, consisting of SVBIEDs, attacked vulnerable perimeter positions. Exploitation forces followed the assault forces, taking advantage of the window of opportunity created to achieve the primary mission.

Area Defense

ISIL established an area defense of the Mosul Dam in August 2014. ISIL defenses integrated urban areas, their remaining civilian population, and manmade structures into complex battle positions. ISIL disruption forces ranged from small tactical cells to larger groups of insurgents appearing as paramilitary

units with weapon systems captured from occupied military facilities. Armored vehicles and heavy weapons were integrated into the area defenses in simple and complex battle positions. ISIL INFOWAR focused on the message that enemy forces would be destroyed if they entered the conflict, and threatened an expansion of the conflict into their respective homelands.

Emplacement of obstacles and numerous improvised explosive devices (IEDs) reinforced disruption operations intended to slow and stop state and coalition forces in kill zones. ISIL maintained a degree of mobile reaction in its ambushes, and small-scale counterattacks by transporting insurgents with small arms and rocket propelled grenades in commercial vehicles, using "technicals" mounting heavy-caliber weapons, and occasionally employing military armored vehicles and heavy-caliber weapons. The disruption forces and main defense forces utilized camouflage, cover, and concealment, and deception (C3D) to improve survivability. Battle positions were coordinated among positions to provide overlapping and concentrated fires into a kill zone or kill zones. Reserves were concealed or camouflaged in complex battle positions or individual hide positions, but readily available to senior ISIL leaders in order to reinforce battle positions, respond to state or coalition attacks, and/or react to other offensive actions.
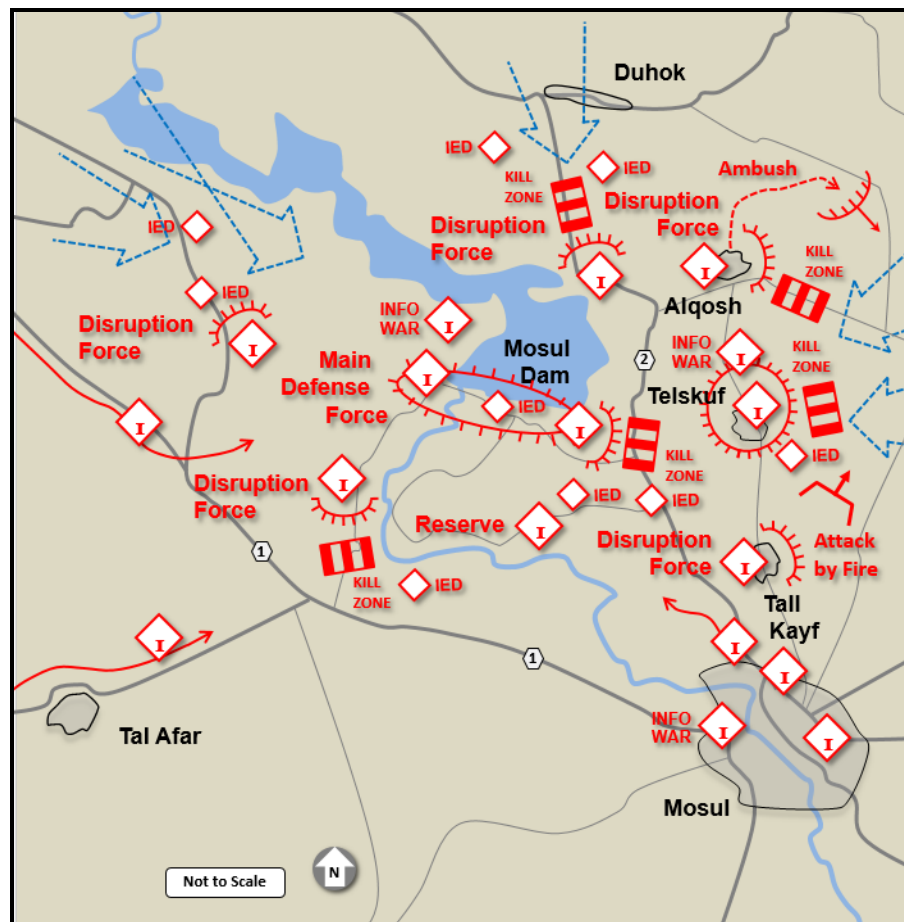

Figure 3. Area defense of the Mosul Dam

Section 3: ISIL Techniques

Command and Control

Abu Bakr al Baghdadi, the ISIL-appointed caliph, governs through a bureaucratic organization that includes close advisors and specialty, regional, and local councils.[24] Al Baghdadi requires a theologically-based pledge of loyalty and fealty.[25] Until recent US airstrikes, ISIL had relatively unfettered movement capabilities along a corridor spanning northern Syria and Iraq. Command and control under these circumstances did not require the kinds of considerations now necessary with the US airstrikes targeting ISIL communication nodes. The use of couriers is likely to become an important part of communicating to ISIL's network of fighters.

ISIL's growth has come from its ability to coopt, dominate, or absorb competitor organizations. Some of these organizations may only be fair-weather friends and leave the coalition when the time is deemed right. There is a very real chance that ISIL leadership will lose control through splintering and infighting. With a varied and diverse demographic of foreign fighters, Sunni tribes, former Baathist leaders, etc., the challenge for ISIL will be controlling both the message and the fight.[26]

An element of ISIL's command and control infrastructure is social media. During the attack on Mosul, for example, ISIL sent tens of thousands of tweets in a way that avoided the Twitter spam trigger.[27] While social media companies are constantly identifying and deleting questionable accounts, it is easy to simply open a new account. A new, tech-savvy generation of jihadists opens up new means of communicating to vast audiences for recruiting, propaganda, and bureaucratic control.

Months of airstrikes against key command and control sites and leaders has created challenges for ISIL.[28] Many of those on al Baghdadi's council of trusted leaders were killed in 2014. ISIL's self-proclaimed caliph, al Baghdadi, is faced with a smaller number of trusted confidantes at the same time he is the single most targeted person by coalition forces. Reclusive and secretive by nature, his inability to move about freely further isolates him and forces an even more decentralized leadership, leaving many decisions to local leaders. With such a vast number of personalities and demographics within its organization, ISIL will face greater vulnerability and risk the more decentralized it becomes. ISIL, in contrast to al-Qaeda, has the added challenge of governing a vast contiguous area with varying degrees of support and compliance.[29]

ISIL is forced to use relatively primitive means to communicate. Using technology that can be monitored such as satellite and cell phones, emails, etc. creates a vulnerability ISIL cannot afford. Use of landline phones for internal communication and encoded electronic messages, couriers, and personal meetings, creates inefficiencies and slows the speed at which decisions can be made.[30]

In November 2015, when Kurdish forces entered Sinjar, Iraq, after pushing ISIL forces out, they found that ISIL had adapted to air attacks by building a network of tunnels that connected houses. These tunnels allowed protection and a means of subterranean command and control. The sandbagged tunnels, about the height of a person, contained ammunition, prescription drugs, blankets, electrical wires leading to fans and lights, and other supplies. In total, there were at least 30–40 tunnels.[31] (Click on Figure 4 to see a video of part of one the tunnels.)

Figure 4. ISIL tunnel in Sinjar

Air Defense

As a result of ISIL's successful campaigns to overrun Syrian and Iraqi military installations and arms depots and its support from other international actors, it has a tactical air defense capability. Through the combination of systems procured from various Syrian and Iraqi military installations and through its international partners, it is assessed that ISIL has access to air defense systems such ZU-23s, FN-6, SA-7s, and SA-16s.[32] These systems are considered very short-range with a maximum effective range of 6km and a maximum effective altitude of 4.5km.

Figure 5. Iraqi Defense Ministry has confirmed ISIL has MANPADs

ISIL will use these weapon systems in an effort to minimize opposition force air advantage. It will do so by employing the systems to target both air systems and ground systems. Also, because these systems are in limited supply and require trained personnel to operate, it is likely that they will be used to defend key urban areas and safe havens for ISIL forces.[33] To defend these areas, ISIL will likely use multiple systems and high volumes of fire.

Much like a regular force entitiy, ISIL is actively training its recruits on the operation of air defense systems. As of October 2014, ISIL has published an online guide describing the best techniques and

procedures to use to down Apache attack helicopters. The guidance provided in the document calls on operators to seek high terrain and solid surfaces to fire the systems.[34] The high terrain is intended to provide better visibility and line of site of the target, while the solid surface is intended to reduce the appearance of dust following a launch.

While ISIL's current air defense arsenal gives the group a robust capability to destroy low-flying systems such as unmanned aerial vehicles (UAVs) and helicopters, it does not provide any capability for targeting systems that fly at higher altitudes. This means that ISIL lacks the capability to destroy US aircraft currently conducting bombing campaigns in Iraq. For this reason, the Pentagon has released statements that say ISIL lacks an anti-aircraft capability.[35]

ISIL has claimed that it has successfully destroyed a number of helicopter systems throughout Iraq this year. For one incident in particular, ISIL released video proof of its capability. This incident occurred on 3 October 2014 near Baiji Iraq. In the first documented use of an FN-6 by ISIL, one of ISIL's fighters targeted an Iraqi Army Mi-35M helicopter and successfully destroyed the helicopter, killing all the crew members. The helicopter was reportedly in the area

Figure 6. Truck-mounted ZU-23

conducting bombing missions on behalf of the Iraqi government.[36] Days after this successful attack, ISIL, again using a man portable air defense system (MANPADS), shot down a second helicopter, a Bell 407 that was conducting a surveillance mission northeast of Baiji. This attack also resulted in the deaths of both crew members.

