AL- QAEDA IN IRAQ RESURGENT

THE BREAKING THE WALLS CAMPAIGN, PART I
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Al-Qaeda in Iraq is resurgent. Al-Qaeda in Iraq (AQI) reached its apex of territorial control and destructive capability in late 2006 and early 2007, before the Surge and the Awakening removed the organization from its safe havens in and around Baghdad. Subsequent operations pursued AQI northward through Diyala, Salah ad-Din, and Mosul, degrading the organization over the course of 2007-2008 such that only a fraction of its leaders, functional cells, and terroristic capabilities remained and were concentrated in Mosul. As of August 2013, AQI has regrouped, regained capabilities, and expanded into areas from which it was expelled during the Surge.

AQI in 2013 is an extremely vigorous, resilient, and capable organization that can operate from Basra to coastal Syria. This paper traces AQI’s revival in Iraq since July 2012, when the organization launched a year-long operation they named the “Breaking the Walls” campaign. This campaign consisted of a series of 24 major vehicle-borne improvised explosive device (VBIED) attacks and eight prison breaks that demonstrate the evolution of AQI’s military capability over that time (See Part 2 of this report, which describes these attacks in detail). VBIEDs had been the signature attack type of AQI from 2006-2008. Since May 2013, AQI has consistently exceeded the number of VBIED attacks per month that it conducted in June 2007, while sustaining operations in Syria as well.

The “Breaking the Walls” campaign ended on July 21, 2013, when al-Qaeda in Iraq successfully breached the prison at Abu Ghraib, leading to the escape of 500 or more prisoners, the majority of whom were detained during the Iraq War for terrorist activities. The United States has reacted by reaffirming the $10 million bounty placed on Abu Bakr al-Baghdadi, the leader of AQI, whom officials said was based in Syria in August 2013. Targeting AQI’s leader, however, will not be effective in halting the organization’s growth. AQI is no longer a small cadre based around a single leader, but rather an effective reconstituted military organization operating in Iraq and Syria.

The United States has also agreed to provide counter-terrorism support to the government of Iraq. As a senior State Department official said, the United States wants Iraq to “have the information to be able to map the network, to get at its financing, and to be very precise in its targeting, because Iraqi forces are under threat and they’re liable to make mistakes such as going at the threat in a symmetrical way, rounding up too many people, targeting the wrong person, which makes the whole problem worse.” Yet the AQI network has grown robust over the past fourteen months, and mapping the network and its finances may not suffice to halt its expansion.

A senior U.S. administration official noted the unexpected growth of AQI’s suicide bombing campaign. Briefing on August 15, 2013, he stated that “Over the last two years, we’ve had an average of about 5 to 10 suicide bombers a month, in 2011 and 2012…. We’ve seen over the last 90 days the suicide bomber numbers approach about 30 a month, and we still suspect most of those are coming in from Syria.”

AQI’s path to war was not abrupt, however. Violence began to escalate in June 2012 just before the start of the “Breaking the Walls” campaign. Casualty levels in Iraq have risen significantly over 2012-2013, caused primarily by AQI’s VBIED attacks. The overall violence level in Iraq in July 2013 was commensurate with wartime levels last observed in Iraq in April 2008. Total monthly fatalities at the end of July 2013 exceeded 1,000 for the first time since that date, according to the United Nations Assistance Mission – Iraq (UNAMI). AQI has been able to grow not only because of its safe-havens and recruiting grounds in Syria, but also because it has replenished its veteran manpower through prison breaks inside of Iraq. The “Breaking the Walls” campaign involved a total of eight complex attacks upon Iraqi prisons, two of which successfully freed hard-core veterans who had likely participated in AQI’s
signature VBIED network during the period 2006-2007. This study will focus upon AQI’s use of VBIEDs throughout the “Breaking the Walls” campaign as the principal indicator of AQI’s growing organizational and operational capacity inside Iraq, even if suicide bombers flow into the country from Syria.

A study of the success of the “Breaking the Walls” campaign elucidates the renewed capability of AQI’s military organization. VBIEDs require an extensive planning and logistical structure, and the VBIED waves witnessed in 2012-2013 showcase the development of a force-level planning effort within AQI’s military organization to orchestrate simultaneous attacks involving many cells. It is critical to estimate AQI’s combat power in order to assess the level of threat AQI represents to the Iraqi state and further to U.S. interests.

The “Breaking the Walls” campaign supported AQI’s expressed operational objectives to retake territory that it had formerly controlled and to establish governance in parts of Iraq and Syria. VBIEDs enhanced AQI’s overall operations by overwhelming Iraqi Security Forces and degrading popular confidence in their ability to protect the population. AQI accomplished its 2012-2013 goals sufficiently and announced a new 2013-2014 campaign named “The Soldiers’ Harvest,” on July 30, 2013.

Iraq Security Forces (ISF) and Shi’a militant groups have mobilized in response to AQI’s attacks. ISF has also mobilized on several occasions to address the predominantly Arab Sunni anti-government protest movement that has been active since December 2012. The ISF launched new operations into western Anbar, northern Diyala, and other provinces in May 2013 in pursuit of AQI. This operation, as well as the ISF’s “Revenge of the Martyrs” campaign in August 2013, may widen the gap between the Maliki government and Iraqi Sunni Arabs. The “Revenge of the Martyrs” campaign in particular also resulted in mass arrests.

The addition of alternate security measures in Baghdad, including the deployment of plain-clothed intelligence personnel and increased security patrols, likewise runs the risk of being counter-productive for Iraq’s security, should marginal security gains in Baghdad come at the price of insurgency outside the capital. These operations, furthermore, have limited potential to counter AQI because the ISF is not effectively pursuing the organization throughout its depth inside Iraq. For example, AQI in August 2013 projected VBIED operations from the southern Baghdad belts as effectively as from the northern belts, but only the former are contested by ISF.

The threat of insurgency has also increased because of the growing regional sectarian dynamic emanating from Syria; the longstanding political and economic grievances of Iraqi Sunni Arabs; the instances of violent confrontation between ISF and protesters in 2013; and the mobilization of Shi’a militias. These conditions have provided AQI with ample opportunity to exploit a principal vulnerability of the Maliki government, namely the perceived exclusion of the Sunni from the political process. Even though most Iraqi Sunni Arabs still vehemently reject AQI, the terrorist organization may be able to drive a wedge between the population and the state. They will succeed if they are able to counter Maliki’s majoritarian political strategy by producing new cleavages in the national government ahead of elections.
in 2014 and shatter popular confidence in the ISF, upon which Maliki has relied for his strong-man image since the Basra campaign in 2008.

General Ray Odierno, commander of U.S. Forces-Iraq described AQI’s goals in June 2010, when its capabilities were minimal. He noted, “al-Qaeda in Iraq... hasn’t changed. They want complete failure of the government in Iraq. They want to establish a caliphate in Iraq.”\(^{15}\) He continued, “Now, that’s a tall task for them now, as compared to maybe it was in 2005 or ‘06. But they still sustain that thought process. And it has nothing to do with the United States. You know, they continue to look around the world for safe havens and sanctuaries. And what they look for is ungoverned territories. And so what they want... is to form an ungoverned territory or at least pieces of ungoverned territory, inside of Iraq, that they can take advantage of.”\(^{16}\)

Control of territory in Iraq remains one of AQI’s goals in 2013, but AQI also seeks to govern in Syria as well.\(^{17}\) AQI declared itself the Islamic State in Iraq and al-Sham (ISIS) in April 2013, an expansion of its historical political identity now to include Syria. At a teaching tent in Aleppo, Syria during its Ramadan fair, ISIS displayed a map of its emirate with no border between Iraq and Syria as part of a wider al-Qaeda caliphate stretching from North Africa to the eastern frontier adjoining Iran.\(^{18}\)

AQI has been instrumental in the Syrian conflict. By studying known instances of SVBIED attacks in Syria, one sees AQI has operated there alongside the Syrian al-Qaeda affiliate Jabhat al-Nusra since at least December 2011.\(^{19}\) AQI had initially supported Jabhat al-Nusra by reversing the flow of fighters and resources that once streamed into Iraq from Syria.\(^{20}\)

The growth of the two franchises created competition. AQI declared in April 2013 that Jabhat al-Nusra was subordinate to the Islamic State of Iraq and Sham. Jabhat al-Nusra rejected AQI’s leadership, declaring fealty to al-Qaeda core directly.\(^{21}\) Al-Qaeda leader Ayman al-Zawahiri directed that the two affiliates operate in their separate geographic zones and put both organizations on probation as franchises.\(^{22}\) Al-Baghdadi at first flatly rejected this instruction and reinforced his single-organization vision. Since June 2013,\(^{23}\) the two organizations have apparently overcome their differences and often choose to cooperate tactically inside Syria. AQI’s military, governance, and social investment in Syria has increased since this time, most recently through a combined arms attack upon Minnakh airbase north of Aleppo,\(^{24}\) through an offensive in northern Latakia,\(^{25}\) and the sponsorship of a Ramadan social outreach program in Aleppo in August 2013.\(^{26}\)

AQI also drastically increased VBIED attacks in Iraq in 2013. As of August 2013, AQI’s new operation, “the Soldiers’ Harvest,” has increased the frequency and volume of VBIED waves and also incorporated spectacular attacks upon critical infrastructure, such as the Um Qasr port at Basra.\(^{27}\) AQI will also likely continue to target hardened ISF facilities with complex attacks involving VBIEDs now that it has tested its greatest complex operational ability. AQI’s success in Iraq at the expense of the ISF will add relative strength to the organization in Syria. AQI would then prosper in a deteriorating security environment that transcends state boundaries.\(^{28}\)

**BACKGROUND**

Characterizing the evolution of al-Qaeda in Iraq’s military capabilities requires an understanding of the state of play in Iraq after the withdrawal of U.S. forces in December 2011. Al-Qaeda in Iraq (AQI)’s operational capability had been degraded three years prior by Coalition Forces, Iraqi Security Forces, and local security elements known as “Sahwa” who took up arms to drive out al-Qaeda and prevent their return.\(^{29}\) In the spring of 2010, U.S. and Iraqi forces “either picked up or killed 34 out of the top 42 al-Qaeda in Iraq leaders, and by June of 2010 the organization had “lost connection with [al-Qaeda Senior Leadership] in Pakistan and Afghanistan.”\(^{30}\)

By 2011, AQI was still able to conduct attacks, but the organization was isolated, disrupted, and did not pose an existential threat to the state. From September 2010 to December 2011, monthly fatalities in Iraq stabilized in the 300-400 range, according to Iraq Body Count database, which provides historical data covering this time period.\(^{31}\) This range establishes a baseline for “normal” violence levels as reported from open sources, against which to compare observations of security conditions in post-war Iraq.

The resurgence of AQI followed two trends: first, the rise of internal, Iraqi Sunni political disenfranchisement after the departure of U.S. forces, and second, the escalation and radicalization of the Syrian conflict. Immediately after the withdrawal of U.S. Forces in
December 2011, Iraqi Prime Minister Nouri al-Maliki arrested and tortured the bodyguards of Sunni Vice President Tariq al-Hashemi on the grounds that he had supported terrorism. Hashemi ultimately fled the country and was sentenced to death in absentia. Violent activities rose following the departure of U.S. Forces-Iraq (USF-I) and the Hashemi arrest, although one cannot establish the causal relationships between these contemporary events.

Fatalities rose above 500 for the month of January 2012, with two attacks on January 5 and January 14 most likely responsible for the overall increase. These attacks involved multiple strikes, including many suicide attacks, upon Shi’a civilian targets in holy cities including Karbala, Nasiriya, and Kadhimiya, and also Sadr City and Basra during the Shi’a religious observance of Arbaeen. Other attacks documented in early 2012 include a large wave of explosions on February 23 that struck Baghdad, Basra, and Salah ad-Din. This wave primarily targeted Iraqi Police and government institutions, and it appeared to involve vehicle-borne improvised explosive devices (VBIEDs). AQI evidently had an enduring ability to coordinate spectacular attacks, including the use of VBIEDs, in the post-USF-I period.

The rise in attacks in Iraq paralleled attacks in Syria in ways that show the overall involvement of al-Qaeda (AQ) senior leadership with the reconstitution of AQI and its Syrian offshoot, Jabhat al-Nusra. VBIEDs detonated in Aleppo and Damascus in Syria on February 10 and 13, 2013. A newly announced al-Qaeda affiliate, Jabhat al-Nusra, claimed credit for these attacks in a formally produced video. This coincided with a landmark statement by al-Qaeda leader Ayman al-Zawahiri calling for Muslims in the region, specifically Iraq, Jordan, Turkey, and Lebanon, to support the Syrian opposition. AQI also launched a media campaign on February 24, 2012, just after its VBIED attacks inside Iraq. AQI announced a campaign to strike military headquarters on behalf of Sunni prisoners in Iraq during a 33-minute speech demonizing Shi’a Islam and the government of Iraq. This distinctly sectarian speech typifies AQI’s strategic voice and disposition in post-war Iraq before the campaign of attacks detailed in this report.

AQI also executed significant operations targeting Iraqi Security Forces (ISF) in early 2012. Most notably, AQI launched a sophisticated raid on ISF units in Haditha, Anbar on March 4, 2012. AQI assassinated two police commanders in their homes and seized a police checkpoint, killing 27 ISF personnel in total. AQI claimed credit for the Haditha attack and described the operation in detail in a message posted to jihadist forums shortly thereafter. AQI recorded the incident in a video illustrating how multiple AQI units surprised ISF by masquerading as Iraqi national police. AQI also launched a wave of 26 attacks across the country on March 20, likely to disrupt and discredit the Iraqi government before the Arab League Summit on March 27-29, 2012. AQI claimed credit for this wave of attacks as well.

Overall violence began to increase sharply in June 2012, at which point Agence France Press (AFP) began to track daily casualties in Iraq in detail. AFP casualty records identified June 13 and June 16 as high-casualty days coinciding with multiple bombings. The dataset of violent events that the author curated for this study documents an additional SVBIED on June 4, 2012, which targeted the offices of the Shi’a Endowment in Bab al-Muadham, Baghdad. AQI claimed credit for the attacks on June 4 and June 13. The June 4, 2012 event produced a massive number of casualties for a single attack, an estimated 215 (26 killed/190 wounded). This attack further demonstrates the capability and intent of AQI to deliver large-scale VBIEDs. Multiple VBIEDs incurring fewer casualties preceded this attack, and similar attacks continued into early July 2012.

AQI emir Abu Bakr al-Baghdadi announced on July 21, 2012 the start of what he called the “Breaking the Walls” campaign. “Breaking the Walls” began just after Ramadan, and three days after a failed assassination attempt against Bashar al-Assad that killed important members of his inner security circle.” In a recorded speech, Baghdadi described his intent to “target the pressure points of the Safavid project.” This message may be understood to target Maliki’s government, but AQI’s message at the start of the 2012-2013 campaign also reflected its broader intent to establish governance in Iraq and Syria.

* Open source reporting has not resolved the method of the attack, with Syrian state media asserting it was a suicide bomber and competing sources suggesting a remotely detonated IED or VBIED. Liwa al-Islam (LI) claimed the attack, and from subsequent events is a more likely perpetrator than the Free Syrian Army, which also claimed it. This paper does not presume to establish a correlation or causation between these events, but rather temporal proximity.
The simultaneous detonation of many VBIEDs against civilian targets in Iraq became an immediate hallmark of AQI’s “Breaking the Walls” campaign. This VBIED wave phenomenon had been typical for AQI during the height of the Iraq war, and it appears that AQI reconstituted this core competency well before July 2012. Based on the sheer volume of attacks at the start of the campaign, it also appears that the early VBIED waves were scheduled and planned well in advance. AQI likely capitalized upon veteran expertise achieved while fighting U.S. Forces during the Iraq War and Assad’s forces in the Syrian War to amplify lethal effects in 2012-2013, particularly through the utilization of VBIEDs.

U.S. officials described how, by August 2012, al-Qaeda inside of Syria had evolved from “disparate, disconnected units” and was “building a network of well-organized cells” that “are now communicating and sometimes cooperating on missions, with a command-and-control structure evolving to match more sophisticated operations in places like Iraq and Afghanistan.”50 The officials stated that “The units are spreading from city to city, with veterans of the Iraq insurgency employing their expertise in bomb-building to carry out more than two dozen attacks so far.”51 They estimated the number of fighters in Syria at a couple hundred.52 The level of organizational capacity indicated by this assessment sets the foundation for this study. AQI has re-emerged as a military force in Iraq and Syria, and it is critical to understand what capabilities the organization has regenerated in Iraq in order to assess the threat that AQI now presents to the region.

A Q I executed a wide array of attack types from July 2012 to July 2013 during the “Breaking the Walls” campaign. These attack types include small arms fire, indirect fire (IDF) via mortars and rocket-propelled grenades (RPG), improvised explosive devices (IED), suicide bombers (SVEST), vehicle-borne improvised explosive devices (VBIED), and a subset, suicide vehicle-borne improvised explosive devices (SVBIED). VBIEDs are the most complex attack type within this set, characterized by the rewiring of a vehicle into a traveling high-yield bomb rather than the placement of an explosive parcel within or outside of a vehicle.53 All of these attack types were used for combined arms effects during the July 2013 Abu Ghraib and Taji prison attacks, and all of them appeared in dispersed fashion across Iraq throughout the course of the previous year.

A blanket study of attacks in Iraq is difficult because violent events are habitually underreported. Attribution is another challenge, as AQI was not the only group conducting attacks in Iraq during this time period. Other groups operating in Iraq today include Ansar al-Islam, Shi’a militias, and very likely Jaysh Rijal al-Tariqah al-Naqshabandia (JRTN), a Ba’athist militant organization.54 All of these organizations are known to use small arms, IDF, and IEDs, and in some cases they are also suspected of suicide attacks and car-borne explosions.

Violent events in certain locales, furthermore, might be attributed to popular uprising rather than AQI.55 This becomes a legitimate consideration in light of the anti-government protest movement, which began in December 2012 after Prime Minister Nouri al-Maliki attempted to arrest Rafia al-Issawi, a leading Sunni national political figure. The protest movement continued at least through September 2013, when this report was published. As more violent actors take up arms in Iraq, attack patterns of established groups become obfuscated, as the groups begin to overlap and react to one another. Nevertheless, it is possible to isolate coherent attack signatures for AQI within the available data. This study will focus specifically upon one of AQI’s classic signatures, waves of vehicle-borne improvised improvised devices (VBIED). The VBIED waves of the “Breaking the Walls” campaign are identified and characterized in Part II of this report. Once attributed, these attacks may be used to evaluate AQI’s operational capacity, depth, and targeting strategy.

