



Combating Terrorism Center
at West Point



Occasional Paper Series

Managing a Transnational Insurgency: The Islamic State of Iraq's "Paper Trail," 2005-2010

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Harmony Program

INTRODUCTION

A cornerstone of strategic thinking is a clear understanding of one's opponent. Developing such an understanding in dealing with the Islamic State (IS) is challenging. Constraints on access to the frontlines in Iraq and Syria make it unusually hard for researchers to ground assessments in evidence-based approaches.

This occasional paper contributes to the development of an empirically grounded understanding of the IS by analyzing the finances and management of the group's predecessor, the Islamic State of Iraq (ISI), which changed its name to the Islamic State of Iraq and the Levant (ISIL) in April 2013 and then the Islamic State in June 2014.¹ There is a direct line of descent from Al-Qa'ida in Iraq (AQI) through the Islamic State of Iraq to today's Islamic State, despite changes in the group's territorial holdings and the announced scale of its ambitions.² Using historical documents to understand how AQI and the ISI were run can therefore help us better understand the current incarnation of the group, as well as the strengths and weaknesses it may have inherited.

This occasional paper describes key findings of a joint research project between the Combating Terrorism Center (CTC) at the United States Military Academy and the Empirical Studies of Conflict Project (ESOC) at Princeton. Over the last year a team led by ESOC scholars in consultation with a wide range of subject matter experts analyzed 153 newly-declassified insurgent documents, which range from spreadsheets listing the qualifications of hundreds of fighters, including details on thousands of individual salary payments and massive lists of itemized expenditures, to internal correspondence outlining geographic areas of responsibility for subunits, organizational changes, and management reports of all kinds. AQI and the ISI produced the vast majority of the documents between 2005 and 2010. The documents were captured by U.S. and Iraqi forces during that period and were recently declassified under the auspices of the CTC's Harmony Program. Originals and translations of all the documents we analyze are being released by the CTC through its website for others to study.

¹ For more information on the evolution of the group, see the CTC's report titled *The Group that Calls Itself a State: Understanding the Evolution and Challenges of the Islamic State*, (Combating Terrorism Center, U.S. Military Academy, 2014). This report is available at the CTC's website, www.ctc.usma.edu.

² This process is akin to a business firm that has changed its name and expanded into new markets while retaining consistent organizational practices and cultures.

Several months from now we will detail our full findings in a book-length report. But the policy challenges presented by the IS are sufficiently pressing that we decided to summarize key top-line findings as soon as possible. Moreover, given the lack of publically available primary sources about the IS, it was important to get this material out sooner rather than later. These materials can inform public debate and we hope their release will catalyze more careful empirical research on the group and its origins to help inform strategic decisions about how to efficiently defeat it.

The remainder of this paper proceeds as follows. We begin by providing a brief background on the CTC-ESOC project analyzing these documents. We then describe the context in which the documents were produced as well as analyze their relevance for the study of the IS. After providing a summary of the documents, we present several examples of the types of information contained in the archive being released. We close by describing the implications of our analysis for understanding violent non-state organizations generally and AQI/ISI specifically. Some of these findings have specific import for thinking about the IS today.

CTC-ESOC Project

For the last year we have been analyzing a large sample of 153 newly-declassified insurgent documents captured in Iraq from 2005 to 2010, 140 of which were produced by AQI or the ISI.

These documents represent a broad cross-section of managerial and financial documents produced by the group during the period when the United States had a large military presence in Iraq. As described below, they were produced in various regions of the country and address a host of organizational matters.