Figure 7. Images released by ISIL of an attack on an Iraqi helicopter

While the incidents discussed here provide evidence of ISIL's capability to destroy Iraqi helicopter systems, it is important to highlight that ISIL is actively training and procuring systems with the intent to counter US forces' operations in the region. Situation reports on ISIL's training and procurement efforts demonstrate this.

Anti-Armor

ISIL's anti-armor arsenal now contains a number of highly effective weapons that can be used against Iraqi and Syrian security forces. Anti-armor weapons with shape charges increase the likelihood of targeted armor vehicle crew casualties, but may not completely destroy the targeted vehicle during the engagement.[37] However, due to Iraqi Security Forces' (ISF) challenges in maintaining larger armored vehicles like the M1, it is possible this platform has been denied future use.[38] The most common systems

in use right now are the Kornet, the M79 Osa Rocket Launcher, and the ubiquitous rocket-propelled grenade launcher the RPG-7. In addition, ISIL has also captured a number of Russian and US tanks that, while more difficult to maintain and larger targets, can be used to attack enemy convoys.[39]

Not surprisingly, these weapons are of choice use for the prosecution of offensive actions like assaults and ambushes. In July 2013, ISIL fighters ambushed an ISF convoy in the Khalidiyah area in Anbar Province. The convoy consisted of at least three M1A1 Abrams tanks and nine M113 armored personnel carriers. The attack occurred on a rural dirt road, initiated with IEDs and followed with anti-tank fire.[40] The graphic below shows the missile hitting the tank. Even more recently, on 20 April 2014, ISF lost a formation with mixed armored vehicles including T-62 tanks.[41]

Figure 8. ISIL anti-tank missile fired at an M1 Abrams tank near Ramadi

ISIL also carefully considers the use of these weapon systems in the prosecution of the defensive actions, such as simple and complex battle positions, emplaced to protect personnel or equipment, restrict enemy freedom of movement, control terrain, or gain time. Surely this becomes even more complex when those positions are overlaid against complex terrain like urban centers. For instance, after taking Jalula on 11 August 2014, ISIL established well-armed battle positions to defend routes through canalized and obstacle-riddled terrain that included "T-55 or T-62 tanks, recoilless rifles, [and] shoulder-fired anti-tank weapons."[42] The combination of these systems, and considering their anti-

armor weapon portability and multi-use character, presents numerous challenges while also demonstrating ISIL's tactical savvy.

Improvised Explosive Devices (IED)

Tunnel IEDs

ISIL primarily uses tunnel networks for communication and safe passage, particularly in Raqqa province where the Syrian Air Force uses its air superiority to conduct airstrikes. Tunnel IEDs are being widely used by members of the Islamic Front in the Aleppo area of Syria where it is attempting to compete with the Syrian military's superior capabilities.[43] Aleppo, with urban infrastructure and embedded government security forces, lends itself to tunnel IED attacks. Given the right conditions, ISIL, already skilled in constructing tunnels for safety and communication, can execute tunnel IED attacks.
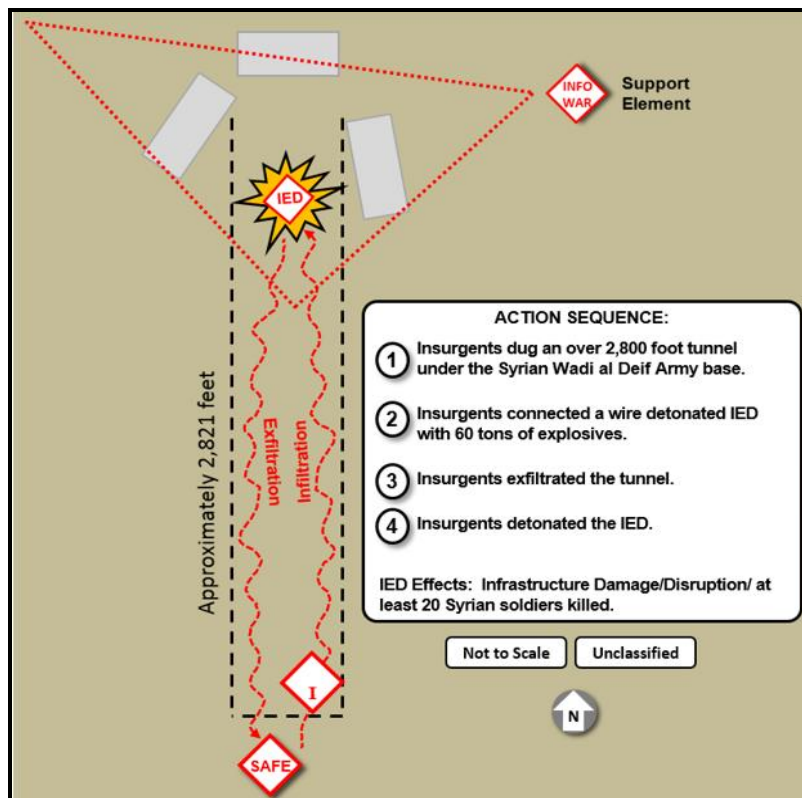

ACTION SEQUENCE:

1. Insurgents dug an over 2,800 foot tunnel under the Syrian Wadi al Deif Army base.

2. Insurgents connected a wire detonated IED with 60 tons of explosives.

3. Insurgents exfiltrated the tunnel.

4. Insurgents detonated the IED.

IED Effects: Infrastructure Damage/Disruption/ at least 20 Syrian soldiers killed.

Not to Scale   Unclassified

Figure 9. Wadi Deif attack

Subterranean tunnels of any distance are both time- and labor-intensive. For this reason, their use, while not widespread, is significant. Insurgents in Syria, though no match for the regime's superior military strength in head-to-head engagements, are finding safety and success in destroying infrastructure and killing enemy personnel through the use of tunnels. Recent targets for insurgent attacks have been the Court of Justice, the Hanono army base, the Carlton Hotel, and the Chamber of Industry; each of these housed Syrian security forces command headquarters. Tunnel construction requires only limited understanding of engineering concepts and utilizes readily-available tools such as a compass, a tool for measuring distance, a spade, a pick axe, and a cart to move dirt.

The attack depicted above was executed on 14 May 2014 by Suqur al-Sham in coordination with the Islamic Front. Insurgent forces in Syria had been trying to capture the Wadi Deif military base for at least a year. The base is a major launching point for Syrian army artillery attacks on the insurgents and protects the Syrian regime's supply route from Damascus to Aleppo. Insurgents used 60 metric tons of

explosives and a hand-dug tunnel length of over 2,000 feet. In addition, the insurgents included an INFOWAR element to record the explosion.

Suicide Water-Borne IEDs

Iraq's rivers with multiple bends are potential avenues of approach for attacking bridges. Pontoon bridges, in particular, are easy targets, impacting lines of communication and movement, particularly in rural areas. This technique has been used in the Dhuluiya area north of Baghdad. On 6 September 2014, ISF successfully fired on and detonated an explosive-laden boat with a suicide bomber onboard before it reached its target. The boat was targeting a pontoon bridge south of the volatile city of Dhuluiya.[44]

Armored IEDs

For a year beginning in August 2012, insurgents fighting the Syrian government conducted a siege and executed multiple attacks on the Menagh Airbase. On 5 August 2013, insurgents finally captured it. After a three-day long barrage of artillery, mortars, and machinegun fire, a Saudi suicide bomber drove a specially-outfitted BMP loaded with explosives and detonated it close to where the last remnants of the

Figure 10. Armored IED

government troops were concentrated. ISIL claimed it had taken the lead in attacking the airfield, supported by other units from Syrian insurgent forces. The airbase was little more than an outpost with only about 75–100 defenders still remaining when it finally surrendered to the insurgent forces.

As part of the attack, the insurgents reinforced a BMP and equipped it as a VBIED. Workers welded metal piping to the sides of the BMP to both provide protection against RPGs and other weapons to ensure the BMP could reach its target and as a wall to ensure the containers holding the explosives stayed in place as the BMP moved.

The following description corresponds to the figure below.

1. The invasion began with enabling elements disrupting the Syrian security forces with a three-day barrage by artillery, mortar, and heavy machinegun teams.
2. A Saudi suicide bomber drove the specially-prepared BMP VBIED close to the buildings where the government troops resided and detonated it as the initial assault element.
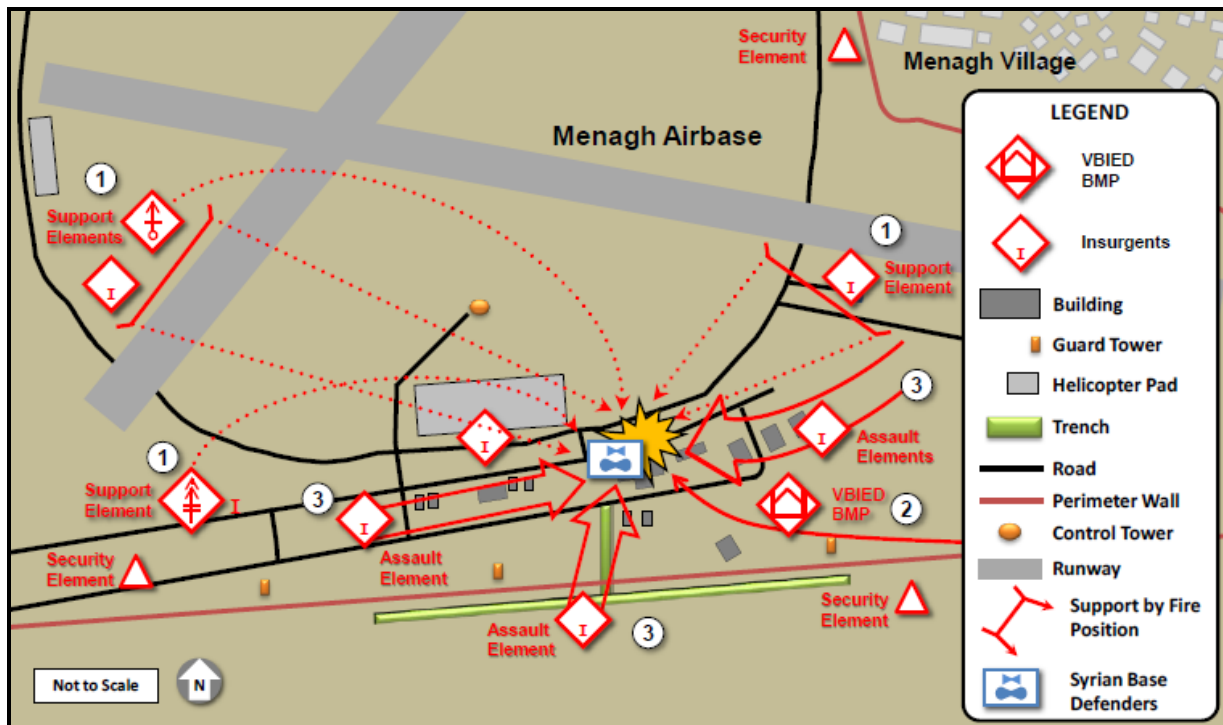3. Other assault elements attacked along three axes towards the center and prevailed after a day of heavy fighting.[45]