METHODOLOGY

Detecting AQI’s Signature

Estimating the combat power and organizational culture of secret organizations such as al-Qaeda in Iraq (AQI) may be approached through detailed analysis of the attacks they perpetrate. This study considers the violent events in Iraq that are documented in unclassified sources for what they indicate about AQI’s renewed organizational capacity. Closely examining the public record of violent events, particularly the use of “spectacular attacks” in Iraq in 2012-2013, enables us to draw conclusions about AQI’s broader operations.
Spotting VBIED Waves

VBIEDs constitute the most useful AQI fingerprint for several reasons. First, VBIEDs are generally the most lethal attack type, and therefore the most consistently reported publically. Second, VBIEDs are the most complex attack type, which best illustrates the full capacity of AQI’s supply chain. Third, VBIEDs have historically been assessed as AQI’s signature attack type.

Although it is likely that AQI bears sole responsibility for all VBIEDs in Iraq, it is worthwhile to challenge and reprove this assessment, particularly given that Ansar al-Islam, another Salafist group, claimed credit for SVBIED attacks in Iraq over the course of 2012. Although VBIED attacks are a core competency for AQI, other groups can adopt this technique, and therefore each VBIED attack by itself is only a moderate signal that AQI is responsible.

A stronger signal emerges in the detection of multiple coordinated VBIED attacks. AQI’s signature massing of VBIEDs over the course of the “Breaking the Walls” campaign will be referred to here as a “VBIED wave,” and defined for the purposes of this study as the detonation of six or more VBIEDs on a given day in Iraq. AQI has claimed credit for several such VBIED waves since the launch of the campaign, beginning with a wave of 30 VBIEDs that detonated on July 23, 2012, just two days after the announcement of the “Breaking the Walls” campaign.

This study will examine the “Breaking the Walls” campaign in detail, particularly the VBIED waves that characterize this campaign. These waves can be broken down for the purposes of analysis into four “Phases” of the campaign. These phases were not announced, but rather assessed by observing qualitative and quantitative differences in attack patterns over time. The VBIED waves across these phases will be evaluated for their geographic spread, target selection, overall volume, and lethality. The VBIED waves will be considered in the context of individual VBIEDs that occurred outside of the 24 VBIED waves as well as other explosive events, such as IEDs and SVSTS, in order to refine an overall characterization of their complementary use by AQI.

In order to estimate lethality, the volume of the VBIED waves will be compared to daily casualty records maintained by Agence France-Presse (AFP). AFP data provides a conservative and specific estimate for casualties, and as compared to other casualty data sets, represents a cautious minimum bound. The AFP dataset begins to provide daily casualty records from violent events in August 2012. Casualty insights prior to this date will be drawn from Iraq Body Count database, whose records begin in 2003. The principal data set for the violent events considered in this study is proprietary and derives solely from open sources, including National Iraqi News Agency, al Sumaria News, al Mada Press, All Iraq News Agency, and the online Iraq Body Count (IBC) database.

THE FIRST CAMPAIGN: “BREAKING THE WALLS”

The Architects of “Breaking the Walls”

Al-Qaeda in Iraq’s “Breaking the Walls” campaign began on July 21, 2012 and ended on July 23, 2013. During that time, AQI executed 24 VBIED waves that showcased the technical, logistical, and training capacity underlying AQI’s VBIED program. The enlistment of these functions to deliver synchronized VBIED waves across Iraq reveals the presence of a robust and specialized VBIED planning capability within AQI’s military organization. The style of execution of the VBIED waves demonstrates the growth of the VBIED organization in terms of its skilled leadership, its support to combined arms attacks, and its
ability over time to train small effective teams.

The following section will identify four phases of the “Breaking the Walls” campaign based upon the patterns and characteristics of the VBIED waves and prison attacks perpetrated by AQI between July 21, 2012 and July 23, 2013. The four phases demonstrate centralized planning and direction of VBIED waves; the growth of AQI’s VBIED capability; and the presence of multiple high-functioning VBIED cells in Iraq by the end of the campaign. The four phases constitute an assessment of AQI’s battle plan and adaptation during the “Breaking the Walls” campaign.

**PHASE I: Proof of Concept and Capability**

The first phase of “Breaking the Walls” began in July 2012 and ended in September 2012. This phase constituted AQI’s proof of concept and capability to execute repeated large-scale VBIED waves across Iraq. The VBIED waves on July 23, 2012 and September 9, 2012, involving 30 and 21 VBIEDs spread over a wide geographic area, were the largest and farthest spread among the waves across all four phases. They served, therefore, to demonstrate the depth and breadth of AQI’s ability to operate. They also indicate the presence of a VBIED construction facility and technical experts with the available materiel to generate many VBIEDs. Furthermore, they indicate the level of command and control already in place within AQI’s VBIED apparatus, as the orchestration of so many VBIEDs on one day required effective communication to a very large team. It also required a plan. In this case, the plan arrayed attacks deliberately by province so that the whole of northern Iraq and Baghdad would feel the effects.

The two large VBIED waves, as well as several smaller waves and clusters of attacks between them, generally oriented on the northeastern front with a heavy density in Kirkuk City. Because the targeting strategy varied
between civilian, military, and government targets, this geographic orientation does not necessarily evidence a clear operational intent. Rather, it may serve to illustrate the physical point of origin of the early VBIED campaign, assessed to have been more centralized then than it is now, particularly in terms of VBIED construction. Phase I constituted an impressive show of force, but not yet exceptionally focused operational planning. This contrasts with patterns observed in later phases.

The early waves of the “Breaking the Walls” campaign involved a large fighting force in addition to the explosive attacks. Very few of the early VBIEDs were documented as suicide attacks, which suggests that the drivers of the attack vehicles required an exit strategy. Drivers were likely deployed as part of teams to spot targets and aid in recovery. A wave of 30 VBIEDs, like that witnessed on September 9, 2012, therefore involved potentially many times more fighters, in addition to a vast VBIED construction apparatus and organizational leadership. This observation points immediately to a critical requirement for command and control that was successfully fulfilled at the beginning of the “Breaking the Walls” campaign. It also points to sophisticated campaign planning, which deliberately shifted operational objectives from the beginning to the end of the “Breaking the Walls” campaign.

The geography of the early attacks was also widespread, stretching from Basra in the south to Mosul in the north (see Part II for further details). This raises the question of whether the original fighting force was gathered together and then dispersed for attacks; or engaged remotely at various locations with guidance to synchronize attacks on a given day. The initial wide spread of attacks may lend to the impression that localized teams were established early on in the campaign, but rigor must be applied to this idea. The requirement to generate 30 VBIEDs and to prepare a deployable force for a specific mission with targeting guidance, training, and ready-made VBIEDs would take much time, but these early waves involved long periods of time in between attacks to “reset,” commensurate with these constraints. It is instead plausible that the greatest
initial constraint for the VBIED organization was technical expertise, and this expertise, if limited to few persons, would suggest centralized VBIED planning, construction, and training.

In addition to VBIED waves, Phase I also incorporated four prison attacks against the Baghdad Counterterrorism Directorate; a police headquarters detaining 10 AQI personnel in Hibhib, Diyala; the Taji Tasfirat prison, which was subsequently struck several times; and the Tikrit Tasfirat prison. The attack against the Tikrit Tasfirat prison on September 27, 2012 in particular involved VBIEDs among other capabilities, including mortars, SVESTS, and small arms. This highly successful complex attack, which would have been planned from an echelon above the smaller VBIED cell organizations, secured the escape of 100 prisoners, 47 of whom were reportedly AQI affiliates on death row. Apparent from a break in attacks is that AQI engaged in a “strategic pause” after this prison break in order to absorb new human networks into its organization.

PHASE II: The Green Line

Phase II began in November 2012 and ended in February 2013. It began with an operational pause in VBIED and prison activity. This may be explained by several conditions: first and foremost, AQI received into its ranks the fugitives of the Tikrit Tasfirat prison, which likely required reorganization and restructuring within AQI. The marked increase in VBIED activity observed in later waves depended upon a rise in human capacity, suggesting that this event triggered new organizational growth within AQI’s military. It may also have produced a shift in the leadership of AQI’s VBIED operation, which assumed a distinctly different character in the later Phase III. The pause in VBIED activity may also indicate a defensive requirement to protect against ISF counter-terrorism efforts in the wake of the prison break. Nevertheless, as the month of October 2012 coincided with Eid al-Adha, AQI still managed to conduct significant attacks, including small, clustered VBIED activity on October 15, 2012 and October 27, 2012. Sadr City was struck more than any other location.
in these two clusters in conjunction with the religious holiday (see Part II for more detail).

Phase II focused many attacks upon civilian and government targets along the Green Line separating Iraqi Kurdistan from the rest of Iraq, coinciding with an escalation in tension between the Government of Iraq and Iraqi Kurds. This tension ignited over the establishment on October 31, 2012 of the Tigris Operations Command, encompassing Salah ad-Din, Kirkuk, and Diyala provinces and placing ISF in close proximity to Kurdish territories.61 Kurdish response was uncompromising. Anwar Haji, the Undersecretary of the Kurdistan Peshmerga Ministry, stated on November 6 that the Iraqi Army would not be allowed to enter Kurdish territories.62 Shortly afterwards, on November 8, the Kurdistan parliament rejected Maliki’s decision to create the Tigris Operations Command.63 Phase II of AQI’s “Breaking the Walls” was accordingly oriented on Kirkuk, reflecting a deliberate targeting strategy to exploit a critical vulnerability of the Iraqi government.

This targeting strategy was not manifest to the same extent as in those attacks observed in Phase I. The waves in Phase II were significantly smaller, closer together in time, and in many cases involved well-chosen individual targets such as Kurdish political facilities. Phase II therefore demonstrated tighter operational focus, but also more importantly a temporary reduction in the overall scale of the VBIED activity. It is possible that this decrease was the result of a fundamental resource limitation; however, there are also indicators that AQI’s VBIED activity was reorganized during this period. Namely, Phase II demonstrates a pattern of smaller waves of VBIED attacks that begins to suggest the presence of independent VBIED cells that had not been clearly visible during Phase I.

Examining closely the clusters of VBIED attacks that occurred during this period, significant groupings of attacks below the “wave” threshold occurred on January 16 and 17, 2013. On January 16, three VBIEDs clustered in Kirkuk and Tuz Khurmatu struck facilities associated with the KDP and PUK, yielding very high casualties. These attacks may reasonably be attributed to one cell operating with the intent to exploit ethnic tension. On January 17, four VBIEDs struck in Karbala and Hilla in southern Iraq, targeting Shi’a civilians. These attacks may also be attributed to a single cell, and very likely a different one, intent on this mission to exploit sectarian tension. The signatures of these two attack clusters point to two different cells on account of the near simultaneity, geographic disparity, and divergent target selection of the two VBIED clusters. These cells appear capable of conducting multiple simultaneous VBIED attacks in close proximity without guidance to coordinate attacks with adjacent cells.

The tight control evidenced by these small attack clusters points to the self-contained capability of a VBIED cell by January 2013. Based on the presence of VBIED waves indicative of coordination across multiple teams in addition to individual VBIED clusters after this date, it appears that a VBIED cell may at times determine its own mission and acquire VBIEDs without assignment, which would suggest that the VBIED construction sites are also forward deployed by this time. This represents a key growth step in AQI’s evolution during the “Breaking the Walls” campaign. The combined occurrence of independent VBIED cell activity and synchronized attacks across many cells would come to typify later phases. It does not follow that VBIED construction teams are necessarily part of VBIED cells, but construction sites and their logistics require some form of protection that VBIED cell personnel may assist with providing. If instead VBIED cells have no role in this site protection mission, protection must instead be assigned to other AQI elements, such as local security battalions, because protection of these sites is an operational requirement.

Moreover, the leadership that had been in place to plan elaborate VBIED waves during Phase I apparently paused, particularly in January 2013, when no VBIED waves occurred that exceeded five VBIEDs on one day. The leadership’s planning re-emerged profoundly during Phase III, which underscores the assessment that Phase II signifies a transformation period of the VBIED force at the leader level. This transformation might also have involved the manning, training, and deployment of additional VBIED cells, given that the overall volume and frequency of coordinated VBIED waves subsequently increased.

VBIED attack waves occurred on November 14, November 27, November 29, and December 17, 2012. These waves occurred in quick succession, were relatively few in number, and consequently incurred fewer overall casualties than the attacks in Phase I. In fact, the four VBIED waves in Phase II cumulatively amounted to roughly the same number of VBIEDs witnessed within one wave on July 23 or September 9. The ability to synchronize attacks in more rapid fashion,
and in particular to reset for repeatable attacks upon Kirkuk, appeared to be the focus of continued Phase II VBIED wave activity while the rest of the VBIED force reorganized. Phase II also concluded with a pair of prison attacks, including a second attempt at Taji base.

**PHASE III: The Baghdad Campaign**

Phase III began in February 2013 and ended in May 2013. Phase III shifted the nation-wide VBIED campaign to Baghdad with large VBIED waves striking at a steady tempo of 30 day intervals. This geographical change and stabilized rate of attacks demonstrate the return of the VBIED planning cell, not only to coordinate highly sophisticated VBIED waves, but also now to direct action elements to mass upon a particular objective. Furthermore, some of the Baghdad waves in Phase III include as many as 20 VBIEDs in Baghdad on a given day, suggesting the requirement for three cells to deliver the observed attack volume, and perhaps more in a surge capacity. This high concentration of localized attacks over several months also suggests the presence of multiple VBIED construction sites on the outskirts of Baghdad.

A preceding mini-wave on January 22, which consisted of three VBIEDs in Taji, Mahmudiyah, and Shula, may support placing two such cells in the belts around Baghdad. If so, the first projected force from Taji or Tarmiyah in the northern Baghdad belts, and the second projected from Mahmudiyah in the southern belts. The likely location of the third cell does not, however, emerge from the data. Historical support zones for AQI would suggest that Jisr Diyala and Arab Jabour southeast of Baghdad are possible candidates.

The attack patterns in Phase III also point to complementary geographic clusters within the attack data. Strike patterns within the main VBIED waves outline three distinct attack zones within Baghdad: one to the north, one to the southeast, and one to the southwest within the city. This pattern validates the assessment of three separate VBIED cells operating in the Baghdad vicinity at this time. To strike similar targets at regular intervals four months in a row suggests that AQI enjoyed
incredible freedom of maneuver at this time, which points to the Baghdad belts as the optimal environment from which to launch attacks upon Baghdad.

There was no operational pause after Phase II, likely because Phase II functioned in many ways as a strategic pause in VBIED planning. Phase III appeared to capitalize upon the launch of the anti-government protest movement on December 26, 2012 and the first violent clash between ISF and protesters near Fallujah on January 23, 2013. Phase III applied maximum pressure to ISF in Baghdad by targeting Shi’a communities in an apparent effort to demonstrate ISF’s incapacity, and thereby to stoke the resurgence of Shi’a militias. Such an environment of uncontrolled violence has the potential to threaten the integrity of state security in Iraq, which translates directly to strategic gains for AQI in its declared pursuit of a caliphate. The VBIED wave on February 17, 2013 demonstrated the full shift of the national VBIED campaign to Baghdad, a trend that lasted until the end of May 2013. By the end of May 2013, Shi’a militias were once again actively engaged in violence in Baghdad.65

**PHASE IV: The AQI Surge**

After May 15, 2013, the VBIED campaign quadrupled in frequency and remained focused upon Shi’a targets in Baghdad. Nearly half of the VBIED waves documented in this study occurred during this last quarter of the campaign. Four additional observations serve to explain AQI’s acceleration.

**Declaring the Islamic State of Iraq and Sham**

The Syrian provincial capital of al-Raqqa fell to the opposition on March 4, 2013.66 AQI had likely been operating in Syria alongside Jabhat al-Nusra well before this, but their role may have intensified as al-Raqqaa loomed as a near victory. Soon after, al-Raqqa became a throne for Jabhat al-Nusra and AQI alongside the secular opposition, and it is likely that AQI shifted military assets in Syria to secure this seat of governance, to recruit, and to advance further into Syria’s military battlefronts.67

Abu Bakr al-Baghdadi declared the Islamic State of Iraq and al Sham on April 8, 2013 following this military victory.68
The U.S. State Department assessed as of July 2013 that al-Baghdadi is personally in Syria, which is reasonable given this governance disposition. This does not imply that the military command of AQI has shifted to Syria, however. A strong military operating base near the Iraqi capital, which has long been a principal attack zone, would be an optimal configuration for AQI's military command.

Al-Baghdadi also declared that the Syrian al-Qaeda affiliate Jabhat al-Nusra was subordinate to the Islamic State of Iraq and al Sham. This announcement did not gain ready acceptance by Jabhat al-Nusra in Syria. The Syrian al-Qaeda affiliate rejected al-Baghdadi's leadership, declaring its independent affiliation to al-Qaeda core. Al-Qaeda emir Ayman al-Zawahiri resolved the dispute with guidance on June 9, 2013 to the two groups to remain separate and operating in their respective geographic zones, namely Iraq and Syria. Al-Baghdadi rejected this guidance on June 14, affirming his intent to pursue an Islamic state in Iraq and Syria. AQI may have sought to increase attacks during this period in order to demonstrate capability and legitimacy to the al-Qaeda core grouping.

**ISF Fires on Protesters in Hawija**

A major inflection occurred in Iraq on April 23, 2013, however, that may have caused AQI's military presence to shift back to Iraq as a main effort. On April 23, ISF surrounded an anti-government protest sit-in camp in Hawija and conducted a search and raid. Armed men inside the camp fired back, and a clash ensued which claimed the lives of over 20 civilians in the camp and wounded over 100 others. The response across the anti-government protest community was explosive. Clashes ensued between ISF and armed gunmen reportedly part of the neo-Ba'athist organization Jaysh Rijal al-Tariqah al-Naqshbandia (JRTN). JRTN seized temporary control of Suleiman Beg until tribal leaders brokered a deal with local officials to end the fighting. The armed men in the protest camp at Hawija were likely not AQI. While Hawija falls along a likely axis of support for AQI, it is more likely that the camp housed militant elements of the nationalist JRTN, whose platform more directly coincides with the character and grievances of the Sunni protest movement. It is unlikely that AQI's fortunes had shifted to the degree that the organization would be welcome in a Sunni Arab camp in Iraq by that time.