Our analysis covers a range of elements of how the group functioned, including:

- Overall organizational structure
- Geographic boundaries and distribution
- Allocation of personnel
- Foreign fighter origins, skills, and utilization
- Compensation practices

- Militant career paths
- Revenue and expenditures by province
- Systems for financial control and evidence of graft

Understanding these areas is useful for several key reasons. First, the documents help us understand the managerial challenges the ISI faced and the approaches it took to address them. As CTC, ESOC, and others have documented, terrorist organizations must deal with a broad range of internal disagreements and tensions.³ The ISI used a large amount of paperwork, at least for an ostensibly covert terrorist organization. We believe this paperwork served, in part, to allow leaders to exert control over the group.⁴ The ISI had a diverse multinational workforce tasked with fighting as well as the various bureaucratic functions required to sustain a medium-sized organization; extensive documentation was simply a necessity for managing the group.⁵ Beyond simply recording activities, the documents also show ISI leaders took numerous actions to manage disputes and audit its own members.

Second, the documents highlight the important, often central role played by administrative personnel. The ISI's top-level leaders received reports from administrative emirs who collated information from the organization's various arms, which included both multiple geographically-organized fighting units as well as units focused on media and propaganda, security and intelligence, and finance. Given the ISI's observed record-keeping practices, we can expect administrative emirs in the IS to

³ For previous CTC and ESOC analyses drawing on the United States government's extensive collection of internal documents from al-Qa'ida and al-Qa'ida in Iraq, see: Joseph H. Felter et al., *Harmony and Disharmony: Exploiting al-Qa'ida's Organizational Vulnerabilities* (West Point: Combating Terrorism Center, 2006); Jacob N. Shapiro and Clinton Watts eds., *Al-Qa'ida's (Mis)Adventures in the Horn of Africa* (West Point: Combating Terrorism Center, 2007); Brian Fishman et al., *Bombers, Bankers, and Bleedout: Al-Qa'ida's Road In and Out of Iraq* (West Point: Combating Terrorism Center, 2008); Assaf Moghadam and Brian Fishman eds., *Self-Inflicted Wounds: Debates and Divisions within Al-Qa'ida and Its Periphery* (West Point: Combating Terrorism Center, 2010).

⁴ For additional context on this and other management dynamics within terror organizations see, Jacob N. Shapiro, *The Terrorist's Dilemma: Managing Violent Covert Organizations* (Princeton University Press, 2013).

⁵ Individuals' inherent cognitive constraints create further incentives for documentation. For a game-theoretic model of how paperwork can facilitate management of groups operating in difficult environments where it is hard for leaders to distinguish workers who try and fail from those who shirk, with evidence from previous CTC-ESOC collaborations, see Jacob N. Shapiro and David A. Siegel, "Moral Hazard, Discipline, and the Management of Terrorist Organizations," *World Politics*, vol. 64, no. 1 (2012): 39-78.

hold large quantities of valuable information on the group's activities, finances, military activities, and personnel. Understanding the group and devising appropriate, effective countermeasures against it requires such information. More broadly, targeting personnel who maintain and store records could have broad, enduring value for building knowledge about how insurgent and terrorist organizations operate and where their strengths and vulnerabilities lie.

Third, analyzing internal documents from AQI and ISI over time allows us to understand better the impact and effectiveness of U.S. (and Iraqi) counterterrorism and counterinsurgency efforts. For example, quantitative data contained in the personnel spreadsheets we analyzed enables an unprecedented, granular level analysis of the group's attrition over time in various parts of Iraq. That attrition is obviously a useful metric for counterterrorist forces. In addition, many of the administrative and strategy documents released in association with this occasional paper highlight the reaction of ISI leadership to various U.S. and Iraqi operations. They also examine the important relationships between ISI, other Sunni insurgent groups, and various tribal and Awakening ("Sahwa") groups.

Fourth, internal documents can be helpful in identifying an adversary's plans and the strategies they plan to employ to achieve those goals. In the case of ISI, the documents clearly show an organization with an early intent to embark on a state-building project.