Figure 11. Menagh Airbase

Suicide Vehicle-Borne IEDs (SVBIEDs)

An integral part of the ISIL battle plan often includes utilization of SVBIEDs. These kinds of attacks, while not always definitive, when well-positioned can cause serious damage to and weaken fortified positions. The additional psychological effect can be equally damaging. As part of an initial assault, it can weaken entry gates and open the way for other assaulting units to enter fortified positions.

This was true of an attack on the Tabqa airbase, the last fortified position in the ISIL stronghold of Raqqa Province, Syria. The Tabqa base is key terrain for both ISIL and the Syrian regime. Both sides fought tenaciously with Syrian forces using air assets and ISIL using its suicide bombers and exploitation element to attempt breaches at the main gate. Around 10 August 2014, ISIL began attacking the base. On 17 August, the Syrian Air Force (SAF) conducted over 20 air strikes in and around Tabqa and the city of Raqqa. On 18 August, SAF continued air strikes in Raqqa City, damaging the Raqqa city water plant. Anticipating sustained ISIL attacks, the Syrian regime sent reinforcements and large quantities of ammunition and food to the Tabqa airbase. In the preceding days, ISIL captured nearby villages from which to launch attacks.

The first main assault began on the night of 20 August. ISIL used rockets and mortars as a disrupting element. A breaching composed of two SVBIEDs attacked the main gate and were followed by an exploitation element of up to 200 fighters. This assault was stopped at the gate by Syrian defenders. The first SVBIED was detonated at a distance from the gate by either the Syrian guards or was caused by a premature detonation. The second SVBIED detonated close to the gate, but produced little damage. The

exploitation element met with sufficient resistance from airbase defenders, and withdrew from the immediate area.

Fighting subsided during the morning of 21 August 2014 after which a second assault was launched. This second assault included a disrupting element of rockets and mortars and an action element with the mission of attacking and penetrating the front gate. Syrian special operation forces, recognizing the staging of ISIL fighters, anticipated their movement and planted mines in their attack axis. In addition, Syrian forces massed heavy indirect fires and air strikes against the ISIL combatants. The ISIL force retreated again. Fighting continued into the morning of 22 August 2014 when ISIL managed to capture a checkpoint outside the base. ISIL failed, however, to capture the base.

On the evening of 22 August 2014, ISIL received reinforcements and attempted to breach the entry to the base in the same manner it had begun the attack on the Tabqa airbase on 20 August. An SVBIED attempt to breach the gate failed again, and the exploitation element failed to penetrate the gate. Over the next two days, the SAF began evacuating the base. On 24 August 2014, ISIL finally breached the front gate to the Tabqa base. To this point, approximately 170 government forces were killed and 150 were
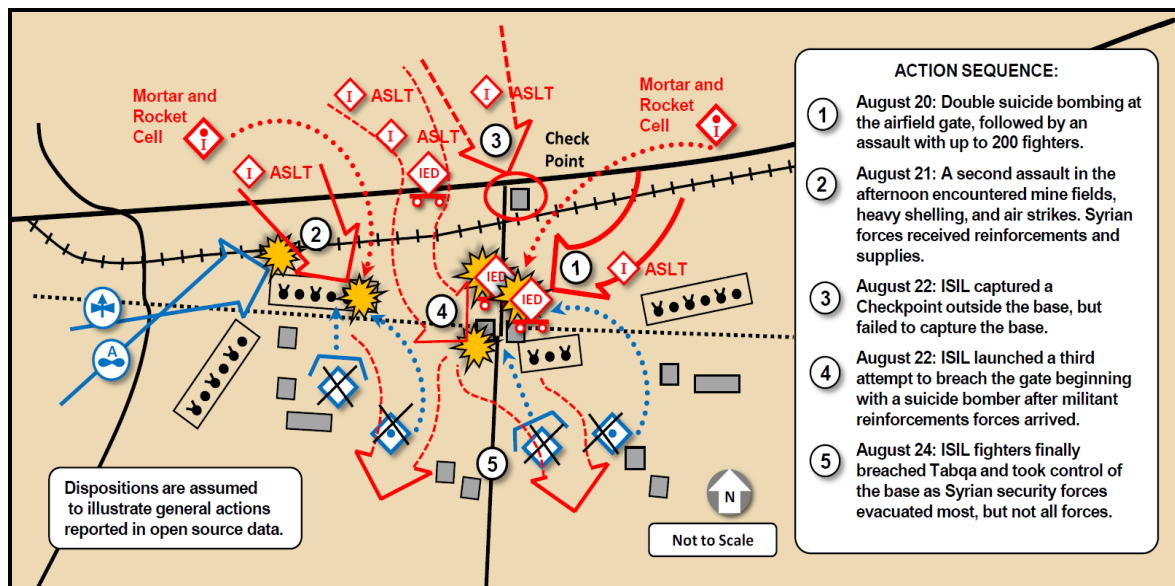

Figure 12. Tabqa attack

captured. Around 346 ISIL fighters were killed in the attacks. ISIL executed the Syrian defenders that were captured. Both ISIL and the SAF sides attempted to explain the events at Tabqa Airbase to their advantage. The Syrian regime painted the evacuation as a planned regrouping of forces. ISIL claimed victory and used it as further evidence of its growing strength.

Chemical Weapons

Recent revelations of chemical weapon caches in Iraq have raised the specter of ISIL's use of chemical weapons. In June 2014, ISIL gained access to hundreds of tons of potentially deadly poisons including mustard gas and Sarin when it occupied the al Muthanna facility 60 miles north of Baghdad. In the 1980s

and 1990s, the facility was a central location for Saddam's chemical weapon development efforts. Although transforming these chemicals to a military-grade weapon and delivery system is probably beyond the current capability of ISIL, chemicals could be used as part of IEDs.[46] As an example of what might occur in future actions confronting ISIL, reports indicate the 2 July 2014 deaths of three Kurdish fighters in Kobani, Syria that may have been caused by a chemical agent.[47]

According to CENTCOM, chemical weapons engineer Abu Malik was killed near Mosul, Iraq on 24 January 2015. Malik worked in Saddam Hussein's chemical weapons' program. He affiliated with al-Qaeda in 2005 and subsequently with ISIL. There is no indication ISIL has a chemical weapons program. There have been, however, allegations ISIL has employed chlorine gas, a choking agent. Malik's death has degraded ISIL's capability to build a chemical weapon program.[48]

For some time, ISIL has had potential access to the makings of chemical weapons.[49] While the Syrian government agreed to turn over its stockpile—estimated at 1,300 metric tons—it has yet to provide any documentation concerning the program, leaving room for concern about potential missing chemical agents.[50] Known Saddam-era chemical stockpiles are part of ISIL-captured areas in Iraq. All of this leads to the high probability that ISIL has an inventory of potentially dangerous chemical agents.[51] Several recent incidents in August 2015 point to ISIL's use of chemical weapons, causing the US and other countries to more fully investigate the claims and their implications.[52]

The town of Makhmur, southwest of Erbil, was the scene of an afternoon and night attack on 11 August 2015 that involved Katyusha rockets filled with what is believed to have been chlorine gas. Soldiers exhibited signs of

Figure 13. Map of Iraq

respiratory irritation, a symptom of chlorine gas exposure.[53] According to the Peshmerga General Command, ISIL elements launched a night attack with at least 45 120-mm mortar shells, some tipped with chemical heads, at Peshmerga positions around Makhmur.[54] The German Defense Ministry said at least 60 Kurdish fighters exhibited breathing difficulties after the attack. Germany's foreign intelligence agency chief, Gerhard Schindler, stated that testing of blood from Kurdish soldiers involved in the attack indicated they were exposed to mustard gas.[55] On 12 August 2015, ISIL attacked Sultan Abdullah, a neighboring town to Makhmur, with multiple rockets possibly containing mustard gas. As with the other attacks, Kurdish soldiers exhibited signs of exposure to chemical agents.