Additional clashes following the one in Hawija occurred in Mosul and Fallujah, and several tribes in Anbar announced the formation of a tribal army to repel attackers, including the Iraqi Army. The inflection also piqued ethnic tensions in Kirkuk, as Kurdish officials announced that Peshmerga forces would deploy “to fill the [security] vacuums... especially around the city of Kirkuk.” This inflection occurred immediately following the April 20 Provincial elections, from which Anbar and Ninewa were excluded ostensibly for security reasons. This created another opportunity for AQI to amplify operational efforts to exploit the gap between Iraq’s Sunni Arabs and the state. It is likely that so many redundant opportunities caused AQI to double down on its efforts in Iraq. Maximizing force to target the Shi’a in Baghdad indicates AQI’s principal strategy remained focused upon igniting a civil war that would mobilize the segments of the Sunni Arab community already teetering on the edge of an uprising.

**The Extremist Regional Sectarian Face-Off**

Shi’a militant activity in the region also coincided with this phase change in AQI’s VBIED operation. On April 30, 2013, Hezbollah leader Hasan Nasrallah overtly announced the organization’s role in the Syrian civil war, stating that Hezbollah “will not let Syria fall.” Jabhat al-Nusra, Syria’s al-Qaeda affiliate, responded by declaring Hezbollah militants in Syria its top priority. These events demonstrate that extremist groups on both sides of the sectarian divide had faced off in Syria. They also influenced the mobilization of Shi’a militias in Iraq to the benefit of AQI.
On May 4, the Iranian-sponsored Shi’a militant group in Iraq, Asa’ib Ahl al-Haq (AAH) held a massive rally in Baghdad. AAH had also recently made its presence known in Syria as part of the Abu al-Fadl al-Abbas Brigade (AFAB). AAH leader Qais al-Khazali called on members at the Baghdad rally to maintain readiness. This event constituted a significant measure of AQI’s ability to provoke a response, and AQI may also have increased operational tempo in order to mass on this objective.

Other Considerations

Yet another factor may have influenced AQI’s battle plan in May 2013. Abd al-Malik al-Saadi, a senior Sunni cleric active within the anti-government protest movement, announced on May 13 that he would form a ‘Commission of Goodwill’ to begin negotiations with the Maliki government on behalf of protesters from all six provinces. The protests had become divided between reconciliation and insurgency influences since the beginning of May 2013, and protesters in Salah ad-Din and Anbar demonstrated favor toward al-Saadi’s initiative. The cessation of protests would have directly undercut AQI’s political strategy; it is possible that AQI increased attacks in order to mobilize ISF to block this effort.

But contemporaneous events alone do not explain this phase change. AQI greatly increased the frequency and sophistication of its VBIED operations at this time, indicating that added resources and organizational growth were installed months earlier. In most cases, attacks occurred weekly, indicating an increased ability to sustain attacks in repeatable fashion. This escalation demonstrates AQI’s refinement of its ability to recover and reset after attacks and the establishment of multiple fixed sites for preparing and staging VBIEDs.

Furthermore, the waves occurring during the last quarter of the “Breaking the Walls” campaign (May 2013 - July 2013) often achieved casualty levels in excess of 300, most with fewer than 12 VBIEDs per wave. This indicates that the lethality of individual VBIEDs increased over time, and emphasizes improved construction, improved execution, and reorientation primarily on civilian targets. The organizational growth may also be a direct result of the Tikrit Tasfirat prison break, which replenished AQI with new veteran manpower, potentially for use in Iraq and Syria. The source of AQI’s amplified material resources are as of yet unexplained. Phase IV of the “Breaking the Walls” campaign concluded with the final two prison attacks on July 21, 2013. The Abu Ghraib prison attack resulted in the escape of 500 prisoners and the death of 68 ISF troops. The attack upon Taji prison was the third unsuccessful attempt over the course of the campaign. AQI then declared the conclusion of “Breaking the Walls.”

Effects of the attack on Abu Ghraib

The effects of the Abu Ghraib prison attack upon Iraq have been profound. First, it permitted a huge manpower infusion to AQI, five times greater than that produced by the Tikrit Tasrirat prison break in September 2012, assessed in this report to have significantly enhanced AQI’s operational capability in 2013. This manpower infusion may now be directed toward Syria as well, for safe haven as well as operational deployment. Though ISF has conducted operations to the north and west of Baghdad to interdict AQI, it is likely that most of the prisoners are still at large and will become a part of the fighting force by 2014.

Additionally, this prison break demonstrated to the Iraq population that AQI can break hardened ISF defenses. Even though Abu Ghraib may be considered the least defensible prison facility for a number of reasons, this was still a shocking victory for AQI, which was also able to match ISF in a sustained firefight for a number of hours. This success gave significant advantage to AQI by demonstrating its capacity to the rest of the al-Qaeda network. It also supports the legitimacy of AQI as a political entity in Syria by showcasing its military might.
and operational initiative on the Iraq Front. This success has likely contributed to AQI’s operations inside Syria, where their operational initiative as well as governance strategy may now be observed north of Aleppo.

AQI’s operations at the end of “Breaking the Walls,” especially the attack upon the Abu Ghraib prison, demand an aggressive ISF response, though the Iraqi government must be equally careful not to trigger Sunni popular backlash. If the ISF is able to mount effective counterterrorism operations to reestablish security in Baghdad, to clear the Baghdad belts, and to regain momentum to project force into the provinces, the Iraqi government may be able to regain enough legitimacy to consolidate gains. Targeting the AQI cells producing these VBIED attacks should be a top priority because such attacks are inflicting more civilian casualties than any other AQI operation, and constitute a principal threat to Iraqi stability at present.

If the ISF instead conducts blind search and raid operations into Sunni neighborhoods and communities that result in mass arrests, the government may precipitate a Sunni insurgency. JRTN, defected ISF units, and departed Sahwa could amplify this revolt, and effectively negate the advance of the ISF. Aside from crafting a more effective counterterrorism strategy, it is imperative that the Iraqi government reconcile anti-government protestors to the state. There must be a healthy perspective of Sunni participation in governance among the Arab population if Iraq is to emerge from the threat of al-Qaeda.

**THE NEXT CAMPAIGN: “SOLDIERS’ HARVEST”**

AQI announced the start of a new campaign on July 30, 2013, claiming the VBIED wave on July 29 as the inaugural attack of the “Soldiers’ Harvest” campaign. As of September 1, 2013, there have been five large VBIED waves following the conclusion of the “Breaking the Walls” campaign, on July 29, August 6, August 15, and August 20, and August 28, 2013. These waves focused upon Baghdad and southern Iraq. During this first month, AQI has also struck critical infrastructure, specifically the port of Um Qasr near Basra. This suggests that AQI may escalate to strike more heavily protected facilities over the course of the next campaign.

Forecasting how else AQI will prosecute the 2013-2014 campaign requires a study of the other elements of AQI’s military organization, how they relate to AQI’s governance strategy, and how this relationship translates to new operational objectives. It also requires a parallel study of Iraqi Security Forces, Maliki’s scheme of maneuver, and how AQI will plan to disrupt national elections in 2014. The new campaign will likely capitalize upon AQI’s amplified VBIED capability and continue its integration into attacks targeting hardened government facilities. Prison attacks and spectacular attacks targeting Shi’a civilians will likewise continue. Political assassinations of Sunni as well as Shi’a figures will likely escalate as Baghdad becomes more permissive for AQI at the expense of ISF.

Outside of Baghdad, AQI will likely begin to operate with impunity in villages where its control becomes palpable. In northern Diyala, southern Baghdad, northern Anbar, and Samarra, AQI may begin to project security battalions into urban areas, causing populations to displace. Population displacement will serve as the principal indicator that AQI has reestablished conditions that reflect the state of play in Iraq before the Surge.

**AQI’S MILITARY ORGANIZATION**

This study seeks to interpret VBIED wave patterns over time for what they indicate of AQI’s organizational evolution into a professional military force. Maintaining a high volume of attacks at short and regular intervals demonstrates measurable growth in capacity to plan, operate, and sustain multiple VBIED cycles, revealing a broader array of technical expertise as well as increasingly sophisticated operational design. VBIEDs and prison breaks do not encompass the whole of the “Breaking the Walls” campaign. AQI’s 2012-2013 campaign likely also involved dedicated operations to establish and secure safe havens. Nevertheless, the VBIED campaign demonstrates how well AQI reconstituted as a fighting force in the wake of U.S. withdrawal. It dispels the possibility that AQI remained a small network of disparate fighters loosely led by a central political personage, Abu Bakr al-Baghdadi. As such, it reduces the expectation that removing one key leader will defeat al-Qaeda in Iraq.

Instead, AQI’s campaign showcases the depth of a multi-echelon military organization with well-established command and control that can design and implement coordinated attacks across the whole of Iraq. This
organization enjoys unconstrained communication among teams as well as unconstrained access to human capacity and materiel. This negates the assumption that the Syrian civil war caused AQI to neglect the Iraq front. Instead, AQI seized the initiative in Iraq as it gained ground in Syria. Al-Baghdadi is now capitalizing upon a position of military strength in order to assert initiative on both fronts.

The most impressive and visible aspect of AQI’s new military organization is its reconstituted operational art. AQI maintained the initiative in Iraq throughout the “Breaking the Walls” campaign, particularly from February 2013 – July 2013. This initiative bears a distinctive operational design signature at the force-level as well as the VBIED organizational level. The force-level planning element is assessed to have designed the prison attacks, while the VBIED planning team designed VBIED waves and provided support to force-level operations as directed.

Indicative of this operational art, AQI maintained its initiative while reacting to events in Syria; to the actions of political figures in Iraq; and to the operations of Iraqi Security Forces. The organization exploited the creation of the anti-government protest movement, the clash between protesters and ISF at Hawija, and other unpredicted opportunities to their gain. And yet it appears that these events merely solidified AQI’s campaign plan for “Breaking the Walls.” The assessed four phases of the “Breaking the Walls” campaign described in this report align with a shockingly symmetrical planning calendar that may very well have progressed with minimal disturbance for the entire year, at least where VBIED waves and prison attacks were concerned (For more on this, see Part II of this report).

The principal action arm leveraged by AQI to inflict
human casualties in Iraq in 2012-2013 appeared to have been the VBIED organization. VBIEDs also struck military and political targets, but particularly in Baghdad, the VBIED campaign followed a classical 2006-2007 model of striking civilian targets in Shi’a and mixed neighborhoods in Baghdad. What is perhaps a new phenomenon is the synchronization of these attacks with attacks in the north, south, and west of Iraq. This suggests that VBIED operations have evolved to include not only a campaign plan, but also the capability to train, resource, and deploy VBIED teams as part of a unit.

It is possible that the reconstitution of AQI’s VBIED capacity carried over directly through veteran technical experts from the original 2007 network, which may mean that the VBIED capacity developed ahead of the rest of AQI’s military organization in 2012. It is also clear that AQI additionally executed many IED, IDF, and AED attacks that were likely prosecuted by other teams apart from VBIED cells. It has been suggested throughout this study that AQI will attempt to re-establish local emirates in conjunction with the declaration of the Islamic State of Iraq and al-Sham, and that these emirates would require local security elements. The presence of emirate structures built to execute attacks was validated when ISF detained the AQI Deputy Wadi of northern Baghdad on April 13, 2013.

SVVEST attacks were also increasingly reported during the last quarter of “Breaking the Walls,” many as part of complex attacks. The VBIED dataset also shows a significant increase in SVBIED activity beginning in April 2013. These attacks do not overwhelm non-suicide attack incidence, but they are nevertheless important to track for several reasons. First, suicide attacks are an indicator of foreign fighter activity, and the rise in suicide attacks in Iraq suggests that foreign fighters are again flowing into Iraq from Syria. Second, the rise in suicide attacks indicates another organizational shift within AQI in order to capitalize upon attack types that can only be executed with suicide bombers — namely SVVESTs. VBIEDs likely require less organizational adjustment to absorb suicide drivers, though optimizing their lethal potential requires new thought.

Negating the consolidation of local emirates in Iraq will depend upon the renewed cooperation of Arab Sunnis with the ISF and Maliki’s government. The departure of Sahwa from their posts in the wake of the Abu Ghraib prison break would be an alarming sign to the contrary. Destroying AQI’s VBIED capability, on the other hand, requires a direct approach by the ISF to dismantle and destroy the VBIED command and its component cells. ISF may do this by replicating Coalition Force operations to destroy the Baghdad VBIED cells in Rusafa and Karkh in 2007. These operations involved aggressive interdiction of VBIED factories as well as the erection of concrete barriers in Baghdad to limit vehicular mobility.

In 2013, the cells are more likely located in the Baghdad belts rather than the city center, which may provide new opportunities to interdict along primary and secondary lines of communication into the city. This strategy may cause AQI to increase targeting of ISF at checkpoints. It may also cause AQI to respond in other ways, either by attempting to shift operations to the city center or increasingly to rely upon SVVESTs. Both of these responses would degrade AQI’s ability to operate, however, and reduce their present momentum. They may also be mitigated through early anticipation and planning against AQI’s next move.

**Combat Power of VBIED Cells**

The ability to forecast AQI’s tactical and operational planning also requires considerate thought for how the VBIED enterprise is organized. Observing VBIED waves drives provides key insights into the shape of the organization that plans, resources, and executes VBIED attacks. A very large wave, such as those witnessed on July 23, 2012 and September 9, 2012, demonstrates exceptional logistics and depth of technical expertise across the organization carrying out the attacks (see
additional information on the waves discussed in this section in Part II of this report). These elements of control require both centralized support and decentralized execution, which frames a core question concerning which organizational model best describes the institution responsible. A highly centralized organization that prepares VBIEDs and deploys fighters may be regarded as less organized, less capable, and less resilient than one that is merely centrally guided, comprised of multiple self-contained cells that are capable of independent operations with minimal support. As of August 2013, AQi’s VBIED wave pattern suggests AQi has developed a VBIED organization involving two echelons — one to plan, support, and communicate; and one to construct and deploy VBIEDs.

The VBIED waves at the end of the “Breaking the Walls” campaign were highly controlled, of a consistent interval, and high yield, indicative of continued thoughtful planning, but also the presence of high-performing forward-deployed teams capable of executing the plan in repeatable fashion. For example, the VBIED waves that focused attacks upon Baghdad on May 15, May 20, May 27, and May 30, 2013 were not likely dependent upon a central command for all manner of support in execution; this interval does not allow time for teams to gather and disperse, for central leadership to provide training and specific guidance, or for new fighters to err. The more likely scenario involves multiple teams already refined in their execution receiving instruction to attack on a given day and executing with little further management or interference.

In order to maintain this volume of attacks at close interval, these teams were also likely able to access VBIEDs from multiple construction sites. This hypothesis is supported by the improbability that one VBIED facility was able to maintain the throughput required for the waves seen in the later stages of the campaign. Whereas the July 2012 and September 2012 VBIED waves required a high one-time volume, such that the VBIEDs might have been manufactured centrally over time and then staged; the pattern of attacks towards the end of the campaign suggests a system more akin to multiple assembly lines for mass production. The pace of attacks is determined in part by the pace of VBIED construction, and the pace of attacks drastically increased. Decentralized VBIED construction is also easier to mask and harder to interdict, and it is an observable indicator of the expanded organizational depth of AQi’s VBIED activity.

Expanding this idea further, the apparent shift in the VBIED construction system is one possible explanation for the overall shift in VBIED waveform observed over the course of the “Breaking the Walls” campaign. The pattern began in Phase I as few high amplitude waves spanning a wide geographic footprint, and it shifted
by the final phase to many successive smaller waves that were focused geographically. This waveform may depend upon many factors, to include planning guidance to accomplish phased operational objectives, resource limitations, and available combat power, but the rate-determining step for the VBIED capability is foremost VBIED construction. Increased VBIED construction may have been the principal reason for the shift over the course of the “Breaking the Walls” campaign to enable AQI to mass attacks upon Baghdad in 2013.

In addition to ready access to VBIED construction sites, forward deployed VBIED cells of the variety estimated in the summer of 2013 required a degree of internal organization to perform minimum key functions: to communicate with a higher headquarters; to receive and deploy fighters; to receive and deploy VBIEDs; and to spot and designate specific targets. The footprint of individual VBIED cells may be traced in the attack data based upon evident geographic clusters, though it does not follow that these high performing teams are tethered to local geography in every case. What a team lacks in local familiarity it must recover in preparation, and the characteristic VBIED cells observed in this study are capable of surging to new attack zones rather than being restricted to a maximum radius of attack.

The idea that VBIED cells may not be geographically delimited emerges with the campaign swing to Baghdad in February 2013. This nationwide consolidation of VBIED combat power indicates a surge role for VBIED cells that had been operating far from Baghdad prior to February 2013. Almost no VBIEDs are documented in this study between February 17 and April 14, 2013 in Kirkuk, Nineawa, and Salah ad-Din provinces, within or outside of VBIED waves. Attacks in Kirkuk resumed on April 15, 2013 in a wave that synchronized attacks with effects in Baghdad. The hiatus in northern VBIED activity, like the January 2013 break in VBIED waves, is not yet fully understood. These cells may have shifted to Baghdad, shifted to Syria, or been disrupted by the ISF or internal constraints. However, because they preceded a drastic rise in VBIED wave activity in Baghdad in May 2013, they may reasonably be considered as indicators of a growth step in the AQI VBIED organization and evidence that cells can lift and shift fire.

Rather than identifying VBIED cells exclusively based on geography, VBIED cells may instead be bounded by feasible attack volume.* It is clear from the data that smaller clusters of VBIEDs with common geography occur frequently between VBIED waves. The occurrence of small clustered VBIED activity is a key insight into the presence of VBIED cells. For example, as the graph above depicts, the high overall level of VBIED activity continued in January 2013 despite the temporary break in VBIED wave activity. This suggests that VBIED cells were capable of mounting independent groupings of attacks without guidance to synchronize with other teams. It is also clear evidence of the presence of a centralized VBIED wave planning element that was absent only during this time before resuming operations in February 2013.