Finally, from a methodological perspective, our analysis and several other reports released by CTC and ESOC highlight the fact that systematic document exploitation that employs social science methodologies can provide a valuable complement to other forms of analysis concerning militant groups. Such analysis can help build a portrait of how terrorist organizations work, identify their key nodes of communication, and illuminate the motives of their members. Viewed as a whole, the rich portrait that emerges from this kind of research helps us understand where terrorists' vulnerabilities lie and can highlight previously underappreciated strategies for countering them.⁶ The usefulness of document exploitation should not be surprising, as societies have long understood the value of archives. While the short-term operational value of documents

⁶ For example, previous CTC work highlighted ideological fault lines and areas of strategic disagreement within al-Qa'ida. See Vahid Brown, *Cracks in the Foundation: Leadership Schisms in al-Qa'ida from 1989-2006* (West Point: Combating Terrorism Center, 2007).

produced by particular insurgent and terror groups is obvious, the strategic value of these types of documents over the longer term is also substantial.⁷

CONTEXT

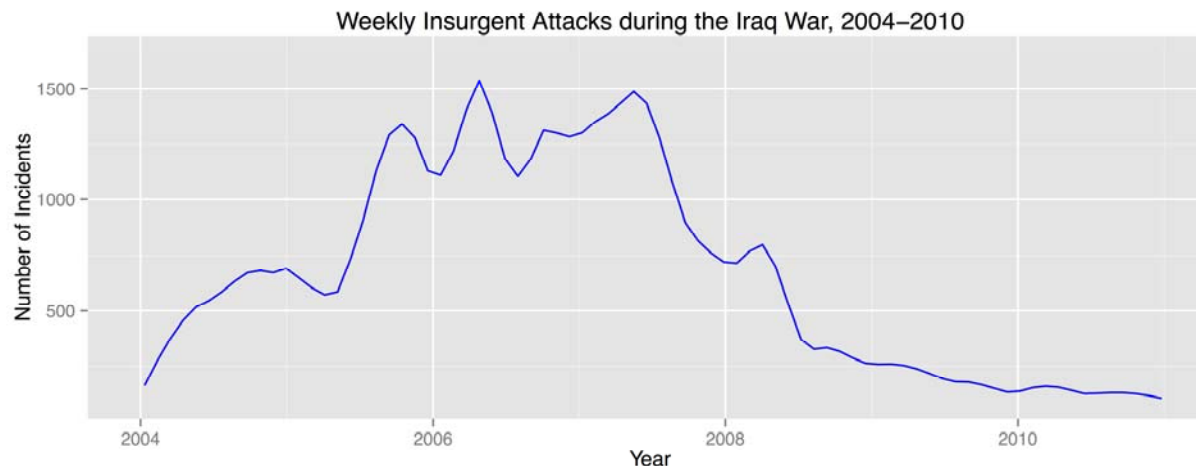
The documents being released were produced between 2005 and 2010. This was a period of significant change in Iraq. As Figure 1 shows, the country went from facing an intense and worsening insurgency at the start of 2005, through a sectarian conflict embedded in that war in 2006-8, to a relatively stable situation by late 2010. As has been well-documented elsewhere, much of the reduction in combat violence in Iraq is attributable to the interaction between localized Sunni political organizations turning against the ISI (commonly known as the Awakening) and a change in U.S. strategy and tactics starting in February 2007 (commonly known as the Surge).⁸

Based on that understanding, the documents in this collection can be roughly divided into three periods: 2005-6, when AQI was doing well; 2007-8, when it came under increasing pressure as local politics combined with an enhanced U.S. force presence and more effective special forces operations put it under even greater pressure; and 2009-10, when the group essentially retreated to Ninewa province and shifted into sporadic terrorist activity. As we discuss below, one of the remarkable patterns in the documents is the consistency with which the group was administered across these different periods.

⁷ To be maximally useful, however, document collections such as this one need to be: 1) Large scale, so that the representativeness of documents is discernible. Analysts need to be able to assess whether any given document is normal or a unique outlier; 2) Well documented, since high-quality metadata enable thoughtful sampling strategies and the efficient selection of documents for closer inspections. Technically, it would be ideal to know the full distribution of document contents. This would shed light on how common are such documents as large-scale financial spreadsheets, personnel rosters, and reimbursement notes. Without knowledge of such a distribution, it is difficult to definitively conclude that the findings from a document analysis apply to the group as a whole over a long time period or only to the specific faction of the group that generated those documents at the time they were generated.