Indonesian police believe a failed chlorine bomb at a Jakarta mall in February 2015 was the work of ISIL adherents returning from Syria. The device was homemade and consisted of several bottles and a

detonator. It was discovered after it failed to detonate. Successful attacks are likely in the future as fighters return to their countries of origin with skills honed on Iraqi and Syrian battlefields.[56]

Deception

ISIL uses deception in two ways. First, ISIL has the ability to blend in with the population. Air strikes have had the predictable result of causing ISIL fighters to shed military uniforms in favor of less identifiable clothes.[57] Sunni tribal support, either directly or passively, has facilitated this by allowing ISIL fighters to move freely and hide in some areas. With the increase in US airstrikes and the involvement of other nations, ISIL will inevitably continue to hide among the population and begin to look much more like an insurgency than a state army.

ISIL has put captured equipment to good use as well. In September 2014, Camp Saqlawiyah in Anbar Province had been under siege with supply and logistics routes controlled by ISIL. With food, medicine, water, and ammunition in short supply for the five battalions trapped in the camp, officers made desperate calls to commanders and even members of parliament for relief. When camp defenders saw uniformed Iraqis in military vehicles they assumed it was the promised relief and let them pass through the gate without proper security checks. After entering the camp, the first ISIL SVBIED exploded in the middle of the camp while two others detonated on the perimeter. The gate security tried to hold back the rest of the convoy, but was hit with more SVBIEDs. The camp was overrun with only a minority able to escape.[58]

Snipers

ISIL-captured, high-powered precision rifles have allowed ISIL to utilize snipers in a variety of roles and situations. A withdrawal by defenders of the Syria-Turkey border town of Kobani was hampered by ISIL

Figure 14. ISIL snipers attacking Kurdish soldiers in Jalula

snipers in October 2014. Equipped with night vision equipment, ISIL snipers kept Kurdish fighters pinned down and unable to withdraw, even under cover of night.[59] In October 2014, Kurdish troops moved out of the town of Jalula to defend positions in Baquba against ISIL attacks. Six soldiers and a BBC reporter left behind were pinned down by snipers firing from multiple positions. The snipers created chaos, fear, and the perception of a larger attacking force.[60]

ISIL snipers have been observed at the height of a battle and not in marginal, clandestine attacks. One observer stated that during a heavy barrage of mortars and RPGs, ISIL snipers were positioned to fire on resisters and other targets.[61] Coupling heavy firepower, suicide bombers and snipers creates a formidable complex attack.

Social Media

The speed of ISIL's June 2014 takeover of northern Iraqi cities was matched only by the speed of its social media campaign. The seemingly incongruous match of a brutality rarely equaled by other terrorist organizations and a nuanced and sophisticated social media capability combine to allow ISIL to mold and nurture a multi-audience narrative of both intimidation and success. It has used a number of social media programs to push out a message of cruelty to its enemies and evidence of success to supporters and potential recruits. ISIL has shown an understanding of such platforms as Twitter and Facebook that has allowed it to significantly increase its audience reach, dwarfing money and recruit competitors such as al Nusrah.

Figure 15. ISIL cartoon tweet

ISIL's ongoing strategy of encouraging fear among occupied populations and enemies while simultaneously inspiring would-be jihadis to join the fight through brutal images has only increased. Jordanian pilot LT Moaz al-Kasasbeh crashed in Raqqa province in December 2014 and became the subject of intense negotiations for his release. Negotiations stalled over proof to Jordanian officials that he was still alive. It is widely believed al-Kasasbeh had been killed before or during the negotiations. A 22 minute video of his death posted on 3 February 2015 showed him in a cage being burned alive. The gruesome death and the theatrics wrapped up in the video were intentional and fit the continuing ISIL narrative.[62]

In a world somewhat numbed and accustomed to beheadings, the intentional burning alive of al-Kasasbeh reignited an emotional response ISIL has come to crave. After ISIL posted the video, Jordan ordered an immediate airstrike as many Jordanians hailed the pilot a martyr and vowed vengeance for his death.[63] The visceral reaction of Middle Eastern political leaders to ISIL's provocations may work to ISIL's benefit as it is likely to create further schisms within its volatile populations.

A group calling itself the CyberCaliphate hacked into several online sites, claiming to be ISIL. In January 2015, the CyberCaliphate hacked into US Central Command's (CENTCOM's) Twitter and YouTube accounts, posting warnings from ISIL, unclassified documents, and propaganda videos. One posted document included the names and addresses of US military officials. A tweet posted under the CENTCOM Twitter name stated, "We won't stop! We know everything about you, your wives, and children."[64] The CyberCaliphate accessed the Twitter feed of Maryland CBS affiliate WBOC-TV. The cyber group also hacked into the Albuquerque Journal newspaper's Twitter feed, posting pro-ISIL messages and personal information including New Mexico residents' driver's license photos.[65] It is not possible to know if the CyberCaliphate has a real relationship with ISIL or if it is just a cyber-vandal, but it does show a potentially growing sophistication and intent to use cyberattacks.

ISIL Media Organization

The ISIL media department, Al Hayat Media Center, under the authority of its official propaganda arm, the Al Itisam Establishment for Media Production, has seen recent success in recruiting Westerners in general and Americans specifically. The products being generated include English-language videos, pamphlets, and a magazine. Competent English speakers are creating the products, which are free from spelling and grammatical errors generally common in such materials, and sprinkled with Arabic words and phrases. German materials are also finding their way into areas with German-speaking potential recruits.

Twitter

ISIL continues to use Twitter effectively to engage supporters and control the organization's narrative. Prior to entering Iraq, ISIL had already developed digital tactics in Syria. Upon entering Mosul, the social media campaign began by tweeting, among other things, a consistent ominous prediction, "#ISIS we are coming Baghdad."[66] Subsequent tweets included a cartoon with trucks filled with militants rushing to Baghdad.[67] ISIL Twitter accounts have also carried gruesome pictures and narratives of mass killings, enhancing its image as conqueror and discouraging resistance from those in its path.

ISIL has capitalized on Twitter features such as hashtags to expand its audience. A hashtag is a way to create a grouping of discussions in a mostly unmonitored ad hoc discussion forum. Any combination of characters preceded by a pound sign, or hashtag (see quote in previous paragraph as an example), allows anyone to sort all discussions with a particular hashtag into one place. If promoted by enough people, a hashtag will appear in Twitter's "Trending Topics." Hashtags are not registered or controlled by any one user or group of users and are not retired from public availability. A hashtag is a title arbitrarily assigned by the author that may or may not have anything to do with the message associated with the hashtag. ISIL uses faux hashtags in order to get its message to a larger audience. Capitalizing on the World Cup soccer fervor, ISIL used a number of hashtags associated with the event to gain a larger audience and improve its trending potential. As an example, ISIL has used hashtags associated with premier English soccer league clubs such as #MUFC, #WHUFC, #LFC, and #THFC.

ISIL has also doctored images to present a message. In one such post, ISIL or one of its supporters used the White House's hashtag message on behalf of the kidnapped Nigerian girls to its advantage. The original Obama Administration hashtag featured Michelle Obama with a sign that said "#Bring Back Our Girls." In a tweet, the picture was altered to say "BringBack Our Humvees," an obvious reference to equipment and vehicles seized by ISIL in its takeover of northern Iraqi cities.[68]

For several weeks in early 2014, ISIL supporters were able to download a Twitter app from the Google Play Store called "The Dawn of Glad Tidings" or "Dawn" for short. The app was advertised as a way to receive updates on ISIL's efforts. Once a user downloaded the app, it would automatically post ISIL materials to each user's Twitter account, spacing the tweets out at a rate and in numbers that would not alert Twitter's anti-spam detectors. Each user essentially became a server for dissemination of ISIL propaganda materials. When ISIL stormed Mosul, the app posted 40,000 tweets in a single day. The app has since been removed from the Google Play Store after being available for several weeks.

Facebook

Facebook has long been used by terrorist and insurgent groups. ISIL is no different, using it to share information and garner support. Facebook and other social media platforms have policies requiring these types of pages to be taken down; however, new accounts can be easily set up under different names. A new twist on the old approach is utilizing social media platforms such as Facebook to sell ISIL-branded products. For a reasonable price, a person can purchase shirts with the ISIL

Figure 16. ISIL branded sales merchandise on Facebook

logo and phrases such as, "We are all ISIS" and "Fight for Freedom, Until the Last Drop of Blood."[69] Other products such as t-shirts, hoodies, and toys can be purchased. Many of the websites promoting these products come from Indonesia, a base of support for ISIL and other militant groups. One of these sites, Zirah Moslem, had over 9,000 likes before it was removed from Facebook. While it is not clear if ISIL is actually selling the merchandise, there is reason to believe it is receiving at least some support from the profits and publicity.

Videos

The ease with which events can be captured on video and disseminated via any number of digital media allows ISIL to distribute messages worldwide within minutes. Videos have been used for the purpose of recruiting disaffected Muslims in the West and sending messages designed to terrify, including graphic tweets of beheadings and mass killings. Whatever the purpose, ISIL has a willing network of people anxious to spread the visual images. News organizations, looking for images to tell stories, and people simply captivated by the images, also become participants in the distribution of the ISIL story.

Dams and Barrages

Water and water infrastructure are critical to Iraqis, providing mobility, irrigation, and needed drinking water. For this reason, ISIL has used and targeted water related infrastructure in order to shape the battlefield in its favor. *ISIL will use this control of infrastructure to exert control over the local population*.

Iraq depends on its intricate system of dams and barrages to control the flow of water from the Euphrates and Tigris rivers to ensure

Figure 17. Dams and barrages in Iraq

crops are irrigated and water flows throughout the country. The key difference between a dam and a barrage is the purpose for which it is created. A dam is built for water storage in a reservoir, raising the water level significantly. A barrage is used primarily for irrigation, raising the water only a few feet, and for diverting water. Barrages are usually built on flat terrain across meandering rivers.[70] Barrages are often referred to as dams, but their definition points to different reasons why they might be attacked.