VBIED construction sites are a critical vulnerability of the VBIED organization because they are not mobile like VBIED cells, and because they are laden with high visibility material resources, such as many cars, components, and explosives. It is not yet clear what explosive material comprises most VBIEDs, though the high volume of attacks suggests a steady supply chain. One report from Iraqi Police in Najaf in December 2012 indicated that a VBIED was seized containing two men and a large amount of TNT and C4.92 Another report from the Tigris Operations Command on August 20, 2013 indicated that a raid on a VBIED factory included ammonium and C4.93 Still another police raid in Salah ad-Din on August 20, 2013 reported seizure of an explosives factory in Suleiman Beg that involved 37 containers of DDT, TNT, and 20 motorcycles.94 These are isolated reports at this time, though the nature of the explosives is a critical line of inquiry for further study. It is important to establish how AQI procures explosive material in order for the ISF to disrupt logistics

* To re-engage the definition of a VBIED “wave” as six or more VBIED attacks, which theoretically represents coordination across multiple cells, one VBIED cell is therefore not estimated to deploy more than 5 VBIEDs on one day. This threshold is reasonable because the detonation of 5 VBIEDs likely requires a team of 5-10 fighters in addition to support staff and leadership. Effective organizations larger than this require further subdivision because of the dictates of span of control. A functional team this size is therefore an effective unit of measure for a basic VBIED cell. For the purposes of framing the data, it is useful to identify smaller VBIED clusters as having structure and meaning even when they do not involve the high organization of a VBIED “wave.” Organizing a VBIED wave of more than 5 VBIEDs is therefore considered to require coordination across cells. Recent reports from the Iraqi Counter-Terrorism Task Force also indicated on August 21, 2013 that they conducted a raid on a 16-man VBIED cell operating IVO Baghdad.
supporting spectacular explosive attacks.

The fact that these cells are also responsive to centralized guidance to synchronize attacks further indicates the professionalization of the VBIED organization. It is unclear how they communicate, though ISF has reported confiscating motorcycles with forged documents upon site exploitation;95 and security battalions at least reportedly receive instruction by courier.96 AQI has also lately warned Syrian jihadist organizations to exercise communications security as a principal lesson learned from fighting Americans in Iraq.97 Nevertheless, because the early waves of the “Breaking the Walls” campaign bear a top-down quality as compared to later waves, it becomes apparent both that the AQI VBIED command has developed new organizational depth over the last year; and that a distinct planning vision is still driving VBIED waves as of August 2013.

The enumeration of VBIED cells is critical to the estimation of AQI’s combat power. Furthermore, it is necessary to understand how to match ISF operational design to eradicate AQI’s VBIED capability. For example, the ISF search and raid operation into northern Baghdad on August 4, 2013 may have had the potential to disrupt a VBIED cell in the vicinity of the northern Baghdad belts; however, VBIED waves continued without interruption in August 2013. This is likely due to the presence of additional VBIED cells projecting attacks in Baghdad from the southern belts. The total volume of VBIEDs occurring within “waves” from February 2013 to August 2013 also clearly indicates the presence of multiple operational cells that cannot each produce a full wave of VBIEDs in isolation. A wave involving 10 or more VBIEDs may be estimated to involve a minimum of two, and likely three VBIED cells. The attacks mentioned below are discussed in further detail in Part II of this report.
Baghdad

The dense geographic clustering into three distinct zones of Baghdad and the overall high volume of attacks, usually in excess of 12 VBIEDs per wave, suggest there may be three cells conducting attacks in the city as of August 2013. There appears to be a northern Baghdad attack zone extending from Shula in the northwest to Sadr City in the northeast; along with a southeastern zone and a southwestern zone. Considering the relative permissibility of the Baghdad belts, these cells may be operating on the periphery of Baghdad, to the north, south, and southwest, where AQI had enjoyed sanctuary historically. One or both of the southern belt cells may also be responsible for attacks in downtown Baghdad, in Karrada and Sadoun, particularly.

Perhaps the best illustration of the presence of multiple cells operating in Baghdad, and in particular from the southern belts, is the spread of the Baghdad attacks on July 20, 2013, the day before the prison attacks upon Abu Ghraib and Taji base. These attacks largely avoided the traditional northern zone. This spread indicates that the northern cell was not in play that day, likely because it had been re-tasked to support one or both prison attacks on July 21, 2013.

AQI had an operational presence in Baghdad from the beginning of the “Breaking the Walls” campaign. The day before the very large July 23, 2012 wave, a smaller wave of seven VBIEDs struck a number of locations. Three of those VBIEDs detonated in Mahmoudiyah, south of Baghdad, which is a possible area of interest for further study to detect one of the southern belt VBIED cells. Northern Baghdad neighborhoods such as Sadr City, Husseiniya, and Ur were struck as part of the first large July 23, 2012 wave the following day, which may indicate that multiple staging areas had emerged in the vicinity of Baghdad from the early days of the campaign.

It is important to consider the full spectrum of possible locations for VBIED cells, and VBIED construction sites particularly, in order to focus collection of intelligence to confirm or deny. It is especially important at this time to understand the depth of AQI in the southern belts because ISF counter-AQI operations in the northern zone will fail if not synchronized with operations in the southern zones. They will also fail if they target the local Sunni population and not the high-performing VBIED teams perpetrating attacks in Baghdad. Instead, if the ISF
is able to disrupt the logistics of the VBIED apparatus, and to block their avenues of approach to Baghdad, the operations may be able to dampen the societal effects of VBIEDs long enough to generate domestic policy changes.

**Northern Iraq**

Next to Baghdad, Kirkuk city and its environs were slammed with VBIED attacks at intense periods at the beginning of the “Breaking the Walls” campaign. Nine VBIEDs detonated in Kirkuk on July 23, 2013, along with two VBIEDs in Tuz Khurmatu to the south of the city. Three additional VBIEDs detonated in Muqdadiyah, south of Tuz Khurmatu, with further attacks in Baquba, Diyala. Again based upon estimated volume of attacks in each location, this VBIED wave appeared to involve a large number of fighters operating in the northeast of Iraq. This northern group of VBIEDs within the July 23, 2012 wave compared to four VBIEDs that detonated in Baghdad that day, and the three aforementioned VBIEDs south of Baghdad in Mahmoudiyah the day before. The relative density of attacks in the North dissipated by September 9, 2012. Attacks in the North generally matched Baghdad attacks until February 2013, when northern activity generally ceased for two months. Northern attacks resumed in April 2013 to a lesser degree. As of August 2013, it appears that there is still a cell conducting attacks in Kirkuk city and Tuz Khurmatu.

Because the volume is low and the rate inconsistent, it is possible that the same cell is responsible for attacks in Kirkuk, northern Salah ad-Din, possibly southern Salah ad-Din, and even Mosul. The assignment of a wide geographic assignment to one cell may be feasible, particularly if the VBIED cell and the construction site are based along the road that connects Kirkuk city to Baiji, or Tuz Khurmatu to Tikrit. Furthermore, the northernmost east-west route between Baiji and Kirkuk forms the southern boundary of the Za‘ab triangle which stretches northwest to Mosul. This region had also been another historic support zone for AQI.99

By contrast, it does not appear that there is a VBIED cell operating in Diyala at this time. The last VBIED documented in Diyala province was defused by ISF on June 13, 2013.100 Given that VBIED attacks had concentrated at various points in the early campaign in the Diyala river valley, it now appears that AQI has regained control of this support zone. A report from the Tigris Operations Command on August 20, 2013 indicated that operations in the Hamrin Mountains area beginning in northern Diyala had resulted in the arrest of 48 personnel, six vehicles, 23 motorcycles, a VBIED factory, a training camp, and 21 rifles.101 It is possible that this had been a command and control node within AQI’s support zone, and potentially that which had played a principal role at the beginning of the “Breaking the Walls” campaign, when VBIED operations were likely more centralized. It is not yet clear how this ISF operation will affect AQI’s combat power, but VBIED waves continued in Baghdad on August 20 and 28, 2013.102

**Mosul**

Single VBIEDs detonated intermittently in Mosul throughout the campaign until June 10, 2013, ahead of provincial elections on June 20, 2013.103 On June 10, three VBIEDs detonated in Mosul, synchronized with attacks in Tuz Khurmatu, Kirkuk, and Baghdad. Two days later, ISF defused two VBIEDs in East Mosul.104 This might suggest that a cell might have formed in close proximity to Mosul, but attacks do not cluster again in Mosul as of the time of this report. This suggests first that the northern VBIED cell that likely covers Kirkuk and northern Salah ad-Din also covers Mosul and Tel Afar as needed. It may also suggest that Mosul began as a permissive support zone for AQI, and thus that the organization, as in the Diyala River Valley, did not need or want VBIED attacks within their support zone.

**Anbar**

A VBIED cell in Anbar also appears among the original constellation of actors at the beginning of “Breaking the Walls,” although the cell participated minimally in synchronized waves. Only one VBIED detonated in Anbar on July 23, 2012, and none detonated on September 9, 2012. However, a cluster of three VBIEDs in Ramadi and Fallujah occurred on September 13, 2012. Clusters of local VBIEDs occurred again on September 24, 2012 and May 1, 2013, again offset in timing from the main wave. The apparent trend of independent cell activity and minimal participation in synchronized waves continued through August 2013. As of the time of this report, the Anbar VBIED cell never participated in a coordinated VBIED wave with more than one VBIED. This may indicate that the cell has difficulty communicating with the rest of the VBIED organization, or that it suffers from some other constraint. It may also be unresponsive to tasking.
**Southern Iraq**

AQI has deliberately targeted Shi’a population centers in southern Iraq since the beginning of the “Breaking the Walls” campaign. This is a particularly impressive feat, given the great distance between the support zone needed to construct a VBIED and the attack zones observed. From September 9, 2012 onward, AQI struck Basra, Amara, Imam al-Sharqi, Nasiriya, Diwaniya, Najaf, Karbala, and Shi’a communities south of Baghdad. VBIEDs began to cluster there in late December 2012, and clusters occurred several times before the February 2013 push to Baghdad began. The southern cell appeared to participate in this push to Baghdad.

On June 16, 2013, a wave of nine VBIEDs struck most of these locations in southern Iraq. A similar wave happened again on July 14, 2013. Because this concentration does not usually occur, it is reasonable to assess that the southern VBIED cell and the southern Baghdad belt cells interoperate, such that the southern Baghdad belt cells assist in waves directed at cities in southern Iraq; and that the southern Iraq cell assists in attacks upon Baghdad from the southern belts. This hypothesis accounts for the volume of attacks in southern Iraq on June 16, 2013 and July 14, 2013, which exceed the estimated capability of a single cell. It is possible but unlikely that the southern belt cells are solely responsible for the attacks in southern Iraq. Instead, there is likely an additional cell, possibly located in Iskandriyah or Mussayib in northern Babel, or Arab Jabour north of Wasit, that covers the southern zone.

**Southern Salah ad-Din**

Like Mosul, only single VBIEDs occurred in southern Salah ad-Din province throughout the “Breaking the Walls” campaign. Single VBIEDs occurred in the cities of Samarra, Balad, Taji, or Tarmiyah in conjunction with most of the Phase I waves, and several independent VBIEDs detonated in isolation during Phase II. This early pattern does not indicate the presence of a self-contained VBIED cell capable of conducting multiple independent attacks. Furthermore, the largest observed cluster of four VBIEDs in Taji occurred as part of the September 9, 2012 wave, and VBIEDs never clustered in this region again as of August 2013. In fact, the last VBIED documented in southern Salah ad Din occurred on June 9, 2013 in Taji. Given that this region is key terrain for the northern approach to Baghdad, it is more likely that AQI has decided not to strike this area with VBIEDs than that AQI is limited from doing so. For the same reason, this region is critically important for ISF to clear and protect in order to re-establish security in Baghdad.

**WHAT WE KNOW**

This study has raised many possibilities and many questions about the disposition of al-Qaeda in Iraq today. It is therefore necessary to take inventory of the facts, assessments, and remaining unknowns at this time.

**Facts**

It is a fact that AQI announced the beginning of the “Breaking the Walls” campaign on July 21, 2012 and its end on July 23, 2013. It is further known that AQI has claimed credit for numerous attacks in Iraq over the course of the same period, including many of the VBIED waves and prison breaks identified in this study, attributed them to an overarching campaign plan, and even published a statistical report to credit themselves with measures of their performance.*

It is a fact that violence levels in Iraq in 2013 by various measures, including documented casualty totals and the volume of VBIEDs documented in this study, compare to wartime levels when the U.S. military was thoroughly engaged in the fight. It is a fact that VBIEDs were chiefly responsible for the rise in casualties from December 2011 to August 2013. It is a fact that they were often synchronized to strike on the same day at locations that were sometimes geographically concentrated and sometimes widespread.

It is a fact that AQI’s military organization is capable of other attacks besides VBIEDs, including IEDs, *

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* On August 13, 2013, AQI published a campaign update in its military periodical, “al-Naba.” According to SITE Intelligence Group, AQI took inventory of its attacks from November 26, 2011 to November 15, 2012, documenting 4,500 operations broken down by region and type. The statistics in AQI’s periodical have not been fully compared to those documented in this study, but the number of VBIED attacks claimed by AQI during this period greatly exceed those documented from open sources.

SVESTs, indirect fire, and direct fire, and that all of these capabilities have more than once been brought to bear upon a single tactical objective to achieve combined arms effects. The attack on the Abu Ghraib prison is the most visible and most recent example to demonstrate this capability.

It is therefore a fact that AQI has reconstituted as a military organization capable of planning, directing, and resourcing the attacks documented in this study. AQI capitalized upon a position of military strength in Iraq to project not only lethal force into Syria, but also to exert governance and control of territory in Syria under the banner of the Islamic State of Iraq and al-Sham.

Assessments

It is assessed that AQI means to assert governance and control of territory also in Iraq. It is possible that AQI already controls territory in the vicinity of northern Diyala province, the Thar Thar desert area northwest of Baghdad, the Jazeera desert west of Tikrit, and the Za‘ab triangle spanning northern Salah ad-Din, southern Ninewa, and western Kirkuk. AQI likely maintains unrestricted access into Syria across the western Jazeera desert, and sanctuary and training may be established there.

It is also assessed that AQI leaves the protection of these areas to other military and security elements outside the VBIED organization, while this high-performing team and signature weapons capability are brought to bear to spearhead an offensive campaign plan in Iraq. This campaign has been successful both in stoking sectarian violence in Iraq and in demonstrating outwardly the inability of the ISF thus far to protect the population from AQI’s attacks.

It is assessed that AQI’s VBIED capability has grown over the course of the last 12 months in three critical ways. First, the organization likely now performs decentralized VBIED construction operations, with multiple VBIED factories deployed forward close to primary attack zones. Second, the organization now likely contains multiple independently functioning VBIED cells that are capable of mounting their own attacks. These cells can also communicate with higher military echelons and are responsive to centralized guidance to coordinate attacks on a single day or in support of a single operation. Third, the VBIED organization still appears to engage central leadership that specializes in VBIED wave planning, but has the potential and intent to broaden its implementation to include spectacular attacks against critical infrastructure as well as complex attacks upon hardened ISF facilities.

It is assessed that AQI’s VBIED operations are not the only military capability developed by AQI over the course of the “Breaking the Walls” campaign. Thousands of violent events, including SVEST attacks, IEDs, small arms fire engagements, and indirect fire, have been documented and as of yet not analyzed fully. They likely contain rich insight into the shape of the overall military organization as well as its relationship to the security apparatus which undergirds AQI’s burgeoning governance initiatives in Iraq.106

Unknowns

It is unknown at this time how AQI supplies VBIED attacks. VBIEDs require basic components, including vehicles, explosive material, and detonation triggers, among other niche components. Several reports from ISF interdiction operations indicate that military grade explosives, and not homemade explosives or munitions, comprise the explosive content of VBIEDs. This would suggest that AQI’s supply chain for explosive attacks begins outside of Iraq, which would follow that AQI requires funding, and not supplies, in order to sustain operations.

If this is indeed the case, it is unknown how AQI funds VBIED attacks, though domestic and regional criminal activities, such as kidnapping, extortion, and theft, are suspected.

The personalities and relationships which comprise the human networks operating within AQI’s military organization are also unknown from open sources. It is also unknown how VBIED cells communicate with central leadership in order to coordinate VBIED waves, though couriers are suspected. It is unknown how they communicate. The veteran AQI network may generally be regarded as sparse communicators, based upon AQI’s historical behaviors. In addition, a recent prisoner statement claims that instructions and funding are provided by courier.107 This demonstrates one of the most remarkable qualities of the VBIED wave phenomenon described in this report. It showcases a dependency upon communications tradecraft that may be interdicted if isolated and understood. These two critical requirements, namely finance and communications, constitute key opportunities to disrupt AQI’s VBIED operations.
Advising Iraqi Security Forces

It is necessary for ISF to reduce the VBIED threat in Iraq in order to preserve the state against the threat of al-Qaeda. VBIEDs are the single highest source of casualties in Iraq. Reducing VBIEDs requires targeting high confidence locations and disrupting operational flows. Reducing VBIEDs will not reduce AQI’s force-level military command or planning capacity. In fact, one can expect that reducing VBIEDs will translate to...
an increase in other attack types, such as SVESTs. Given that the VBIED effort is not demonstratively driven by suicide attacks, this would not an easy transition for AQI to accomplish, although the increase of suicide bombers in the summer of 2013, originating from Syria, suggests that the organization is already increasing this capability. Disrupting AQI to this degree may shift the momentum of the counter-terrorism fight in Iraq in favor of ISF.

Reducing the military command of AQI likely means a focused desert operation. But this operation should not attempt to clear the Jazeera Desert that forms western Ninewa and Anbar provinces. Instead, attacks should be focused upon regions such as Thar Thar, The Za’ab Triangle, and Hamrin where AQI has been known to establish command and control previously, and from which to project into urban centers. It is imperative to protect Baghdad. Focused operations to pursue VBIED cells and local security battalions in the Baghdad belts, to the north and south of Baghdad, are advised. It is also imperative to increase security of Iraq’s prisons, especially Taji, which has been attacked multiple times without success.

Focused operations upon the Baghdad belts will likely cause attacks to swell in northern Iraq, namely in Ninewa and Kirkuk provinces. Particularly in Kirkuk, it is necessary to address counter-terrorism in a cooperative manner with Kurdish Peshmerga forces. AQI has likely targeted Kirkuk in order to exacerbate ethnic violence rather than to establish safe haven, but the overlapping presence of JRTN amidst protest camps represents a redundant threat to ISF. JRTN is also likely mobilized in Ninewa, particularly in Mosul. The present security situation in Mosul, which involves multiple threat streams apart from AQI, must be studied in greater detail.

Above all, it is necessary to reduce the threat of insurgency in Iraq as counter-terrorism operations increase. A counter-terrorism strategy that propels a Sunni uprising or even a Federalism effort will cripple ISF. Furthermore, history has shown that the successful defeat of AQI principally occurred at the hands of Iraq’s Sunni Arabs. Likewise their alienation from the state will condemn ISF to fight all at once a terrorist threat, a secular insurgency, and a sectarian civil war. This had been the nature of the war in Iraq in 2006. This is the nature of the war in Syria today. It is imperative that such a crisis be averted in Iraq lest the battlefronts of Iraq and Syria merge.

**CONCLUSION**

It is critical to the development of U.S. policy options to address the security situation created by AQI in Iraq and Syria to understand that it is both necessary and possible to interdict this threat. Interdiction depends first and foremost upon expert intelligence and operational design, both of which the U.S. can provide in mentorship as the veteran force which lately assisted ISF in the near defeat of AQI. It is foremost necessary that ISF mount effective operations to disrupt AQI’s attacks upon the population if the legitimacy of the state is to endure. VBIEDs are AQI’s most lethal and specialized attack vector, and it should be targeted and defeated first.

Second, defeating AQI depends upon the active participation of Iraq’s Arab Sunni population in national defense, which ultimately drove AQI from its strongholds in western and northern Iraq in 2007-2008. This population is instead teetering on the edge of an uprising as of August 2013 for lack of opportunity to participate in national government exacerbated by recent mass arrests in the wake of the Abu Ghraib prison break. The U.S. must ensure that support which is offered to the government of Iraq to counter AQI will not increase this risk of popular insurgency. In fact, it should be a precondition of any proffered security support that Maliki reconcile with the anti-government protest movement so that it participates as an enfranchised party within the Iraqi state.

Third, it is necessary that the government of Iraq approach the containment of AQI in conjunction with Kurdish security forces, given the assessed strong presence of AQI along the Green Line. AQI is effectively exploiting the territorial gap between the two erstwhile rival security forces, and this gap must be refined as a seam that is synchronously approached by ISF and the Kurdish Peshmerga if AQI is to be dislodged from this linear stronghold. If AQI is instead allowed to increase in the east, it will realize its potential to develop multiple centers of gravity in Iraq and Syria and thereby become much more difficult to defeat.

Prime Minister Maliki has claimed now on multiple occasions that AQI represents a real threat to his government. Taking inventory of the effects of AQI’s initiative, attacks against the population have caused Shi’a militias to remobilize. Attacks against ISF
installations have successfully damaged facilities and secured the release of hundreds of prisoners, most of whom are veteran AQI fighters and leaders. Attacks against Sahwa may cause them to abandon their posts in the midst of a broader domestic potential for a new Sunni uprising. Attacks against port facilities in Iraq’s south may degrade Iraq’s industrial base, or threaten it enough to affect outside investment. While the international community muses over the potential for the Syrian civil war to achieve broader effects upon the region, it is also necessary to observe the effects of AQI’s resurgence in Iraq, which reduces the potential for Iraq to buttress regional stability against the Syrian tide.

The resurgence of al-Qaeda in Iraq and Syria also presents a direct threat to U.S. interests in Iraq and the region. AQI has not expressed the intent to target U.S. interests, but it has demonstrated the capability and will to target government installations which contain U.S. citizens as well as critical infrastructure tethered to U.S. corporate interests. Furthermore, as an al-Qaeda affiliate, AQI fundamentally supports the broader al-Qaeda network with potential sanctuary which may very well serve to support attacks against the West. It is vital to U.S. national security that AQI be prevented from its goal to establish a caliphate in Iraq and Syria.


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47. “ISI Claims Suicide Bombing Against Shi’ite Endowment Headquarters,” SITE Intelligence Group, June 10, 2012; “ISI Claims Wednesday’s Wave of Bombings in Iraq,” SITE Intelligence Group, June 16, 2012.


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AL-QAEDA IN IRAQ RESURGENT, PART II
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This report is a continuation of a previous publication entitled “Al-Qaeda in Iraq Resurgent: The Breaking the Walls Campaign, Part I.” Part I of this report put forth the assessment that al-Qaeda in Iraq (AQI) has reconstituted as a professional military force capable of planning, training, resourcing, and executing synchronized and complex attacks in Iraq, in particular waves of Vehicle-Borne Improvised Explosive Devices (VBIED), and combined arms attacks involving VBIEDS, mortars, suicide bombers, and small arms fire. This assessment derives from careful study of the 24 VBIED waves and 8 prison attacks observed during AQI’s “Breaking the Walls” campaign from July 21, 2012 to July 23, 2013. This report will describe these events in detail in order to provide the necessary tactical evidence to support the strategic and operational assessments presented in Part I.

This continuation will focus upon the geography, volume, interval, and selected targets which characterize the individual waves and prison attacks. Careful study of the individual attacks supports the estimation of AQI’s combat power applied to VBIED operations in 2012-2013. Part II will also show how the four phases of the “Breaking the Walls” campaign that are described in Part I were derived and assessed. It will provide further insight into the evolution of AQI’s military organization over the same time period. The primary object of Part II will be to explain AQI’s battle plan and adaptation over the course of the “Breaking the Walls” campaign. The paper observes how AQI employed VBIEDS, its historical signature and current weapon of choice, to increase operational momentum in Iraq and establish the initiative at the expense of the Iraqi Security Forces. Part II will also establish the key indicators of the presence and reactivity of AQI’s VBIED planning cell and its distinction from the force-level planning cell assessed to be responsible for combined arms attacks upon prisons.

Part II uses the definitions and key terms that are established in Part I, including VBIED, VBIED wave, and VBIED cell. A VBIED is distinguished by its design to project explosive power outside of a vehicle. VBIEDS are identified in context either to kill many people outside of the vehicle; as a battering ram to achieve structural damage; or in select instances to assassinate a person in another vehicle. By contrast, car bombs and sticky bombs are small parcel bombs placed on or in a car in order to target its occupants. A VBIED is therefore considered to be a much more sophisticated weapon, requiring explosives expertise and automotive expertise to re-wire a car as a traveling high-yield bomb.

A VBIED wave is an observed phenomenon often repeated by AQI in 2012-2013, in which many VBIEDS are detonate on the same day. Throughout the “Breaking the Walls” campaign, these waves often struck multiple cities on the same day, which provides insight into the minimum command and control mechanisms in place to direct and coordinate attacks. For the purposes of both Part I and Part II, the threshold for distinguishing a VBIED “wave” as opposed to other groupings of attacks is six VBIEDS in a single day. This serves to isolate the distinction between coordinated VBIED activity at a national level and VBIED activity that may be more decentralized. Likewise the methodology to isolate VBIED attacks and to evaluate VBIED waves presented in Part I applies also to Part II. The methodology described in Part I is re-printed in Appendix A of this report.

Part I of this report described the presence of a national VBIED organization within AQI’s military that designs, resources, and directs VBIED waves. Decentralized components of the national VBIED organization are called “VBIED cells.” VBIED cells are not assumed to have been present for the duration of the “Breaking the Walls” campaign. Rather, a principal object of this more in-depth study will be to observe key indicators that decentralized VBIED cells are active, where they may be active, and when they may have emerged. The disposition of independent VBIED cells, which may correspond with increasingly decentralized VBIED construction, is a measure of the operational depth of AQI’s military
organization. Individual VBIED cells that can operate without guidance but remain responsive to tasking are difficult to defeat corporately. Destroying one cell, or even communication among across echelons, does not destroy their aggregate lethal capability.

Part II will also discuss indicators of the presence of two echelons of planners within AQI’s military, one that specifically pertains to VBIED operations, and one that incorporates VBIEDS into combined arms attacks. This observation yields a key assessment that AQI has reconstituted as a military organization typified by its operational planning, as opposed to a disrupted and leader-centric terrorist organization. The VBIED command, assessed to be a national-level asset within AQI’s military structure, is further assessed to possess its own planning capability, its own supply chain, and its own training apparatus to propagate technical expertise. The overarching military command, assessed to design and direct combined arms attacks, appears sometimes to task the VBIED command with support to these complex attacks, for example the prison attacks of 2012-2013. This report will explore the phases of the “Breaking the Walls” campaign for what they indicate of the objectives and planning culture of these two military headquarters.

**PHASE 1: PROOF OF CONCEPT AND CAPABILITY**

*Waves 1 & 2: 22-23 July 2012*

The wave on July 23, 2012 was the first to draw international attention to AQI’s “Breaking the Walls” campaign. A wave of seven VBIEDS, however, detonated the day prior, on July 22, 2012 and was actually the first wave of the campaign. This wave consisted of two clusters of events in Mahmoudiyah south of Baghdad and Ramadi and additional singleton VBIEDS in Mosul and Najaf. It is unclear at this time if these two waves were staggered deliberately. Given the assessment offered in Part I that the organizational structure of AQI developed over the course of the campaign, it is possible that the July 22, 2012 wave and the July 23, 2012 wave were meant to be a single wave, but were inadvertently offset in time.

30 VBIEDS detonated on July 23, 2012, striking civilian, ISF, and government targets. Most of the VBIEDS detonated across northern Iraq in Mosul, Kirkuk, Diyala, Salah ad Din, and Anbar. In comparison, only four of the VBIEDS detonated in Baghdad, with one just north in Tarmiyah. Additionally, a simultaneous spike in other explosive events also occurred on July 23, 2012, and some of these attacks may have been part of a larger coordinated strike by AQI. In particular, two waves of house-borne IEDs (HBIEDs) detonated in Sharqat and Taji. Violent events were not observed to cluster on any other day in July 2012, suggesting that these HBIED events were also orchestrated to occur on the same day as the VBIED wave. Wave 2 may therefore provide an early indication of a force-level planning effort within AQI’s military to synchronize disparate lines of operation. It is worth noting that VBIEDS were several times observed to correlate with spikes in other types of attacks during the early months of “Breaking the Walls,” but that VBIED waves began to occur independently and generally to assume their own character and focus in February 2013 in conjunction with the start of Phase III.

The AQI operatives who executed the VBIED wave were likely not the same operatives who executed the HBIED attacks. This assessment is based on several observations. First, VBIEDS constitute a highly technical operation requiring automotive as well as explosives expertise, and the combination is specific to this highly-focused attack type. Second, VBIED preparation sites have niche
requirements, namely a car repair shop than can be converted into a VBIED factory. Third, because this is the largest VBIED wave documented in this study, it is therefore reasonable to regard this wave as an illustration of AQI’s maximal effort applied to VBIEDS. This suggests that other activities occurring outside of this wave were performed by teams with no VBIED capability. It has also lately emerged as an assessment in September 2013 that HBIED attacks are now used deliberately to displace populations from areas where AQI seeks to exert control.\(^2\) As such, the HBIED attacks on July 23, 2012 may demonstrate AQI’s early push to control terrain in Taji and Sharqat, though more importantly to amplify the effects of a national wave of attacks.

Wave 3: 16 August 2012

An interval of 24 days separated Wave 2 from Wave 3. This wave was much smaller overall, consisting of only 6 VBIEDS, but it appeared to produce a considerably higher casualty-to-attack ratio than Wave 2.\(^*\) The effectiveness of the VBIEDS in this wave may indicate that the targets for this wave were more carefully selected, that the smaller wave was easier to control for maximum effect, or that the first wave of VBIEDS and prison breaks had already generated lessons learned that were employed in Wave 3. The limited size also indicates that this wave did not require a full planning effort like the waves on July 23, 2012 and September 9, 2012.

The Wave 3 distribution may serve to isolate the attack zones selected by AQI for emphasis or shaping. Three of the VBIEDS that detonated on August 16, 2013 struck targets in or near Kirkuk. The others exploded in Baghdad, Kut, and Taji. Additional explosions that

\(^*\) The total casualties recorded by AFP on August 16 exceeded 200 (63 KIA/149 WIA). One of the VBIEDS in Kirkuk and two of the IEDs in Baghdad, in Sadr City and Zafaraniyah respectively, appeared most responsible for the fatalities.
day detonated in Kirkuk, Hawijah, Tuz, Baqubah, Baghdad, Tikrit, and Tal Afar. This spread suggests that AQI maintained operational depth in northeastern Iraq at the beginning of the “Breaking the Walls” campaign. It also suggests that the VBIED logistics and staging effort were also located in the northeast, along with the Headquarters of the VBIED command containing the planning cell.

A small cluster of VBIED attacks occurred the day prior, on August 15, 2012, comprised of three VBIEDs in Baqubah and Muqdadiyah. The cluster on August 15 may have been planned and executed in conjunction with the August 16 attacks as a two-phased operation. One of the VBIEDs in Muqdadiyah reportedly exploded near the house of an Interior Ministry Intelligence officer. Additionally, gunmen attacked two police checkpoints in Baqubah. The attacks’ geographical dispersion validates the hypothesis of an eastern headquarters for the early VBIED command, possibly centered on or north of Muqdadiyah in the Diyala river valley. Muqdadiyah had been the site of one of the longest standing VBIED factories and significant AQI command and control centers in late 2007.

Two prison attacks also occurred in the interim, involving VBIEDs among other attack methods. AQI struck the Baghdad Counter-terrorism Headquarters on July 31, 2012, inflicting 65 casualties and claiming credit on August 13, 2012. The attack upon the Taji Tasfirat Prison on August 1, 2012 incurred over 30 casualties. This pair of prison attacks established the relationship between the VBIED campaign and the prison attack campaign. The grand scale of these sequential efforts suggests a strong linkage between the VBIED planning cell and the force-level planning cell at the beginning of the campaign. Accordingly, the VBIED waves and prison attacks, which each required significant prior planning, were likely not planned separately, but together, before “Breaking the Walls” was announced. This coincides with the assessment that a centralized organization is less sophisticated and more vulnerable than one that sub-divides by specialty and develops greater operational depth, which will be observed as a growth step within the VBIED organization in later phases of the campaign.

Wave 4: 9 September 2012

Wave 4 greatly expanded the geography of the attacks. Wave 4 extended attacks to Basra and other southern cities, as well as Tal Afar in the north. This wave stands out among others in the “Breaking the Walls” set as one that was clearly intended to demonstrate the ability to launch attacks anywhere in Iraq, including southern Shi’a strongholds. An interval of 24 days separated Wave 3 from Wave 4, replicating the VBIED recovery cycle between Waves 2 and 3. Wave 4 consisted of 21 VBIEDS. The total casualties recorded in Iraq that day exceeded 526 (76 KIA, 420 WIA), which is the single highest casualty-yield day within this data set. Wave 4 was a second very large wave and the most deadly, again indicating that target selection and execution improved the lethality of individual VBIEDS as part of a larger wave. The VBIEDs causing the highest casualties were in Maysan province, Kirkuk, Amara, and Sadr City, which are Shi’a majority areas. The attack in Maysan targeted civilians near the Imam al-Sharqi shrine.
the previous wave, though VBIEDS in Taji inflicted more material damage than human casualties. These VBIEDS may therefore have reinforced a push to establish control in Taji. Additionally, this wave sustained VBIED activity within Kirkuk city. In addition to VBIEDs in the city center, a VBIED struck the parking lot outside the state-owned North Oil Company as well as Iraqi Army soldiers west of the city. VBIED attacks upon critical infrastructure targets were not commonly observed during the “Breaking the Walls” campaign, but they signify a critical vulnerability of the state and are as of September 2013 assessed to be a potential objective of the AQI’s new 2013-2014 campaign.

Smaller VBIED clusters followed on September 13 and 24, which appear unconnected to the September 9 wave. These attacks repeatedly struck Fallujah and Ramadi, most often targeting the ISF. In one notable exception, a suicide bomber targeted a primary school in Hit, Anbar, killing 4 children and wounding 8. AFP data does not indicate that these attacks otherwise generated significant casualties. These VBIED clusters demonstrate that the AQI campaign in Anbar diverges from that in the east. Independent activity occurs outside of VBIED waves and in high enough volume during this period to suggest that an independent VBIED cell was already in place in Anbar at this time. Such a VBIED cell would likely involve independent leadership, and possibly also independent VBIED construction, to prepare and execute attacks if not assigned and resourced by a higher command.

Wave 5: 30 September 2012

The significance of Wave 5 is that it occurred immediately after the attack upon the Tikrit Tasfirat prison on September 27, 2012, in which VBIEDs played a supporting role. The attack upon the Tikrit Tasfirat prison was highly successful. Over 60 ISF were killed or wounded and 100 prisoners escaped, including 47 AQI death row inmates. The attack involved VBIEDS, silenced weapons, explosive belts, and hand grenades, and reportedly began from inside the prison. This was a well-planned and well-executed operation in which VBIEDS played only a minor role. AQI claimed credit for this attack.

The Tikrit Tasfirat prison attack occurred one week after

* AFP data additionally points to moderately high casualties on September 7, 2012, which is unexplained by available data on explosive events at this time.

the September 19, 2012 attack on the Hib Hib police directorate, where 10 AQI leaders were reportedly detained. This attack involved suicide bombers and small arms fire. AQI also claimed credit for this attack. The larger attack upon the Tikrit prison involved the integration of VBIEDS as combined arms complements to degrade infrastructure in support of small unit tactics and large scale prisoner ground movements. Wave 5 occurred three days after the Tikrit Tasfirat prison break. Wave 5 consisted of 13 VBIEDS, the majority of which targeted Baghdad and Taji, with additional attacks in Baquba, Kut, Fallujah, Hit, and Mosul. AFP casualty records indicate relatively low total casualties in Iraq that day, and none of the VBIEDS are reported to have inflicted high casualties individually.