The Mosul Dam, the largest in Iraq, was a key strategic target once ISIL captured the city of Mosul. Located about 50 kilometers north of Mosul, the dam controls the water and power supply to most of Iraq. Its generators can produce 1,010 megawatts of electricity. Behind the dam is over 12 billion cubic meters of water. Capturing the dam offers both a threat and a means to generate more cash through controlling a critical infrastructure.

The Mosul Dam, while ISIL's largest water infrastructure target, is not its first attempt to use water infrastructure to its advantage. The Fallujah Barrage is located about five kilometers south of Fallujah in the Nuaimiya area of Anbar Province. In February 2014, ISIL took control of the dam and fortified it with

concrete blast walls and sand bags. The barrage allows ISIL to flood certain areas, impede Iraqi security force movement, and control the flow of water to other areas of Iraq. Reduction in water levels in the Euphrates River has also led to shortages of electricity in towns south of Baghdad. Government officials have warned about the negative effect on agriculture production if irrigation water is cut off.[71]
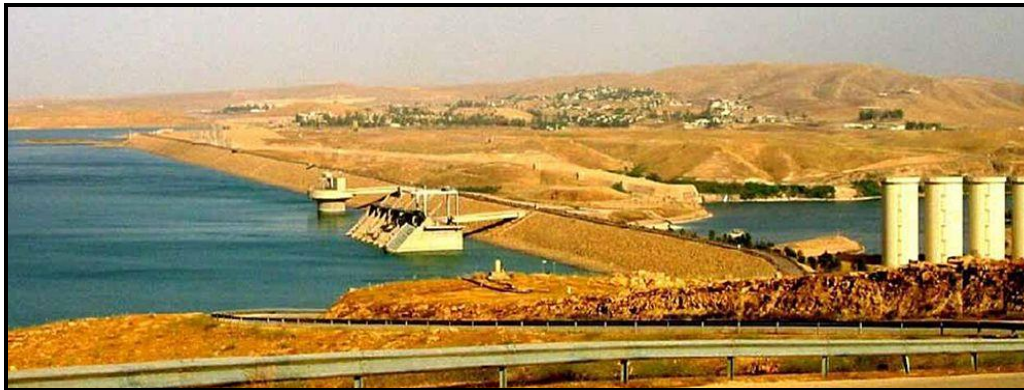

Figure 18. Mosul Dam

In April 2014, ISIL began using the Fallujah Barrage to shape the battle in its favor. The Ministry of Water Resource announced that ISIL gunmen closed eight of the ten gates of the Fallujah Barrage on the banks of the Euphrates River, effectively shutting off the supply of water into the southern Iraqi provinces.[72] Closing the gates also caused flooding upstream and forced the evacuation of families. By 10 April 2014, ISIL re-opened five of the barrage's gates, fearing the flooding in its own stronghold in Fallujah.[73]

Rivers and Gunboats

Captured Iraqi gunboats are a useful tool for ISIL in attacking river cities. Dhuluiya, lying 75 kilometers north of Baghdad on the Tigris River, is key to ISIL's plan to capture Baghdad. It has changed hands numerous times over the recent past as ISIL has had some success with local Sunni tribal leaders who are suspicious of the Shia-led government in Baghdad.[74]

ISIL attacked the town of Dhuluiya on July 31, 2014 using a combination of

Figure 19. Map of Dhuluiya

gunboats and VBIEDS. The assault on Dhuluiya began at dawn and lasted for two hours before ISIL was pushed back by Iraqi security forces.[75] The gunships, acting as enabling elements, provided fixed Iraqi security elements while two VBIEDs and other assault elements attacked Iraqi security elements in the city.
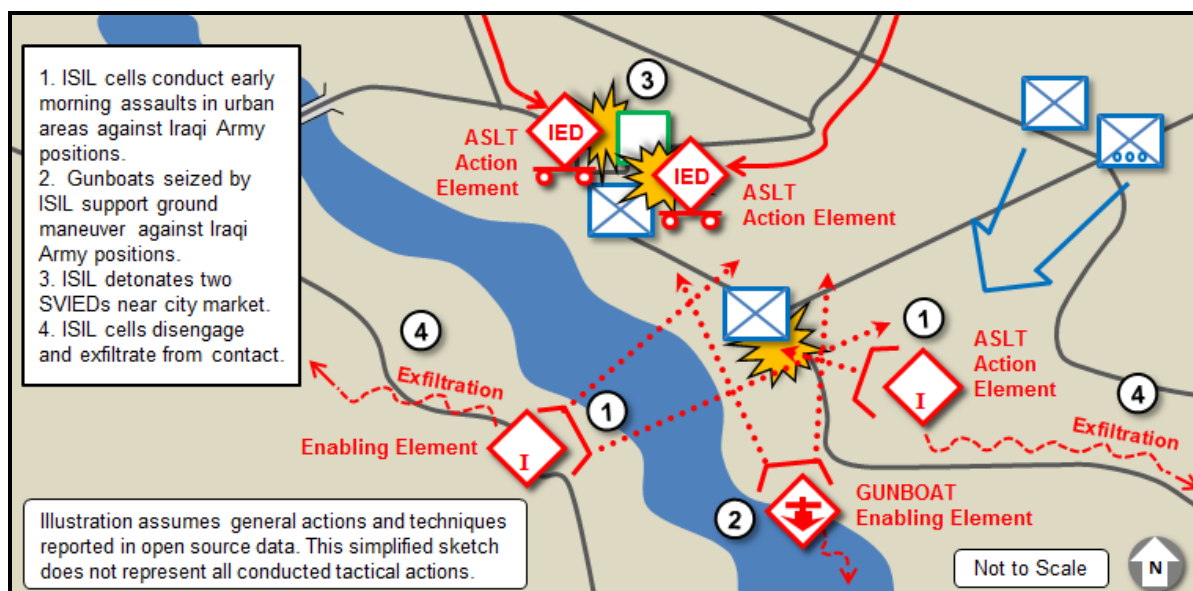

Figure 20. Dhuluiya gunboat attack

Unmanned Aerial Vehicles (UAV)

In the recent Raqqa Governorate fighting, ISIL added a new reconnaissance capability to its fighting by employing UAVs. A recent ISIL video, meant for propaganda, shows that it is capable of and interested in using technology to gain an advantage. The released video shows a reconnaissance flight over the Tabqa airbase prior to a successful attack on that base.

Figure 21. UAV flight over Syrian airbase

The Phantom FC40 Quad Copter, believed to be used by ISIL, can be purchased commercially for about $500. The UAV has an attached smart camera that supports 720p/30fps HD video. It can be controlled through an iOS or Android app running over a 2.4G Wi-Fi connection. While the video is useful, the capabilities of the quad copter do not allow it to see from long distances in real time. Even with its limitations, the video retrieved from the quad copter gave ISIL a view of the area it was attacking it would not otherwise have had.[76]

Figure 22. Phantom FC40 Quad Copter

Section 3: ISIL Weapons and Equipment

Successes in occupying Syrian and Iraqi military bases and facilities have given ISIL access to a large inventory of military weapons and equipment. The inventory includes tactical equipment, small arms and light weapons, light tactical and utility vehicles, heavy machine/anti-aircraft guns, artillery, and armored vehicles.[77] This is alarming in the short term, however, it is yet to be seen if ISIL can properly maintain the equipment and weapons and obtain spare parts and ammunition. Training in proper use is also a critical unknown. Additionally, a tank may be intimidating in a city, but it also offers a larger target. These considerations do not completely eliminate the serious nature of an organization such as ISIL obtaining a large arsenal of sophisticated military weapons and equipment, but may minimize some of the danger over time. *Despite the large amount of heavy and medium equipment, ISIL relies on light and fast methods of movement and attack. Speed and agility have been its main force multiplier in combat.*[78]

The following table is representative but not inclusive of weapons and equipment captured or acquired by ISIL:[79]

ISIL WEAPONS AND EQUIPMENT			
Armored Equipment	**Artillery**	**AT Weapons**	**Anti-Air Systems**
T-55	M198 Howitzer (limited)[80]	M79 Osa Rocket Launcher	ZU-23-2 Anti-Aircraft Gun
T-72	Type 59-1 Field Gun	RPG-7	SA-16 MANPADS
T-62	BM-21 MRLs	RPG-29	SA-7 MANPADS
BMP-1 (primarily used as VBIEDs)[81]	SCUD Missile (propaganda—not functional)[82]	M79	FN-6 MANPADS
HMMWV		Kornet	
MRAP		HJ-8	
		DShK Machine Gun	

Section 4: ISIL Organization

ISIL has grown from a small terrorist organization founded by the late Abu Musab al Zarqawi to an organization that gives the outward appearance of an organized state spanning northern Syria and Iraq. After declaring a new caliphate named the Islamic State, Abu Bakr al Baghdadi announced his new role as caliphate. Emerging captured documents are giving a clearer picture of ISIL's organization.

Governance

Al Baghdadi governs through a network of subordinate leaders. These leaders conduct much of the day-to-day management of affairs. A Leadership Council consists of trusted advisors with direct access to him and tasked with handling religious contentions and policies, executions, and other issues of doctrine and governance. A cabinet manages departments such as finance, recruitment and transport of fighters, prisoners, media, etc. ISIL also has an organized hierarchy of provincial and local leaders that handle the heavy lifting on the ground. Once a city is taken over, ISIL leaders seek to keep services working while strictly and violently enforcing adherence to ISIL's vision of an Islamic state.[83] There is a definitive difference between delivering effective governance and public services and the life of a fighting jihadi. ISIL's ability to maintain a restrictive government, deliver needed services, and keep the peace will be tested over time.