Several of the VBIEDS in this wave appeared to target the ISF, in Mosul, Hit, Baghdad, and Kut. The ISF is generally a harder and smaller target than civilians in public places, which may account for the low casualties.
Although it would seem logical that AQI would target the ISF as a defensive reaction to new ISF operations launched in the wake of the prison break, it is unlikely because none of the VBIEDS detonated in the vicinity of Tikrit. Consequently, we should hypothesize instead that the VBIED organization was not able to reset quickly in the Tikrit zone; that this VBIED wave was a diversion to protect prisoner escape; or that the wave is not directly related to the prison break. AQI claimed credit for the wave, indicating that the ISF had been targeted in a “bill of blood” for recent execution of Sunni prisoners.  

**PHASE 2: THE GREEN LINE**

**Wave 6: 14 November 2012**

A 45-day interval separated Wave 5 from Wave 6. Wave 6 was a smaller wave, consisting of 9 VBIEDS detonating in Kirkuk, Baquba, Baghdad, and also the southern provinces. Kirkuk sustained three VBIEDs targeting civilians. One of them reportedly targeted the KPD headquarters in Kirkuk. The VBIED in Baghdad struck the central neighborhood of Karrada, which was the third time this neighborhood near the Green Zone was targeted in the early months of the “Breaking the Walls” campaign. Launching successive attacks upon Karrada demonstrates that AQI can project attacks into the heart of the city despite the presence of ISF. The southern provinces of Wasit and Babel were also struck. This geographic spread suggests that AQI had begun to extend persistent VBIED lines of effort into three regions: Kirkuk, Baghdad, and southern Iraq by November 2012.

Kirkuk appeared to remain the main effort. The targets in Kirkuk were likely selected to exploit ethnic tension, while the Baghdad and southern VBIEDS targeted Shi'a communities to stoke sectarian tension on the eve of the Muslim New Year. Striking targets in southern Iraq, while witnessed during Phase I, was still uncommon during Phase II. This wave contained only the second VBIED to strike Babel during the “Breaking the Walls” campaign. It contained only the fourth to strike in the vicinity of Kut in Wasit province. It is therefore unlikely that separate cells had formed to focus upon southern Iraq targets by this time. It is more likely that AQI operatives dispatched from another location and staged in the southern Baghdad belts to execute this wave.

Separately, a very large SVBIED targeted the military installation at Taji on November 6, eight days prior to this wave. This attack inflicted significant casualties for a single VBIED. The SVBIED targeted a group of Iraqi Army recruits gathering outside the gate to load onto buses. Taji base has sustained several off-cycle independent attacks over the course of the “Breaking the Walls” campaign. Among military installations, it is the hardest and most frequently struck with VBIEDS. This indicates both the significance of Taji base to AQI as a main objective and possibly also its proximity to one or more of AQI’s principal support zones. AQI combined arms operations directed against hardened facilities may be planned at the force-level rather than by the VBIED organization itself, given that they involve other weapon systems besides VBIEDS.

**Waves 7 & 8: 27 & 29 November 2012**

An interval of 14 days separated Wave 6 from Wave 7. This interval constitutes a dramatic reduction in the recovery time between VBIED waves. It is possible that
smaller elements were assigned primary responsibility for Phase II execution, leading to the false perception of faster recovery. Wave 7 consisted of 8 VBIEDS. Two of the VBIEDS exploded in Kirkuk, one specifically in front of the PUK Youth Union headquarters. Three additional VBIEDS exploded in Baghdad, another two in Mosul, and one in Ramadi. One of the Baghdad VBIEDS targeted the Ali Basha Shi’ite mosque and inflicted significant casualties. The Mosul VBIEDS targeted an Iraqi MP and an Iraqi Police patrol, on the northeast and northwest of the city, respectively. AQI’s attack zones in Mosul therefore shifted geographically. Previously, during Wave 1 and Wave 3, three attacks per wave focused upon the southwest and southeast quadrants of Mosul.

Once again, only a single VBIED detonated in Ramadi during this synchronized wave. Six other singleton VBIEDS detonated in Ramadi and Fallujah at other times during Phase II. The most organized VBIED effort in Anbar occurred two months prior, four days after Wave 4. On September 13, a small VBIED cluster consisting of four VBIEDs struck civilian and government targets in Fallujah and Ramadi. An AQI cell in Anbar was likely executing VBIED attacks during this time; however, this cell does not appear to be effectively synchronized with centrally directed VBIED waves or routinely able to construct and deploy more than one VBIED at a time. With the exception of a complex attack upon a government compound in Ramadi on January 15, 2013 involving VBIEDS, IEDS, SVESTS, and Direct Fire, none of the VBIED attacks in Anbar during Phase II incurred more than 4 casualties. Most focused upon the harder to target ISF, which may contribute to the low casualty count.

Wave 8 occurred two days later on November 29, 2012, consisting of 6 VBIEDS. AFP data also indicates that more than 250 casualties (50/200) occurred on that day. VBIEDS detonated in Mosul, Baghdad, Fallujah, Hilla, and Karbala. In contrast to previous attacks that
appear to emanate from east of the Hamrin Mountains, this small wave was west-leaning. The VBIED attacks upon Hilla and Karbala drove the casualties up, as they inflicted a combined total of 120 casualties (24/96). This attack pattern is interesting because it suggests several possible configurations of the VBIED organization at this time. It is possible that the VBIEDS in Wave 8 originated with teams gathered at a central location and then dispatched for attacks. It is also possible that the Baghdad, southern Iraq, and Anbar teams were semi-permanently or permanently deployed forward with their own VBIED construction capabilities by this time. We see evidence of this forward-deployed disposition of groups later on, and this is the first VBIED wave in which that disposition is possible. The organizational transition to multiple VBIED construction sites may therefore have occurred during Phase II.

Wave 9: 17 December 2012

An interval of 18 days separated Wave 8 from Wave 9. This interval initially appears to signal a longer recovery time, but it was interrupted by a significant mini-wave on December 16, which included a substantial strike against the PUK headquarters in Jalula, northeast of Muqdadiyah, a contested area along the Green Line. The attack upon a satellite PUK headquarters clearly represents AQI’s intent to exacerbate ethnic tensions, and it also points back to Hamrin as a principal support zone. It further demonstrates that AQI focused its targeting along the Green Line, characteristic of Phase II, through smaller VBIED clusters as well as synchronized VBIED waves.

Wave 9 consisted of 9 VBIEDs, and AQI claimed credit for this wave. Three of the VBIED attacks occurred in Baghdad, four occurred in Salah ad Din, and additional events occurred in Mosul and western Diyala. The VBIEDS in Balad and Tuz Khurmatu appeared to inflict the highest casualties. Two of the Baghdad attacks occurred to the west of the city for the first time. Three of the Salah ad Din attacks occurred in a deliberate straited pattern, with one VBIED each in Samarra, Balad, and Tikrit. The VBIED attacks along the northern arc likewise occurred at precise and distant intervals, with one VBIED each in Diyala, Tuz Khurmatu, and Mosul. It is difficult to discern a new cell configuration from this pattern, but new and highly defined targeting guidance is visible, almost as if it were drawn on a map.

December presented AQI with several new campaign opportunities. First, Iraqi President Jalal Talabani suffered a catastrophic stroke on December 17, 2012. Talabani had served as a stabilizing force to mollify ethno-sectarian strife in Iraq. His removal from Iraqi politics might have created a genuine opportunity for AQI, but Maliki seized it first. On December 20, 2012, PM Nouri al-Maliki targeted for arrest the Minister of Finance, Rafi al-Issawi, one of the four remaining Sunni national political figures. This event ignited a nationwide predominantly Sunni Arab anti-government protest movement that endures past the publication date of this report. It does not appear that AQI fully absorbed these changes operationally until January 2013, after the conclusion of pre-planned attacks upon Kurdish political targets. AQI immediately adjusted its messaging to target Sunni protesters, however.

AQI executed a small VBIED cluster on 31 December 2012, for which it claimed credit while issuing advice
to Sunni protesters to abandon Maliki’s government. This VBIED cluster dispersed over a wide area, with 5 VBIEDs striking Kirkuk, Balad Ruz, Khalis, Baghdad, and Babel. While this cluster does not meet the threshold for a full VBIED wave, it was likely coordinated at least loosely to target Shi’a populations in these locations. Targeting Shi’a communities in order to stoke sectarian violence that overwhelms the ISF and results in the further disenfranchisement of the Iraqi Arab Sunni community is a principal theme of AQi’s “Breaking the Walls” campaign, and it dominates AQi’s VBIED wave targeting in 2013. If this VBIED cluster was a reaction to current events rather than a pre-planned attack, AQi was capable of quickly shifting attacks to these specific locations, indicating the enduring presence of an active VBIED support zone in the Diyala area.

**SPECTACULAR ATTACKS: 16 JANUARY 2013**

A 30-day interval separated Wave 9 from a small cluster of four spectacular VBIED attacks on January 16. This interval stabilizes for the duration of Phases II – III. Between January 2013 and May 2013, there was consistently a 30-day interval between attacks. After May 15, the VBIED waves suddenly became much more frequent. Two of the VBIEDs on January 16 inflicted significantly high casualties. One VBIED struck a KDP motorcade near the KDP offices in Kirkuk, claiming 123 casualties (33/190). The other struck PUK offices in Tuz, claiming 45 casualties (5/40). These attacks correspond with AFP’s high casualty daily total, at 289 (49/240). They resonate as the crescendo attacks of the ethnically orientated Phase II. AQi claimed credit for both, taking care to specify that a Libyan fighter targeted the KDP headquarters, and an Iranian fighter targeted the PUK. This is a noteworthy message, indicating a desire to demonstrate use of foreign fighters to al-Qaeda core. It is likely that these fighters began in Syria, not only because the fight there has been drawing international attention from al-Qaeda, but also because the foreign fighter ratlines to Iraq ran from Damascus at the height of the Iraq War.

AQI also claimed credit for the suicide bombing on January 15 that targeted and killed MP Ifan Sa’doun al-Issawi in Anbar. In this statement, AQI celebrated the cooperation among military and security units to accomplish coordinated attacks, highlighting the careful selection of targets and the demonstrated ability to “simultaneously and in a coordinated manner, [pound] a number of strongholds.” This artifact validates several core assessments, including the organizational distinction between military elements, such as VBIED cells, and local security battalions; as well as the deliberate planning and command and control functions performed by AQI in order to synchronize VBIED attacks.

Additionally, a separate trend in VBIED attack clusters becomes visible in January 2013. Apart from the small cluster of five VBIEDs that occurred on December 31, there were four other clusters consisting of 4-5 VBIEDs each in January 2013. Each appears to have its own character and its own timing, which indicates the emergence of localized VBIED cell activity that had been indiscernible prior to this point. Furthermore, these VBIED clusters demonstrate the ability of a VBIED cell to synchronize VBIED attacks internally at a small scale. The VBIED cluster on January 5 included attacks in Karbala, Kanaan, Hilla, and Mosul. The attacks in Karbala and Hilla were likely executed by the same cell. Similarly, the aforementioned cluster on January 16 was tightly oriented upon the Green Line, with attacks on Kirkuk, Tuz Khurmatu, and Baiji. These attacks also appear to be the work of a single cell.

In a separate cluster on January 17, five VBIEDS detonated in Karbala, Babel, and Dujail. Dujail is oddly placed geographically in this cluster, but like the other attacks that day, it targeted Shi’a pilgrims. In this case, the pilgrims were en route to the Al Askari mosque in Samarra. This attack was actually a VBIED pair, and it is documented as the highest casualty event in this wave. AFP data indicates that this was a second high casualty day with 149 casualties (29/120). In still another small cluster on January 2, three VBIEDS struck in the vicinity of Baghdad. An additional southern cluster occurred on February 8, striking Kadhimiyah, Karbala, and Babel. In sum, based upon visible separate efforts, it appears that decentralized VBIED capabilities existed in the north, near Baghdad, and in the south at this time.

Comparing this decentralized pattern to the pristinely appointed configuration of Wave 7 demonstrates a core shift in the national VBIED organization. New cells likely deployed forward by this point, and the VBIED cells appeared to contain a level of planning expertise and independent access to VBIED construction sites. This new pattern may also indicate that the national VBIED planning cell went offline for a time, for one of several reasons: either because it experienced some form
of disruption; or because it was further reorganizing; or because it focused on planning future VBIED attacks in Iraq, such as the next pair of prison attacks and the rapidly approaching campaign for Baghdad; or because it was active instead on the Syria front.*

**PRISON BREAKS: 3 AND 5 FEBRUARY 2013**

Phase II also concluded with a pair of prison attacks. The attack on Kirkuk Tasfirat prison on February 3, 2013 involved an SVBIED painted as a police vehicle and three suicide bombers dressed as police. This attack was unsuccessful, but reportedly inflicted over 130 casualties. AQI claimed credit for this attack, which reportedly involved a team of Iranian, Saudi, and Tunisian fighters.† Again, foreign fighters may have arrived via Syria. The attack on Taji Tasfirat prison incurred 21 casualties. It was also unsuccessful in breaching the prison. This is the second time that Taji Tasfirat prison had been hit with a complex attack in order to free prisoners, and it was at least the third time that the installation has been targeted with VBIEDS.

The most significant aspect of these prison attacks is the application of VBIEDS as a supporting effort to a combined arms attack involving multiple functional teams within AQI. The planning cell for prison attacks likely exists at an echelon above the VBIED organization. The VBIED organization, possessing specific technical expertise, specialized requirements, and a distinctive planning signature, appears to have been tasked by a higher echelon to provide support to prison attacks. This higher headquarters likely leverages information and derives support from various specialized combat teams within AQI. The prison attacks witnessed thus far include VBIED, SVEST, IED, mortars, and small arms fire components. It also evidently recruited and dispatched foreign fighters to support the effort. Outside of support to prison attacks, the greatest incidence of combined arms attacks recorded in this dataset occurs in June and July 2013, most visibly before, during, and after the final pair of prison attacks on July 21, 2013.

IEDs, IDF, and small arms fire are likely core competencies associated with AQI’s primary maneuver units. AQI named four battalions following the attack upon an IP checkpoint north of Haditha, Anbar in March 2012, so one can assess confidently that they existed from the spring onward.33 “They are likely geographically based and fixed upon fundamental security objectives to consolidate and expand AQI’s control of territory. This study of the VBIED campaign within “Breaking the Walls” does not explore the operations of these security battalions; however, prison attacks featuring VBIEDS also feature their involvement, and the functional relationship among these units and AQI’s budding governance apparatus warrants future study.34 The terrain defended by these security battalions will become the best indicator of AQI’s physical support zones over time.

**PHASE 3: THE PUSH TO BAGHDAD**


† AQI did not describe this attack as a prison break, but rather as a successful complex attack upon a police headquarters involving VBIEDS, SVESTS, small arms, and hand grenades. “ISI Claims Suicide Bombings, Raid in Kirkuk Among 32 Claimed attacks,” SITE Intelligence Group, March 19, 2013.
This suggests that the VBIED planning effort began to direct wave operations independently of the combined arms and multi-functional force.

Waves 11 & 12: 19 & 29 March 2013

A 30-day interval separated Wave 10 from Wave 11. At least 20 VBIEDs detonated on March 19, 2013, generating the largest VBIED wave since Phase I.* AFP’s daily casualty total exceeds 232 (56/226), but reporting does not point to a particular VBIED or other attack that is chiefly responsible for the high casualties. Rather, all appeared to achieve a small number of casualties that collectively arrived at this total. AQI claimed credit for this wave, associating it as the tenth anniversary of the U.S.-led invasion of Iraq. All but three of the VBIEDS in Wave 11 were placed in Baghdad. Within Baghdad, attacks occurred across a wide array of neighborhoods, appearing to distract ISF attention from any one neighborhood by striking a maximum number of independent sites. The VBIED attacks in Baghdad formed three clusters along the north, southwest, and southeast of the city. Once again, the geographic spread indicates that multiple VBIED cells acted in unison to project attacks into Baghdad from different points of origin in the Baghdad belts. Two of the attacks outside of Baghdad detonated south of the city in Iskandriyah and Mussayab. These attacks may have been launched from a cell in Mahmudiya that projected into Baghdad’s southwest quarter. Another VBIED occurred in Baiji, north of Tikrit, and it may be attributed to another cell operating farther north. This wave was followed by a small cluster of five VBIEDS which detonated across Baghdad on the following day, March 20, 2013.

* Five of the 20 VBIEDS were interdicted by ISF. Other explosive events also appeared to spike on March 19, 2013.
that day (22/110) according to AFP’s daily count.* All of them targeted Shi’a mosques on a Friday, which accounts for the very high casualties. All but one VBIED were located in Baghdad, in the neighborhoods of Zafaraniya, Qahira, Binook, Jihad, and Talabiya. The last mosque VBIED detonated in southern Kirkuk. These are not the only VBIEDS or explosive attacks to target Shi’a mosques during “Breaking the Walls,” but it is the single most deliberate sectarian strike within the campaign. Wave 12 is also the first full VBIED wave to occur on a Friday, indicating that AQI deliberately planned this wave in order to maximize effects to stoke sectarian violence.

Wave 13: 15 April 2013

A 27-day interval separated Wave 12 from Wave 13. Wave 13 consisted of at least 16 VBIEDS, corresponding to the highest daily casualty count since September 2012 according to the AFP data. Nine of the VBIEDS detonated in Baghdad, which represents a significant reduction in number from Wave 11. The others occurred along the northern arc tracing the Green Line, as well as in Fallujah. This suggests that various surge elements participating in Baghdad during Wave 11 resumed normal operations outside of Baghdad during Wave 13. Additionally, a single report that the ISF interdicted a team that was building a VBIED in Samarra raises the possibility that additional cells were forming and embedding themselves into new forward locations during this time.34

The VBIEDS along the Green Line are occurred in Tuz
Khurmatu, northern Baquba, and Kirkuk, suggesting once again that the VBIED cell had greater freedom of movement and ability to stage attacks in that area. Because the ISF conducted operations into this area in early June 2013, AQI and possibly other violent actors, such as JRTN, had established a strong and detectable presence in the area.35

Attacks into the northern quadrant of Baghdad appear to have paused during this wave, an important anomaly that indicates that the northern VBIED cell near Baghdad was disrupted in some way or that missioned elsewhere during this wave. One can deduce the cell’s absence because the Baghdad attack waves normally occur in distinct and repeatable geographic clusters to the north, southeast, and southwest of the city. Sadr City still sustained an attack, which may indicate that this key Shi’a neighborhood was approached from the south, since that neighborhood falls within reach of the Jisr Diyala cell. The Sadr City VBIED in this wave inflicted the greatest recorded casualties among the set. Another VBIED in this wave targeted Shi’a MP Bahaa al-Araji on Route Irish near Abbas Ibn Firnas Square in western Baghdad.36 VBIEDS are not typically used to conduct assassinations as part of the VBIED waves observed in this study, and the anomaly stands as a reminder that AQI’s operational planning also consists of determining how in particular the VBIEDS are used.

VBIEDs persisted in Baghdad after this wave over the course of the following several days. One targeted Iraqi Police in Tarmiyah on April 16 and April 24, supporting a theory that Tarmiyah is a possible launch site for the northern Baghdad cell. Two VBIED attacks occurred in Abu Ghraib on April 17, the first time this location appears in the data set. Given the retrospective insight that Abu Ghraib prison would be attacked on July 21, 2013, this early VBIED clustering provides an early indication of potential pre-conditions. One struck government offices, and another struck an IA patrol, killing 8 Iraqi soldiers. Shortly thereafter, four VBIEDS struck police and Sahwa targets in Fallujah and Ramadi on May 1, 2013, the most cohesive attack upon targets in Anbar in this dataset.

Wave 14: 15 May 2013

A 30-day interval separated Wave 13 from Wave 14. Wave 14 consisted of at least 12 VBIEDS. Nine of the VBIEDS detonated in Baghdad, one detonated in Tarmiyah, and two detonated in Kirkuk. Two of the Baghdad VBIEDS struck in Khadimiyah, where the ISF reportedly interdicted two additional VBIEDS. This is the first in a series of successive VBIED strikes focused upon Khadimiyah in May 2013. Khadimiyah is the site of a premier Shi’a shrine in Baghdad and constitutes key political terrain for the competitive array of Shi’a political and militant factions.37 It had during various phases of the Iraq war represented a sectarian battleground, as Sunnis displaced and Shi’a communities consolidated. It was a premier VBIED target to stoke the revival of Shi’a militias in early 2013.

Asai’b ahl al-Haq (AAH), an Iranian-backed militant offshoot of Muqtada al-Sadr’s Jaysh al-Mahdi (JAM), established political offices in Khadimiyah in June 2012.38 This neighborhood has since reemerged a battleground for intra-Shi’a political competition, which has also turned violent as Shi’a militias mobilize further. On June 2, 2013, AAH elements opened fire on Sadrist key leader Hazem al-Araji, killing a member of
his party. Another event shows that AAH had resumed an armed presence in Khadimiyah by early June. Another sign of AAH’s 2013 re-mobilization was a political rally held near Sadr City on May 4. This event pre-dated Wave 14, but it likely occurred in response to the previous three months of focused VBIED attacks upon Shi’a communities across Baghdad as well as the overt mobilization of Shi’a militant groups for the fight in Syria as Hezbollah’s participation in the siege of al-Qusayr intensified. Meanwhile, ISF launched operations on May 16 to pursue AQI in western Anbar in response to AQI’s May 4 assault upon an ISF convoy carrying a platoon of Syrian regime forces that had fled into Iraq via the Rabiya border crossing in order to escape Syrian rebels. AQI claimed credit for this attack, which killed 48. These operations mobilized elements of Maliki’s new Al-Jazeera and Al-Badia Operations Command, the JBOC, created in February 2013. Despite AQI’s demonstrated security presence in the Jazeera, the ISF chose a poor time to prioritize securing remote areas while Baghdad’s security rapidly deteriorated.

The VBIED wave on May 15, 2013 marked the transition between Phase 3 and Phase 4, generally following the pattern of the Phase III attacks.

**PHASE 4: THE AQI SURGE**

*Wave 15: 20 May 2013*

The VBIED trend in Baghdad dramatically escalated the following week and has not abated as of September 2013. A 5-day interval separated Wave 14 from Wave 15. Wave 15 consisted of 17 VBIEDs. Three discrete and localized efforts were synchronized in this wave, pointing to VBIED cells in Baghdad, along the northern zone, and during this wave in Salah ad Din. Seven VBIEDS detonated in neighborhoods across Baghdad, Kadhimiyah among them, clustering in the same three sectors of Baghdad observed in prior waves. The attacks in Baghdad all fell along the outskirts of the city in close proximity to sites that had been struck in the weeks prior. Four of the VBIEDS detonated in towns in Salah ad Din province, including Balad, Samarra, Tikrit, and Baiji, suggesting the presence of an additional cell in the area, whether temporarily or permanently. One of the VBIEDS in Balad reportedly targeted a bus full of Iranian pilgrims travelling to the Shrine of Imam Mohammed. Four more VBIEDS detonated in the south, in Basra and Hilla in Babel province. An additional VBIED in Wasit was dismantled prior to detonation. The VBIED in Babel province targeted the Shi’a Wardiya mosque and inflicted high casualties. The southern wave points to the establishment of a new southern front, with a cell operating out of Iskandariyah, Mussayib, or Salman Pak.

*Wave 16: 27 May 2013*

A 7-day interval separated Wave 15 from Wave 16. Wave 16 consisted of 16 VBIEDS. 15 of the VBIEDS detonated in Baghdad, and one detonated in Mada’en, just to its southeast. Kadhimiyah was struck for the third week in a row, elevating the stakes for Shi’ a militant revival. AFP data indicates that there were 245 casualties (58/187) in Iraq that day. This wave targeted the same neighborhoods that were struck the two weeks prior and additionally hit targets in Sadoun and Sadr City.
Waves 14, 15, and 16 occurred in rapid succession, suggesting that the planning and preparation for subsequent waves began before the preceding wave concluded. This begins to form an image of a VBIED cell with subordinate teams that can alternately plan and attack in successive waves, one firing while the other reloads. This hypothesis is supported by the observation that not all of the teams operating in Baghdad attacked as part of Wave 15; it appears that many more attacked in Wave 16. This further signifies that the VBIED cells in Baghdad had not only become large enough to support alternating teams, but had also each acquired logistical and engineering support to generate at least 5 VBIEDS a week for many weeks. This cellular formation would easily permit the integration of new teams in training, which had likely become a sustained effort by this point in the VBIED campaign.

There also appear to be heavy follow-on VBIED attacks in Baghdad on May 28 and May. There were sustained attacks in Baghdad every day from May 27 - 30. The number of daily VBIED attacks is an important threshold by which to compare present and historic trends; in February 2007, Baghdad was struck with an average of three VBIEDS a day. Additionally, a VBIED targeting the Samarra Mosque detonated on May 25, 2013. The Samarra Mosque bombing in February 2006 had been the principal incendiary attack that mobilized the Shi’a militias in Iraq to cleanse Sunni areas.

Wave 17: 30 May 2013

A 3-day interval separated Wave 16 from Wave 17. Wave 17 consisted of 10 VBIEDS, six of which detonated in Baghdad, two in Mosul, one in Kirkuk, and one in Ramadi. AFP data indicates a daily casualty total of 131 (35 KIA/96 WIA), which is lower than the other waves in Phase IV. The Baghdad events occurred in the neighborhoods of Sadr City, Binoq, Karrada, Bayaa, Maghrib, and immediately south of Baghdad.

This wave is most significant because it is the second VBIED wave within a week in Baghdad, which would appear to double the frequency of attacks. However, because no VBIED wave occurred the following week, it appears instead that this wave was essentially an aberration. All three Baghdad cells would normally have conducted this wave on the following Monday, but it was likely accelerated, perhaps to test the organization’s capabilities. It did not occur again in Baghdad during “Breaking the Walls.”

The appearance of Mosul in Phase IV is important to note, because it persists for several weeks after this wave. VBIEDS in this Mosul cluster targeted ISF and likely reflect AQI’s intention to deter Sunni Arab voter turnout. The single VBIED event in Ramadi confirms that the cell there was operating at a different pace, but was perhaps responsive to tasking by the VBIED planning team in this instance. The ISF operations into western Anbar and the Jazeera that started on May 16 evidently did not disturb the VBIED activity in Ramadi.

Waves 18 & 19: 7 & 10 June 2013

A 9-day interval separated Wave 17 from Wave 18. Wave 18 was a coherent SVBIED wave on June 7, with six SVBIEDS detonating in Ramadi, Muqdadiyah, Alharoniyah northeast of Baquba, and Baghdad and another non-descript VBIED in Taji. This mini-wave departs even further from the pattern, with only one
attack in Baghdad. In fact, it suggests an independent and event-driven SVBIED operation coordinated outside of Baghdad. This is the first time in the dataset that multiple SVBIEDS were recorded in one day. It is possible that SVBIEDS were more regular prior to this wave and simply underreported as such.

The following attack on Monday, June 10 also occurred outside of Baghdad, nearly uniformly in the north. Wave 19 consisted of 9 VBIEDS and a number of additional explosive events. AFP documents 330 casualties (78/252) that day. VBIEDS detonated in Mosul, Tuz Khurmatu, and Dibis in Kirkuk province. Additionally, another cluster of SVBIEDS occurred in Kirkuk, Mosul, Tanak west of Mosul, and Madaen southeast of Baghdad. The colocation of the VBIED and SVBIED attacks in Mosul and Kirkuk negate the theory of a separate SVBIED cell in either location.

Whether SVBIEDS are conducted by normal VBIED cells or developed separately is an important question. SVBIEDS are not just VBIEDS with suicide bombers to drive them; they are fundamentally different technical operations involving redundant triggers and more sophisticated support teams. Regardless of whether June 2013 signified an uptick in SVBIED activity or just in SVBIED reporting, it is important to note that the June 7 and June 10 waves involved clusters of SVBIEDS. If it is a genuine increase in SVBIED activity, it may signify that foreign fighters were again routing to Iraq, possibly from Syria.

VBIED and SVBIED attacks in Mosul began to increase significantly at the beginning of June 2013. A number of singleton VBIED attacks are noted in the dataset across several sectors of Mosul. Rescheduled provincial elections in Ninewa and the political vulnerability of leading Arab Sunni politicians such as Osama al-Nujaifi may have drawn particular attention from AQI. The
attacks mostly targeted ISF, which might undermine the incumbent provincial council.

Wave 20: 16 June 2013

A 5-day interval separated Wave 19 from Wave 20. Wave 20 consisted of 10 VBIEDS and 4 other explosive events. AFP indicates a daily total of 188 casualties (33/135) that day. With the exception of one VBIED which detonated south of Mosul, all of the VBIEDS in this wave occurred in southern Iraq. They also occurred in pairs: two VBIEDS detonated in Basra; two VBIEDS detonated in Nasiriya; and two VBIEDS detonated in Kut. Additionally, single VBIEDS detonated in Najaf, Mahmadiyah, Madain, and Mosul. This wave confirms that there was a VBIED cell by this time dedicated to attacks in southern Iraq. It also appears that one or both of the southern Baghdad cells supported this wave, which involved no attacks in Baghdad proper.

Focusing on southern Iraq during this wave reflects AQI’s deliberate intent to target pilgrims during the Shabaniyah festival at Karabala on June 25, 2013. ISF took extensive precautions to protect civilians ahead of this event. Attacks did not occur in Baghdad and Karabala, which may indicate ISF defenses were successful. Similarly, as ISF reportedly seized an AQI camp northwest of Kirkuk in Dibis district on June 19, it is possible that a portion of the northern VBIED network was also disrupted at this time. The ISF remained in Anbar after operations in the western desert through provincial elections on June 20, perhaps causing similar disruption. Apparent ISF gains began to deteriorate within a month, however. Two VBIEDS struck Dibis and another Tuz on July 11, the same day that another pair of VBIEDS struck Ramadi and Falluja. The VBIED in Ramadi was a suicide attack. Tuz was the biggest blast in this wave, killing over 30 Iraqi Police and destroying 12 houses. The Dibis VBIEDS wounded 10.

A series of SVVEST attacks also occurred June 16-19. The first detonated in an internet café in Amin, Baghdad. The following day, an SVVEST targeted a police station near a polling center in Falluja. This event preceded provincial elections in Anbar, rescheduled for June 20, 2013. On June 18, an SVVEST targeted a mosque in the al-Qahira neighborhood of Baghdad, with a total of 87 casualties (30 KIA/57 WIA). The fourth was a targeted assassination of Sheikh Younis al-Rammah in Mosul. The combined increase in SVBIED and SVVEST attacks observed in June points to the increasing integration of foreign fighters into AQI’s operations on the Iraq front. Foreign fighters were historically designated for suicide operations in Iraq by al-Qaeda in 2006. Based upon this precedent, foreign fighters may be viewed as national-level assets that must be organized in transit and dispatched to the field by a central command. Their increasing presence highlights the human resource role of the AQI military command structure.

Meanwhile, Sahwa in Diyala threatened a collective resignation due to irregular salary payments on June 20, 2013. The salary payments were likely not the issue, as Sahwa withdrawal is a prime indicator of AQI intimidation. Another indicator is the targeting of high-value Sahwa leaders, which had already occurred in Khaneqin on June 7 with the attempted assassination of Sheikh Ahmed al-Karkoshi, the mayor of Saadiya district. Diyala had not been struck with VBIEDS since April 15, 2013, which viewed in light of these other indicators suggests that AQI had developed a strong
Dijla Operations Command arrested Khalen Mafraji, leader of the anti-government protest sit-in in Kirkuk on June 21, 2013. AQI executed two VBIED attacks on June 23 in Tuz Khurmatu and central Kirkuk that might have intended to exacerbate the protest movement’s opposition to the ISF, evident since the clash that occurred within the protest sit-in near Hawija on April 23, 2013. The VBIED in Tuz Khurmatu incurred 50 casualties (19 KIA/21 WIA).

Additionally, AQI executed singleton VBIEDs in Anbar province on June 22-23, in Saqlawiyah north of Fallujah and Qaim. Both attacks targeted ISF. In Saqlawiyah, an SVBIED targeted a police checkpoint, and then additional forces reportedly bombarded the checkpoint with mortars and light weapons for one hour. The VBIED in Qaim targeted an Iraqi Army convoy. This attack aligns with the launch of ISF operations on June 22 into Rawa, Anbar to track down those responsible for an IED blast on Rawa bridge the day prior.

Wave 22: 2 July 2013

An 8-day interval separated Wave 21 from Wave 22. Wave 22 consisted of 14 VBIEDs that fell into three regional clusters: Baghdad, Ninewa, and southern Iraq. The wave occurred on a Tuesday, which is off-cycle from the typical Sunday/Monday weekly attack pattern that typified Phase IV. In Baghdad, eight VBIEDs detonated in neighborhoods across the city, including some atypical locales on the western side of the city, such as Shula and Hurriyah. Otherwise, the neighborhoods commonly struck were unfailingly struck again, in Kamaliya, Shaab, and southern Baghdad. AFP recorded a daily casualty total of 293 (57 KIA/236 WIA), which is a fairly high casualty rate for a smaller wave.

Three VBIEDs also detonated in Muthanna, Maysan, and Basra provinces in southern Iraq. Muthanna and Maysan were not often struck throughout the campaign. The Muthanna VBIED inflicted more casualties than the rest, but not by much. Generally, each VBIED achieved 30 total casualties. This string of very effective VBIEDs suggests that the same teams that had conducted prior waves in the south were also responsible for these attacks. Two SVBIEDs were also intercepted in Ninewa, one south of Mosul and another near Tel Afar. The SVBIED in Tel Afar reportedly involved a tank.

The new targets and off-cycle hits do not necessarily signify a shift in targeting strategy; rather, they suggest

Wave 21: 24 June 2013

An 8-day interval separated Wave 20 from Wave 21. Wave 21 consisted of 10 VBIEDs. One VBIED detonated in Mosul, another in Kirkuk, and the remainder detonated in Baghdad. The VBIEDs in Baghdad resumed their normal distribution, indicating the involvement of three cells projecting into Baghdad from the north, southeast, and southwest. AFP recorded a daily casualty total of 183 (35 KIA/148 WIA). This wave signifies the reengagement of the Baghdad cells on their primary target set. AQI’s operations in Baghdad appeared to have paused for the three weeks prior in June 2013. Meanwhile in Kirkuk, the 12th Iraqi Division under the presence in northern Diyala well beforehand. Indeed, the Dijla Operations Command conducted operations into Hamrin from June 11-22, further demonstrating that AQI is exerting control over this terrain.
either displacement from normal attack zones by ISF, attempts to broaden the attack zone ahead of Ramadan, or shaping operations to prepare for impending attacks. Ramadan began one week later on July 8, 2013. AQI’s operations ahead of Ramadan tended to be more deliberate, as we saw at the genesis of the “Breaking the Walls” campaign.

There were also two SVESTS on July 1 in Diyala, one in Baquba and another in Muqdadiyah. These operations validate the observation at AQI had purposefully shifted VBIED attacks away from the Diyala river valley. It is possible that ISF operations, Sahwa activities, and local law enforcement applied enough pressure to reduce VBIED operations, which has historically resulted in a surge in SVEST activity. However, because Muqdadiyah has higher value as a C2 node, and because indicators of intra-tribal rivalry and population displacement were occurring in the area, it is more likely that the decline in VBIED activity since April 2013 indicates the reconsolidation of AQI’s stronghold in northern Diyala.

Wave 23: 14 July 2013

A 12-day interval separated Wave 22 from Wave 23. This interval is almost double that of the previous 8 VBIED waves. Wave 23 only consisted of 9 VBIEDS, all of them oriented on southern Iraq. This suggests that the Baghdad VBIED cells were out of play for the third consecutive week. This tidal ebb at the beginning of Ramadan signals an imminent and large attack. Given the retrospective insight that AQI would conduct a dual prison attack on July 21, it is worthwhile validating this observation and assessing whether the Baghdad cells stood down in order to prepare for the capstone operation the following week. VBIEDS detonated in Basra, Karbala, Kut, Suwayra, Jabala, and Nasiriya, which may have exceeded the lethal capability of the southern VBIED cell. This was only the third time in a year that Nasiriya had been struck.
with a VBIED, but as it also occurred the week prior, it generated a more direct response by the ISF, which announced the capture of the cell responsible for the Nasiriya VBIEDS on July 22, 2013.69 One can conclude, therefore, that the cell in Nasiriya was not a displaced Baghdad cell.