ISIL's governance strategy depends largely on intimidation and fear. In Mosul, for example, ISIL has constructed an organization that incorporates legislative, judicial, and executive/enforcement responsibilities. At the heart of governance is enforcement of strict obedience to the religious rules. Security organizations include the relatively mundane traffic police and tax collectors. The Islamic moral police, Hisba, is more feared and intrusive as it enforces strict adherence to religious law. This elite security committee gathers intelligence and enforces observance of prayer times, bans on smoking and t-shirts with English writing, and veils on women and girls, among other things.[84] Governance overreach will make the areas under ISIL's occupation more difficult to manage and encourage more restrictive and violent responses by local ISIL leaders.

Financing

ISIL is arguably the wealthiest terrorist organization, having developed revenues from a number of sources. Its capture of oil-rich areas has allowed ISIL to create steady revenue streams.[85] Revenue estimates of the dozen or so oil fields and refineries under its control in Iraq and Syria are as much as $1 million to $2 million a day. One of the first targets for occupation when ISIL invaded Mosul was banks where millions of dollars were taken. Coupled with confiscation of properties of internally displaced people leaving areas of occupation and extortion of businesses and individuals, ISIL is able to keep fairly large payrolls and services functioning.[86]

The shift from an invading force to an occupying force has brought the inevitable need to provide services and manage an economy. The age-old problem of rebels not making the best administrators is now staring ISIL in the face. Two challenges facing ISIL are a poor economic foundation and harsh and restrictive policies that increase volatility. Main funding sources include oil, gas, extortion, phosphate and sulfuric acids, cement, wheat and barley, ransoms, and donations. Oil, by a factor of two over the next source of income, is the largest revenue generator for ISIL. Other sources of income include redistribution of property, either confiscated or acquired from those who fled their homes, and taxes. Bank accounts carry a 5% income tax and withdrawal limits.[87] Taxes are often collected daily. Butchers, for example, pay around $4 a day to enter slaughterhouses to buy cattle and sheep. Shop rents are paid directly to ISIL.[88]

ISIL-occupied areas are subject to increasing economic volatility. Access to such basic needs as food, energy, and water are more difficult. The costs of these basic needs are increasing, even as food subsidy programs are being dismantled. Due to the reduction in public services and public projects, unemployment is increasing. The much-touted ISIL currency will be unsustainable over time. While initially metal-backed, the government will likely risk inflation by printing currency in order to fund projects for which it does not have cash on hand. This, coupled with increasing shortages, will cut significantly into the purchasing power of Iraqis and Syrians.[89] Economic volatility has caused the displacement of over two million Iraqis and countless numbers of Syrians. This continuing volatility, particularly as airstrikes continue to destroy and disable economic infrastructure, will affect ISIL's ability to control a large population remaining in its occupied areas.

ISIL-created institutions such as schools, law enforcement, media, and public works demand financing and budgeting prioritization decisions.[90] Documents found from operations in Syria's oil-rich Deir Ezzor province shed some light on the workings of ISIL's funding. The documents cover 23 December 2014 through 22 January 2015. Of interest is how more than $8 million in revenue was both acquired and spent. Nearly 45% of the revenues came from what ISIL calls "confiscation." Missing prayers three times in a row, for example, might result in confiscation or loss of a person's business. Another example of confiscation is ISIL officials and strongmen taking anything of value carried by a person as a penalty for transporting illegal goods, such as cigarettes.[91]

A source of initial ISIL wealth came from the one-time plundering of banks, but expectations pointed to oil revenues as a source of long-term revenue generation. Deir Ezzor province is the location of some of the richest oil resources in the region; however, ISIL may not be generating as much wealth as originally estimated. Some early unconfirmed estimates put oil production in Syria at 44,000 barrels daily, netting around $4 million a day for the ISIL coffers. According to the documents referred to earlier, Deir Ezzor is

currently only producing about $66,433 a day in revenue. One source stated that the Deir Ezzor oilfields peaked in the 1990s and require capital investment, manpower, and expertise that is beyond ISIL's current capacity in order to improve production yields.[92]

While ISIL revenues are significant, how it spends that money may also point to long-term problems and challenges. A large percentage of its budget in Deir Ezzor goes to security and local enforcement of rules and regulations. About 63% of the $8 million went toward supporting the military with salaries and other defense-related outlays. Another 10% was spent on law enforcement. A relatively meager $2 million was left over for social and public services, the healthcare system, etc. Brigham Young University professor, Quinn Mecham, has gone so far as to say that ISIL is very close to being a failed state, ranking it as the 16th most failed state.[93]

ISIL's claims to an Islamic nirvana will be challenged by the realities on the ground. Maintaining a balance between security, corruption, and other kinds of organizational excesses and providing public services will take skilled leaders who can bridge the complexities of rigid enforcement of rules, but with enough freedom not to stifle economic growth. Another critical part of the ISIL equation is the delicate relationship with Sunni tribal leaders. If tribal leaders do not see themselves benefiting from an ISIL caliphate, ISIL may see another "Sunni Awakening" where tribal leaders turn against it.

Military

ISIL has gained a reputation as a winning organization. This has attracted many to the cause. Estimates of how many fighters ISIL now has under its command in Iraq and Syria range from as low as 10,000 to a high of 31,500. The number of foreigners fighting for ISIL is estimated at up to 15,000. Countries represented include Canada, United States, Britain, Sweden, Germany, France, Morocco, Tunisia, Libya, Egypt, Sudan, Somalia, Pakistan, Afghanistan, Kazakhstan, Russia, China, Indonesia, and Australia. The majority of the ISIL fighters are from Muslim countries, but there is a disturbing trend toward Western country representation.[94]

The trend toward more foreign fighters arriving in Syria and Iraq is continuing with an increasing number of Westerners joining the fight. While the exact numbers of foreign fighters may not be known, it is certain that the conflict that began in Syria has caused the greatest mobilization of foreign fighters since the anti-Soviet jihad in Afghanistan in the 1980s.[95] The FBI is tracking close to 150 Americans who have traveled to Syria for a variety of reasons. The FBI believes over a dozen of these have joined ISIL.[96]

As ISIL stalls in Iraq, it is likely to look west from its stronghold in Raqqa province, Syria to make further geographic gains for the caliphate. With Jabhat al Nusrah (JN) gaining strength in Syria, ISIL will have to decide whether to fight JN or strike a devil's bargain for the sake of a common enemy. ISIL's more aggressive and violent view of how to prosecute the jihad and confidence in its successes points to clashes between the two organizations rather than accommodation. Without JN's pledge of fealty to al Baghdadi, the organizations will eventually begin to fight over the same ground.

International Expansion

Similar to an earlier al-Qaeda, ISIL is enjoying the fruits of its success in gaining affiliates in other countries.[97] On 16 February 2015, ISIL's Libya organization beheaded 21 Egyptian Christians. Following immediate airstrikes from the Egyptian air force, ISIL claimed responsibility for suicide bombings

claiming the lives of 45.[98] ISIL pamphlets have been seen in Afghanistan and Pakistan where it is competing with al-Qaeda for adherents.[99] Tehreek-i-Taliban (TTP), the Pakistani Taliban, fired its spokesman, Abu Omar Sheikh Maqbool, and five commanders after they pledged allegiance to ISIL's al Baghdadi.[100] ISIL's spokesman, Abu Muhammad al Adnani, called on supporters to attack from within their countries, thereby encouraging lone wolf attacks in America and Europe as well as against coalition partners.[101] At least one of the Paris Charlie Hebdo attackers pledged allegiance to ISIL in a video. In the video, Amedy Coulibaly stands in front of the ISIL flag and defends the forthcoming attacks as retribution for attacks on ISIL.[102]

ISIL has benefited significantly from early successes in Iraq and Syria. These successes have inspired a variety of international relationships ranging from tacit acceptance to active pledges of allegiance and active recruitment of international fighters. All of these relationships, projected along a continuum of support, add to the narrative that ISIL is creating a worldwide caliphate. Countries in which these organizations exist must consider two additional contributors to internal instability: first, increased violence and disruption from traditional terrorist organizations inspired by ISIL's success and, second, seasoned fighters returning from Iraq and Syria with new-found skills.