In the meantime, a number of singleton VBIEDS detonated in early July in Mosul. On July 3, one VBIED and two SVBIEDS detonated in Mosul. On July 10, an SVBIED detonated in southern Mosul. This trend of intermittent Mosul VBIEDS continued into the final VBIED wave of the “Breaking the Walls” campaign on July 20 which otherwise struck only in Baghdad. The June 20 VBIED targeted an IA convoy east of Mosul and appears disconnected from the rest of the set, which was focused on the prison attacks. One can conclude from this pattern that the cell acting upon Mosul was operating on an independent program and in response to different stimuli.

A rise in reported SVEST attacks also occurred at the beginning of Ramadan. SVESTS detonated in Muqdadiyah on July 11; in Mussayab on July 14; in Mosul on July 15; again in Mosul on July 17; and on July 19 in Muqdadiyah, Mosul, and Hilla.

Wave 24: 20 July 2013 & Twin Prison Attacks

A 6-day interval separated Wave 23 from the final wave, Wave 24. Wave 24 consisted of 9 VBIEDS, all of which struck targets in east and west Baghdad, principally in the same places previously observed. But the attacks largely avoided the northern zone of the city. This omission likely indicates that the northern Baghdad VBIED cell engaged in the Abu Ghraib or Taji prison attacks, though there may also have been VBIED cells in Anbar and Salah ad Din in close proximity that could have supported those events. The VBIED wave on July 20 may reasonably be assessed to complement the prison breaks on July 21. First, they inflicted a heavy total casualty count. Second, they occurred on a Saturday, which is atypical for the Phase IV pattern. The VBIED wave was likely choreographed as a diversion from the twin prison breaks upon Abu Ghraib and Taji prisons, which would occur the following night.

On Sunday evening, July 21, 2013, AQI attacked the hardened facilities at Abu Ghraib and Taji prisons with combined arms tactics.70 The perimeter at Abu Ghraib was breached by VBIEDS,70 assaulted by AQI’s ground battalions bearing small arms and mortars,72 interior-breached by SVESTS, and reinforced by synchronous riots inside the prison.70 ISF returned fire into the morning, killing an unknown number of AQI fighters and 71 prisoners and incurring 68 casualties of their own.71 Despite their efforts, over 500 prisoners escaped Abu Ghraib that night.73

An estimated 12 VBIEDS were used between the two prisons, Abu Ghraib and Taji.74 The perimeter at Taji was

* Several reports indicate that the prisoners inside Abu Ghraib were in contact with the AQI organization on the outside prior to the attack. Suadad al-Salhy, “Insight- Iraq security forces outmatched as ‘open war’ returns,” Reuters, July 30, 2013, available online at http://uk.reuters.com/article/2013/07/30/uk-iraq-security-jailbreak-insight-idUKBRE96T0X420130730.
† AFP indicates a combined daily casualty total covering July 21–22 of 214 (95 KIA/ 119 WIA).
PHASES OF THE ‘BREAKING THE WALLS’ CAMPAIGN

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This graphic showcases the different character of the VBIED operation throughout the four phases. Waves 1 and 3 include very high volume VBIED waves at long and regular intervals. Waves 2 and 4 involve rapid fire attacks oriented on specific key terrain. While VBIEDs outside of waves occurred throughout the set, they became much more frequent over time, such that there are very few days without documented VBIEDs as of August 2013. This data visualization is sensitive to VBIED reporting behaviors. Apparent gaps in VBIED activity on this graph may be due to reporting anomalies. Multiple VBIEDs striking on the same day are reported with high confidence.

not breached, and no prisoners escaped, though some sources indicate that more VBIEDs were used there than at Abu Ghraib. The total number of VBIEDs implies that more than one VBIED cell supported the Abu Ghraib and Taji operations, very likely a total of three cells. The operation obviously required coordination of subordinate cells by the central VBIED planning cell. This is particularly true, given the assessment that two additional cells perpetrated the VBIED wave on July 20, 2013.

Most importantly, the operation demonstrates the necessary presence of the force-level planning cell, which tasked VBIEDs to support a complex, specialized, and atypical operation. The Abu Ghraib prison attack was a full-fledged military operation, conducted by an organization that had reconstituted as a military force rather than as a militant network. Moreover, it was a planned operation orchestrated to conclude the year-long “Breaking the Walls” campaign and free the prisoners who could provide cadre to the AQ organization.

CONCLUSION

Taking inventory of VBIED attacks in this way enables a tactical review of AQI’s application of available combat power to maximize the effects of planned attacks. At an operational level, it is necessary to evaluate the planning thought process behind the attacks that have been documented over the 2012-2013 period. VBIED waves are not an environmental condition, nor a disorganized and frenzied attack phenomenon, but a highly organized and meticulously planned military operation with forensic signatures that can be tracked.

Part I of this report places this observation in the context of AQI’s expressed strategic goal to establish a transnational caliphate in Iraq and Syria. Part I also explores the possibility that the tactical footprint of AQI in Iraq relates directly to its operations in Syria.

Within Iraq, it is possible to use this material in order to track, observe, and counter AQI’s national VBIED campaign. Destroying the VBIED organization will not destroy AQI’s military capability in Iraq or Syria.
but it may provide vital opportunities for the Iraqi government to consolidate its forces and overturn AQI’s present operational momentum. The location of VBIED construction sites, the method of communication from the national VBIED organization to VBIED cells, and AQI’s steady explosives supply chain are critical requirements that may be targeted to great effect. Targeting the military headquarters of the VBIED command that generates plans for VBIED waves will not degrade independent VBIED cell activity at this point, but it may degrade access to suicide bombers, finance, and other resources. It may also be measured in the disruption of the VBIED wave phenomenon. It is advisable for Iraqi Security Forces first to protect Baghdad by clearing possible VBIED construction sites in the Baghdad belts north and south of the city.

It is also possible to evaluate future VBIED waves by comparing them to those observed in 2012-2013 to determine if the frequency or lethality is increasing, if the targeting strategy or geography apparently shifts, or if the patterns described in this study shift in other ways. August and September 2013 have witnessed the continuation of VBIED waves as well as the introduction of VBIED attacks against critical infrastructure, such as the Um Qasr port facility, as described in Part I. Part I expresses the requirement to determine what new operational objectives AQI has identified for its new campaign, the “Soldiers’ Harvest.” While this campaign may not be principally defined by VBIED waves and prison attacks, as the “Breaking the Walls” campaign is assessed to have been, it will clearly continue to involve AQI’s weapon of choice as a means to maintain the initiative against the ISF and to stoke sectarian violence. It may become apparent that AQI’s efforts to establish territorial control in parts of northern and central Iraq diverge from the VBIED trend, such that AQI’s efforts to displace populations occur in different regions from those where they conduct VBIED attacks. It is important to recognize that the VBIED campaign directly supports this effort to control ground, and by continuing VBIED attacks, AQI’s opportunity to establish control of terrain increases.

This conclusion points back to the assessment of a force-level military command that incorporates VBIEDs into a broader military strategy. It may become visible over the course of further study that the VBIED command in Iraq is tasked at times to support VBIED attacks and combined arms attacks in Syria, both of which have been observed and referenced in Part I. VBIEDS have been observed in Syria since December 2011. It may also become apparent that the Iraq VBIED waves of 2012-2013 correspond to events in Syria as well as Iraq, and that the mutual rear support provided to AQI by its presence in both countries directly enabled the exponential growth of the VBIED supply chain observed in 2012-2013.

How AQI is fighting in Iraq provides critical insight into what capabilities it may yet bring to bear in Syria. Three of the signature capabilities that now are hallmarks of AQI’s contemporary military force include deployable VBIEDS; combined arms attacks; and VBIED waves. While deployable VBIEDS and combined arms attacks involving VBIEDS have been observed in Syria, VBIED waves have not yet been documented, though this is another subject for further study. VBIED waves are not expected to present themselves to the same degree in Syria for several reasons. First, the principal objective of the 2012-2013 VBIED campaign in Iraq was to stoke sectarian violence by targeting vulnerable Shi’a civilians who were otherwise living in peace. In Syria, Alawite and Christian communities have long been actively engaged in a civil war and therefore targeted by other means. In this wartime context, al-Qaeda affiliated groups are optimizing their VBIED firepower by focusing upon regime military and government targets. Second, the conflict in Syria already has a sectarian dimension and therefore al-Qaeda groups do not need to stoke it in order to create space for the kinds of chaos and authority vacuums on which they customarily capitalize. Rather, the loss of regime control especially in the northern and eastern provinces has allowed al-Qaeda groups to enter existing vacuums. Consequently, AQI has attempted to establish governance in rebel held areas of northern Syria, sponsoring social services and expressing its vision for the Islamic State in Iraq and Sham in more palatable terms. VBIED waves would be counter-productive to this messaging and governance strategy.

AQI is unmistakably brutal, and its influence and control within rebel-held zones is challenged, not only by Syrian opposition elements, but also potentially by Jabhat al-Nusra, the Syrian al-Qaeda affiliate. Miscalculations in the use of vicious tactics like population-focused VBIEDS have the potential to alienate AQI from the Syrian opposition and thus erode their opportunity to control terrain and
populations. However, if AQI perceives that it is losing influence with the population to competing groups, AQI may attempt to reverse these developments through VBIED waves comparable to those observed in Iraq. The application of VBIED waves, either against pro-regime minority elements or against anti-regime or neutral populations, would undercut the legitimacy of the moderate opposition and maintain conditions of violence that enhance AQI’s position. AQI may begin to consider this requirement after the latest formation of an alliance among influential rebel groups on September 25, 2013, which may be viewed as an attempt by opposition groups to limit AQI’s potential to establish control near Aleppo.77

This forecast leads to an important final conclusion about the operational utility of VBIED waves. VBIED waves are designed to start a war. If necessary during war, they have the potential to separate the population from the insurgency. The Assad regime’s population-centric counterinsurgency strategy, typified by its year-long aerial bombardment campaign against the Syrian population, has generally driven the wedge between the population and the government. In this context, AQI’s potential to use terrorism against the population generates a grave hypothetical issue for the Syrian opposition. The most dangerous scenario for the U.S. in Syria is for the Syrian moderate opposition to face two enemies both bent on alienating them from the Syrian population. If Assad continues his aerial bombardment campaign, and if AQI concurrently launches VBIED waves against any population in Syria, they will collectively decimate the moderate opposition and strengthen each other as opposing forces in the process. The fact that AQI has not yet done so suggests that they are not threatened enough by the moderate opposition to resort to VBIED waves in Syria. In order to maintain the possibility that relatively moderate forces will prevail in Syria, it is necessary to preclude AQI’s ability to target the population.

It is therefore vital to the prosecution of a U.S. strategy for Syria to understand AQI’s VBIED tactics and organization in Iraq, from which the organization may launch VBIEDS into Syria. AQI will use VBIEDS to cultivate a protracted war because this condition is essential to its growth as a military organization protecting an emerging al-Qaeda emirate. AQI adds capacity to the broader al-Qaeda network in the process. The VBIED command is a strategic-level asset within AQI’s military, but it can be defeated tactically by targeting VBIED construction sites and command and control nodes in Iraq. This is extremely difficult because AQI now likely has many such sites and can shift to new locations when pursued. The U.S. military has, however, succeeded in this mission before. Destroying AQI’s VBIED capability presently rests squarely on the shoulders of the Iraqi Security Forces, whose recent desert operations and urban search and raid operations have failed to achieve this effect. It is imperative for U.S. national security objectives in Iraq, Syria, and in its counter-terrorism campaign to advise and assist the Iraqi Security Forces in this effort with precise information and oversight. The Maliki government is proceeding with mass arrests and Shi’a militias are mobilizing. The United States has only a narrow window to provide precise assistance to and leverage the Iraqi Security Forces before the security problem becomes one not only of destroying VBIED factories, but also managing the instability generated by the spiraling escalation and interaction of Iranian-backed Shi’a militias and AQI. Otherwise, the United States will lose permanently the gains it made in Iraq in 2007, and Iraq will become a front in an increasingly regional conflict.
Detecting AQI’s Signature

Estimating the combat power and organizational culture of secret organizations such as al-Qaeda in Iraq (AQI) may be approached through detailed analysis of the attacks they perpetrate. This study considers the violent events in Iraq that are documented in unclassified sources for what they indicate about AQI’s renewed organizational capacity. Closely examining the public record of violent events, particularly the use of “spectacular attacks” in Iraq in 2012-2013, enables us to draw conclusions about AQI’s broader operations.

AQI executed a wide array of attack types from July 2012 to July 2013 during the “Breaking the Walls” campaign. These attack types include small arms fire, indirect fire (IDF) via mortars and rocket-propelled grenades (RPG), improvised explosive devices (IED), suicide bombers (SVEST), vehicle-borne improvised explosive devices (VBIED), and a subset, suicide vehicle-borne improvised explosive devices (SVBIED). VBIEDs are the most complex attack type within this set, characterized by the rewiring of a vehicle into a traveling high-yield bomb rather than the placement of an explosive parcel within or outside of a vehicle. All of these attack types were used for combined arms effects during the July 2013 Abu Ghraib and Taji prison attacks, and all of them appeared in dispersed fashion across Iraq throughout the course of the previous year.

A blanket study of attacks in Iraq is difficult because violent events are habitually underreported. Attribution is another challenge, as AQI was not the only group conducting attacks in Iraq during this time period. Other groups operating in Iraq today include Ansar al-Islam, Shi’a militias, and very likely Jaysh Rijal al-Tariqah al-Naqshabandia (JRTN), a Ba’athist militant organization. All of these organizations are known to use small arms, IDF, and IEDs, and in some cases they are also suspected of suicide attacks and car-borne explosions.

Violent events in certain locales, furthermore, might be attributed to popular uprising rather than AQI. This becomes a legitimate consideration in light of the anti-government protest movement, which began in December 2012 after Prime Minister Nouri al-Maliki attempted to arrest Rafia al-Issawi, a leading Sunni national political figure. The protest movement continued at least through September 2013, when this report was published. As more violent actors take up arms in Iraq, attack patterns of established groups become obfuscated, as the groups begin to overlap and react to one another. Nevertheless, it is possible to isolate coherent attack signatures for AQI within the available data. This study will focus specifically upon one of AQI’s classic signatures, waves of vehicle-borne explosive improvised devices (VBIED). The VBIED waves of the “Breaking the Walls” campaign are identified and characterized in Part II of this report. Once attributed, these attacks may be used to evaluate AQI’s operational capacity, depth, and targeting strategy.

Spotting VBIED Waves

VBIEDs constitute the most useful AQI fingerprint for several reasons. First, VBIEDs are generally the most lethal attack type, and therefore the most consistently reported publically. Second, VBIEDs are the most complex attack type, which best illustrates the full capacity of AQI’s supply chain. Third, VBIEDs have historically been assessed as AQI’s signature attack type.

Although it is likely that AQI bears sole responsibility for all VBIEDs in Iraq, it is worthwhile to challenge and re-prove this assessment, particularly given that Ansar al-Islam, another Salafist group, claimed credit for SVBIED attacks in Iraq over the course of 2012. Although VBIED attacks are a core competency for AQI, other groups can adopt this technique, VBIED identification from public sources involves a qualitative assessment of each incident and the context in which it occurred. Not all attacks that are reported in news media as “car bombs” are technically VBIEDs. For example, an Adhesive Explosive Device (AED), or sticky bomb, is not a VBIED, but an assassination technique designed to target the occupants of a vehicle. A genuine car bomb, likewise, is a bomb that is placed in a vehicle in order to target the occupants. By contrast, even though they are often reported as car bombs, VBIEDs direct explosive power externally, usually to inflict mass casualties or significant structural damage. This requires thoughtful design, which is why VBIEDs are characterized as a highly technical operation.
and therefore each VBIED attack by itself is only a moderate signal that AQI is responsible.

A stronger signal emerges in the detection of multiple coordinated VBIED attacks. AQI’s signature massing of VBIEDs over the course of the “Breaking the Walls” campaign will be referred to here as a “VBIED wave,” and defined for the purposes of this study as the detonation of six or more VBIEDs on a given day in Iraq. AQI has claimed credit for several such VBIED waves since the launch of the campaign, beginning with a wave of 30 VBIEDs that detonated on July 23, 2012, just two days after the announcement of the “Breaking the Walls” campaign.58

This study will examine the “Breaking the Walls” campaign in detail, particularly the VBIED waves that characterize this campaign. These waves can be broken down for the purposes of analysis into four “Phases” of the campaign. These phases were not announced, but rather assessed by observing qualitative and quantitative differences in attack patterns over time. The waves of VBIED attacks across these phases will be evaluated for their geographic spread, target selection, overall volume, and lethality. The VBIED waves will be considered in the context of individual VBIEDs that occurred outside of the 24 VBIED waves as well as other explosive events, such as IEDs and SVESTS, in order to refine an overall characterization of their complementary use by AQI. Part I of this report will address these waves in aggregate to describe phase changes that illustrate organizational growth within AQI, and a detailed examination of the individual waves is available in Part II.

In order to estimate lethality, the volume of the VBIED waves will be compared to daily casualty records maintained by Agence France-Presse (AFP).59 AFP data provides a conservative and specific estimate for casualties, and as compared to other casualty data sets, represents a cautious minimum bound. The AFP dataset begins to provide daily casualty records from violent events in August 2012. Casualty insights prior to this date will be drawn from Iraq Body Count database, whose records begin in 2003.60 The principal data set for the violent events considered in this study is proprietary and derives solely from open sources, including National Iraqi News Agency, al Sumaria News, al Mada Press, All Iraq News Agency, and the online Iraq Body Count (IBC) database.

* The threshold of six VBIED attacks was chosen through holistic assessment to be the minimum volume of a VBIED cluster that otherwise bore characteristics suggestive of orchestration by a central VBIED command. Clusters of five or less VBIEDs, by contrast, appeared to be feasibly organized by a single VBIED cell assigned to a particular geographic area, or alternately a co-occurrence of singleton VBIEDs that were not necessarily synchronized.
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