The following is a selection of countries where ISIL exercises direct or indirect influence. This is not intended to be a detailed exploration of ISIL operations in these countries; rather it is a sampling of how ISIL is affecting countries outside its base operations in Iraq and Syria. (See "The Islamic State as Icarus: A Critical Assessment of an Untenable Threat" for a chart detailing ISIL-affiliated organizations by region and level of support.)[103]

Algeria

Algerian-based Jund al-Khilafa fi Ard al-Jazaair, previously affiliated with AQIM, swore allegiance to ISIL in September 2014. Within days of its new relationship, Jund al-Khilafa kidnapped French mountain guide and photographer Hervé Gourdel near the village of Ait Ouabane on 21 September 2014. Jund al-Khilafa, adopting ISIL techniques, threatened to behead Gourdel if the French military did not publically announce cessation of air strikes against ISIL in Iraq within 24 hours. A published video documented Gourdel's beheading on 24 September 2015.[104]

Jund al-Khilafa has faded since the well-publicized murder of Gourdel. A month after being formally accepted into ISIL's caliphate, Algerian security forces killed Abdelmalek Gouri, the leader of Jund al-Khilafa. The group has not been able to muster a large number of fighters and, other than a message released on 9 March 2015, it has not had any real visibility.[105]

Libya

After months of a deteriorating political and security situation in Libya, ISIL-backed militant groups declared three provinces, known as wilayat, in Libya. Created in October 2014, Wilayat Barqa includes the Cyrenaica region in eastern Libya. Wilayat Tarabulus, established in December 2014, includes the wider Tripoli region and western Libya. Wilayat Fezzan, created in January 2015, includes the Fezzan area of central and southern Libya.[106]

In February 2015, ISIL affiliates took over parts of the city of Sirte, using it as a base from which to launch attacks into neighboring towns. Sirte became much more important with the loss of ISIL's stronghold in Derna on 12 June 2015.[107] ISIL lost control of Derna beginning on 9 June 2015 when

gunmen assassinated the Abu Salim Martyrs Brigade (ASMB) leader Nasser al-Aker. Following the assassination, the Mujahedeen Shura Council of Derna, an umbrella group controlled by ASMB, declared war on ISIL in Derna. This incident may be indicative of the challenge ISIL will face in trying to control populations outside of Syria and Iraq in the face of local opposition.[108]

Tunisia

Tunisia, the birthplace of the Arab Spring, is now facing a growing militant opposition even as it is trying to create a more open and democratic government. The Tunisian government believes more than 3,000 Tunisians—more than any other country—left their homeland to fight for ISIL in Syria, Iraq, and Libya. The prospect of experienced fighters returning to Tunisia is a grave concern for the country's leaders.[109] The government imposed a state of emergency on 4 July 2015.[110] In October 2015, the Tunisian Ministry of the Interior captured two SUVs at its southern border town, Remada, as they tried to cross into Tunisia from Libya with items marked with ISIL logos. Tunisian officials seized ten Kalashnikovs, RPG launchers, explosives, Libyan telephone cards, and documents.

The deteriorating security situation in Libya continues to plague and threaten Tunisia. Tunisian security officials believe there are around 800 Tunisians fighting for ISIL in Libya. Tunisian fighters run a training camp near the Libyan city of Shabrata, located close to the Tunisian border. The growing strength of ISIL in Libya, bolstered by Tunisian nationals in its ranks, increases the vulnerability of Tunisia to attacks conducted from Libyan safe areas.[111]

Egypt

ISIL has benefited from the restive Sinai peninsula where many fighters come from disenfranchised and neglected Bedouins in that area of Egypt. After al-Baghdadi's speech on 13 November 2014, the group Ansar Bayt al-Maqdis changed its name to Wilayat Sinai to reflect its geographic presence in the Sinai Peninsula.[112] Wilayat Sinai is an effective and improving organization, but one about which there is little known due, in part, to the remoteness of the area from which it operates. It is not believed to have more than a few hundred fighters, pointing to its ability to effectively plan and coordinate to maximize its effectiveness in attacks. Most Wilayat Sinai attacks target security forces in the northern part of the area in an attempt to create a zone where the group can operate freely without interference from national security forces.[113]

Wilayat Sinai is able to conduct complex simultaneous attacks such as the ones that occurred on 1 July 2015. Eight hours of attacks, focused primarily on the city of Sheikh Zuweid, left dozens dead and more wounded. The attacks included ground assaults on Egyptian military positions and three assaults against security checkpoints by suicide bombers. Egyptian ground troops required F-16 fighter jet support to turn back the attackers. Wilayat Sinai claimed responsibility for the Sheikh Zuweid attack, stating the group had used RPGs, mortars, guided missiles, and even air defense weapons during its offensive.[114]

Saudi Arabia

Due to Saudi Arabia's geographic possession of Islam's holiest sites, ISIL sees it as a significant target. According to the Soufan Group, the second-largest number of foreign fighters and the most suicide bombers within the ISIL organization come from Saudi Arabia.[115] It is likely that ISIL has placed sleeper cells within the country, waiting for opportunities to attack even as the group is continually frustrated by the Saudi government's conscious and effective crackdown on insurgent activities.[116]

In November 2014, ISIL declared wilayats in Saudi Arabia and began conducting attacks. ISIL attacks included an unsuccessful plot to bomb the American embassy in Riyadh, drive-by shootings at police and security personnel, attacks on Shia mosques, and suicide bombings.[117] Wilayat Najd claimed responsibility for an attack on 22 May 2015 that killed 21 Shia Muslim worshippers and wounded 80 other worshippers inside a mosque in the al Qadeeh village. A month later, Wilayat Najd followed up this assault with a suicide attack against the Kuwaiti Shia Muslim mosque of Imam Sadiq. The attack killed 27 people and wounded 227 more.[118]

Yemen

Undoubtedly one of the most contested and violent countries, Yemen is embroiled in civil war involving Houthi rebels, al-Qaeda insurgents, Yemeni government forces, Iranian- and Saudi Arabian-supported proxies, and now ISIL-affiliated groups. Focusing attacks on Shia Houthi rebels, ISIL contributes significantly to the instability and confusion of the area as it also considers al-Qaeda, Iran, and Saudi Arabia to be enemies of its cause.[119] ISIL announced its organizational presence in Yemen in November 2014, which was quickly denounced by al-Qaeda. By March 2015, ISIL carried out its first suicide bombings in Yemen, targeting two Shia mosques in the capital of Sana'a.[120]

Afghanistan and Pakistan

Khorasan is the ISIL-proclaimed administrative wilayat that includes Afghanistan and Pakistan. ISIL has gained a foothold in eastern Afghanistan. It gained control of at least seven districts in southeastern Nangarhar province in June 2015, but Taliban counteroffensives over the next several months rolled back ISIL's gains. As of October 2015, ISIL maintained a safe haven in Achin district and continues to contest the Taliban for control of several surrounding districts. Although not without resistance, in areas where it has a presence, ISIL has had some success in establishing sharia courts and prisons, taxing locals, and executing and punishing those resisting. This has driven many locals to flee the area to escape ISIL abuses. [121]

Uzbekistan

In August 2015, the Islamic Movement of Uzbekistan (IMU) leader, Usman Ghazi, swore allegiance to ISIL and announced that the group should be considered part of Wilayat Khorasan.[122]

North Caucasus

Leaving behind questions about whether they would remain autonomous or throw their support behind ISIL, militant Caucasus leaders posted an audio message on YouTube in June 2015 proclaiming that the mujahideen of Dagestan, Chechnya, Ingushetia, and Kabardino-Balkaria would affiliate with ISIL. On 23 June 2015, ISIL spokesman Mohammed al Adnani released an audio message accepting the allegiance of the North Caucasus militant leaders. ISIL designated the region as Wilayat Qawqaz and appointed Dagestani Rustam Aselderov, also known as Abu Mukhammad Kadarsky, as its leader.[123]

 The North Caucasus contributed significantly to ISIL's fight even before area leaders gave an official pledge of support. Over 20 years of armed conflict in the region, beginning with Russia's fight with Chechen rebels in 1994, fueled both an Islamist insurgency and a pursuit of vengeance aimed at the Russian government. At least some of the 2,000 to 3,000 Chechen diaspora in Europe that are believed to have moved to Syria in support of jihad are fighting for ISIL. The red-bearded military commander of

ISIL fighters in Syria, Abu Omar al Shishani, is a Georgian citizen who identifies with the Chechen cause.[124]

Nigeria

In March 2015, Boko Haram's leader Abubakar Shekau posted an audio message to the group's Twitter account pledging allegiance to ISIL.[125] ISIL spokesman Abu Mohammad al Adnani validated the acceptance of the pledge and described it as an expansion of the caliphate to West Africa.[126] Influence from ISIL can be seen in an improved and increasing Boko Haram social media presence. The newly-formed relationship with ISIL will open up new opportunities for acquisition of and training on new weapon systems and improved tactics in response to an intensified Nigerian military counterinsurgency. Improvement in the use of air defense weapons will be particularly challenging for the Nigerian Air Force's current air superiority. (For a more detailed treatment of ISIL's relationship with and operations in Nigeria, see Threat Tactics Report: Boko Haram.)

Indonesia

The Indonesian government estimates there are at least 500 Indonesians fighting for ISIL in Iraq and Syria. These range from a policeman to students who were studying in Turkey, Yemen, Pakistan, and Egypt. ISIL supporters include members of several Darul Islam factions, the loosely-aligned coalition Mujahidin of Eastern Indonesia (Mujahidin Indonesia Timur, MIT), Abu Bakar Ba'asyir's Jamaah Anshorut Tauhid (JAT), and disaffected jihadis from other groups attracted to ISIL's militancy. Some of the fighters include followers of Oman Rachman, known as Aman Abdurrahman, a Salafi scholar and one of Indonesia's most influential promoters of ISIL.[127]

As the world's most populous Muslim-majority country, Indonesia has struggled with Islamic extremism, facing attacks mostly on Western targets such as the Bali bombings in 2002. A government crackdown on the most dangerous organizations limited recent attack targets to domestic security forces. With the rise of ISIL, this relative calm may deteriorate. A video invitation to Indonesians to join ISIL appeared in July 2014, resulting in pledges of allegiance by several relatively inactive extremist groups, college students, and religious leaders.[128] Indonesian security forces arrested three Uighurs traveling to Suluwesi in September 2014 to join the extremist group MIT for training and follow-on travel to Syria.[129] Indonesian police believe a failed chlorine bomb at a Jakarta mall in February 2015 was the work of ISIL adherents returning from Syria. In March 2015, anti-terror police arrested five men allegedly arranging for a group consisting primarily of women and children to enter ISIL-held areas of Syria.[130] In May 2015, Brunei security arrested an Indonesian traveling on an Indonesian airliner to Saudi Arabia with an IED in his carry-on baggage.[131] In August 2015, Indonesian police arrested three ISIL-inspired bomb makers planning an attack for 17 August during the 70th anniversary celebration of Indonesian independence.[132]

Philippines

In August 2014, two hardline Filipino Muslim groups, Bangsamoro Islamic Freedom Fighters (BIFF) and Abu Sayaf rebels, allied themselves with ISIL. BIFF spokesman Abu Misry Mama verified to an Agence France-Presse reporter that BIFF has an alliance with ISIL. The BIFF spokesman stated that the group had no plans to impose ISIL's radical form of Islam, referring to ISIL's beheadings, mass executions, taking child brides, etc. Mama also stated BIFF had not sent any fighters to support ISIL's operations in Iraq and Syria and the organization was not recruiting for ISIL. Another video, alleging support for ISIL by Abu

Sayaf senior leader Isnilo Hapilon, has also been posted. Philippine military spokesman LTC Ramon Zagala stated the videos were only propaganda.[133] Armed Forces of the Philippines chief of staff GEN Gregorio Pio Catapang Jr. maintained earlier this year that there is no intelligence that indicates an ISIL presence in the Philippines and that BIFF, Abu Sayaf, and privately-armed groups are not supported by ISIL.[134]

France

Following an al-Qaeda-inspired attack on the satirical magazine Charlie Hebdo in January 2015, eight ISIL-affiliated terrorists conducted coordinated attacks on civilians at outdoor restaurants, a concert hall, and a soccer stadium on Friday, 13 November 2015, with evidence that other targets had been planned. The attackers killed 132 people and injured hundreds more using rifles and bombs. At least nine participants died from suicide-bomb detonations or direct contact with French security forces and two are still believed at to be large. The attackers included Belgian, French, and Syrian citizens, suggesting home-grown radicalization and cross-border travel for trainers and planners.[135]

Implications

ISIL fits the definition of a hybrid threat, effectively using tactics and techniques in a manner similar to other threat actors. It is better funded than many groups the US has faced recently and has attracted a large number of recruits to its cause. ISIL's success so far is due to its ability to control large numbers of fighters, many of whom are recruited foreigners, against ineffective opponents. It is yet to be determined if ISIL will be able to capitalize on captured weapons and equipment over a longer term, which will require training, maintenance, and repair parts. ISIL's techniques continue to include heavy use of IEDs in various forms and a focus on suicide attacks, which achieve psychological effects on those being attacked. More refined social media strategies capitalizing on readily available technology have given ISIL the means to advertise its successes to potential recruits worldwide and to threaten its enemies through graphic images. While ISIL momentum has stalled in Iraq and Syria, it has inspired various degrees of allegiance internationally, which continues to contribute to its narrative of a worldwide caliphate.

Training should focus on tactics outlined in the Hybrid Threat doctrine described in the TC 7-100 series. These publications describe hybrid threats and summarize the manner in which such future threats may operationally organize to fight US forces. They also explain the strategy, operations, tactics, and organization of the Hybrid Threat that represents a composite of actual threat forces as an opposing force (OPFOR) for training exercises.

REAL-WORLD CONDITIONS APPLIED TO TRAINING

The TC 7-100 Hybrid Threat series and the Decisive Action Training Environment (DATE) provide training resources for applying real-world conditions to training. ISIL tactics and techniques are readily accessible through these resources as referenced throughout this report. ISIL uses the principles of offense and defense present in the TC 7-100 Hybrid Threat series when employing its fighters. The operational environment outlined in the DATE also provides an ISIL-inclusive framework.

Replication in Training

All three of ISIL's tactics graphically depicted in this report can be found in TC 7-100.2, *Opposing Force Tactics*.

TC 7-100.2 Tactics	
Dispersed Attack	3-74. Dispersed attack is the primary manner in which the OPFOR conducts offensive action when threatened by a superior enemy and/or when unable to mass or provide integrated C2 to an attack. This is not to say that the dispersed attack cannot or should not be used against peer forces, but as a rule integrated attack will more completely attain objectives in such situations. Dispersed attack relies on INFOWAR and dispersion of forces to permit the OPFOR to conduct tactical offensive actions while overmatched by precision standoff weapons and imagery and signals sensors. The dispersed attack is continuous and comes from multiple directions. It employs multiple means working together in a very interdependent way. The attack can be dispersed in time as well as space.
Integrated Attack	3-64. *Integrated attack* is an offensive action where the OPFOR seeks military decision by destroying the enemy's will and/or ability to continue fighting through the application of combined arms effects. Integrated attack is often employed when the OPFOR enjoys overmatch with respect to its opponent and is able to bring all elements of offensive combat power to bear. It may also be employed against a more sophisticated and capable opponent, if the appropriate window of opportunity is created or available.
Area Defense	4-85. In situations where the OPFOR must deny key areas (or the access to them) or where it is overmatched, it may conduct a tactical area defense. Area defense is designed to achieve a decision in one of two ways: - By forcing the enemy's offensive operations to culminate before he can achieve his objectives. - By denying the enemy his objectives while preserving combat power until decision can be achieved through strategic operations or operational mission accomplishment.

Table 1. Excerpts from TC 7-100.2, Opposing Force Tactics

Care should be taken not to adopt a precise replication of ISIL tactics for all decisive action training events. Significant capability gaps exist that would leave a number of typical mission essential tasks unchallenged.

ISIL does not have the full capabilities of hybrid threat. ISIL is a capable *insurgent paramilitary* force that demonstrates a degree of tactical coordination and line of effort intent, but, as of this writing, lacks the collective ability for consistent combined arms maneuver and decisive operations. ISIL has demonstrated an "organized use of subversion and violence to seize, nullify, or challenge political control of a region" and employed "forces or groups distinct from the regular armed forces of any country, but resembling them in organization, equipment, training, or mission" (JP 1-02). However, gains in occupying critical infrastructure, terrain, and controlling local populations appear temporal based on the example of ISIL's inability to protect and retain control of the Mosul Dam. ISIL also has no

association or affiliation with a regular military force as it conducts tactical actions in the trans-border Syria and Iraq region.

Significant gaps in ISIL combat power capabilities are most evident in an absence of integrated fires command and control, and the types of weapons systems to be coordinated in a focused combat power manner. Although ISIL social media displays armored vehicles, artillery pieces, and other associated equipment captured from state forces, there is not yet evidence of fully integrated cannon, gun, multiple rocket launcher, and surface-to-surface missile capability by ISIL. The presence of ISIL short-range air defense in MANPADS can be assumed but has not been reported in open-source documentation during the Mosul Dam occupation.

Use of an ISIL replication for a mission rehearsal exercise (MRX) developed for a unit deploying into contact with ISIL is precisely appropriate. For decisive action training, care must be taken to ensure all training objectives are addressed by challenging conditions. For training objectives not covered by a single actor's capabilities, whether ISIL or some other group, use of the best practice composite models developed for the TC 7-100 Hybrid Threat series is required.

As DATE and Hybrid Threat Opposing Force are composite models synergized from real-world actors and actions, ISIL's capabilities can be found throughout these products. The following table assists the exercise planner with the locations of key elements in these products of the actions and techniques described in this report.

Real-World Condition	Comparable Condition in DATE	Page(s) in DATE	Relevant Information in Threat Doctrine	Manual and Page(s)
Insurgents capture an airbase	South Atropian People's Army attacks Rimzi Airbase	DATE 2.2, 2B-2-8 DATE 2.2, 1-I-18	Offense operations	TC 7-100.2, Opposing Force Tactics, p 3-1
Insurgents use river gunboats to attack a city	South Atropian People's Army attacks a city on the Kura River	DATE 2.2, 2B-7-2 DATE 2.2, 1-I-18	Offense operations	TC 7-100.2, Opposing Force Tactics, p 3-1
Insurgents capture a chemical cache	Coalition of small anti-government groups takes over a warehouse containing toxic industrial chemicals	DATE 2.2, 2C-2-22 DATE 2.2, 1-I-19	Offense operations	TC 7-100, Hybrid Threat, p 3-1
Insurgents defend takeover of a dam	Arianian Free-Will Movement defends an occupied dam against Arianian security forces	DATE 2.2, 1-I-17 DATE 2.2, 2A-6-1	Defense operations	TC 7-100.2, Opposing Force Tactics, p 4-1

Related Products

Follow these links to view related products:

- Menagh Airbase Siege: Menagh, Syria, Red Diamond (September 2013)
- ISIL Attack on the Tabqa Airbase, Red Diamond (September 2014)
- ISIL's Use of Social Media, Red Diamond (July 2014)
- Decisive Action Training Environment (DATE) 2.2 (April 2014)
- TC 7-100 Series

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.

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

To see more products from TRISA-CTID, visit the Army Training Network (ATN) with CAC access: https://atn.army.mil/dsp_template.aspx?dpID=377.

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Figure 1. Dispersed attack on the city of Mosul. Source: The Institute for the Study of War; modified by ACE Threats Integration. 10 June 2014.

Figure 2. Integrated attack on the city of Ramadi. Source: ACE Threats Integration. 2015.

Figure 3. Area defense of the Mosul Dam. Source: ACE Threats Integration. 2014.

Figure 4. ISIL tunnel in Sinjar. Source: BBC News via YouTube. 25 November 2015.

Figure 5. Iraqi Defense Ministry has confirmed ISIL has MANPADs. Source: YouTube. 10 October 2014.

Figure 6. Truck-mounted ZU-23. Source: YouTube. 22 August 2013.

Figure 7. Images released by ISIL of an attack on an Iraqi helicopter. Source: YouTube. 11 October 2014.

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Figure 22. Phantom FC40 Quad Copter. Source: DJI. 2014.

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