⁸ Stephen Biddle, Jeffrey A. Friedman, and Jacob N. Shapiro. "Testing the Surge: Why Did Violence Decline in Iraq in 2007?," *International Security*, Vol. 37, No. 1, 2012, pp. 7-40. For more details on how this process played out in areas now controlled by the IS see Govinda Clayton and Andrew Thomson, "The Enemy of my Enemy is My Friend... The Dynamics of Self-Defense Forces in Irregular War: The Case of the Sons of Iraq," *Studies in Conflict and Terrorism*, Vol. 37, no. 11, 2014, pp. 920-935. For dissenting views that argue that other factors were critical to the reduction in violence see John Hagan et. al., "Correspondence: Assessing the Synergy Thesis in Iraq," *International Security*, Vol. 37, No. 4, 2013, pp. 173-198.

Figure 1. Trends in Combat Over Time



NOTES: Plot shows 3-week moving average of combat incidents per week. Data derived from Multi-National Forces Iraq SIGACT-III database. Excludes incidents positively identified as non-combat. Provided by ESOC.

Evolution of AQI into the IS

The group now known as the Islamic State has changed its name numerous times but has retained most of its core organizational principles and structures throughout its incarnations. The group first surfaced in Iraq on a large scale in late 2004 under the name al-Qa’ida in Iraq (AQI). AQI was not an offshoot of AQ central; rather it was a local extremist group that raised its profile by affiliating with the more widely known al-Qa’ida organization. By early 2005 AQI had emerged as the most violent insurgent group in Iraq, conducting activities across a broad territory in Western and Central Iraq. As its local reputation worsened in 2006, due in large part to its wanton violence against local political leaders and use of armed robbery and theft for fundraising, AQI rebranded itself as the Islamic State of Iraq (ISI).⁹

⁹ The deeper political motives and organizational maneuvering behind these changes are well described by Nelly Lahoud in “Metamorphosis: From al-Tawhid wa-al-Jihad to Dawlat al-Khilafa (2003-2014)”, in *The Group That Calls Itself a State: Understanding the Evolution and Challenges of the Islamic State*, pp 9-26.

From mid-2006 through early 2009 the ISI was routed from most of Iraq by a combination of U.S. and allied forces, local Sunni militias, and Iraqi forces.¹⁰ The group went largely underground, maintaining supporting infrastructure around the city of Mosul and launching sporadic terrorist attacks in mixed areas across the country. As civil war broke out in Syria, the group's leadership sensed an opportunity and sent fighters into Syria under the banner of Jabhat al-Nusra (JN) in January 2012. Perhaps motivated by JN's steadily improving reputation, ISI leader Abu Bakr al-Baghdadi unilaterally declared a merger between his group and JN in April 2013 and announced the founding of the Islamic State in Iraq and the Levant. This move was rejected by JN (with the endorsement of Ayman al-Zawahiri).

In response the group began fighting directly under its own banner in Syria. It also stepped up its activities in Iraq, targeting Iraqi security forces and former Awakening leaders, and conducting a series of bold prison raids that resulted in many freed prisoners, which strengthened the ranks of the ISI/ISIL. Following extensive anti-government protests in Iraq's Anbar governorate from January through December 2013, which were met by an aggressive Iraqi government response, ISIL moved back into Iraq in force and, with local support, quickly overwhelmed Iraqi Army garrisons in Fallujah and a few other small cities. In June 2014, the group routed a poorly-led Iraqi Army garrison in Mosul, Iraq's second largest city and the group's long-time base, and renamed itself the Islamic State.

Relevance for Today

The dynamics of this history are relevant for today in two key respects.

First, the group has shown that it is able to survive at a lower level of activity even when a majority of people turn against it.¹¹ Following its defeat in Anbar and other areas the group turned to a campaign of terrorist attacks and assassinations, which

¹⁰ Biddle, Friedman, and Shapiro (2012).

¹¹ On this history see the excellent series of articles by Jessica Lewis at the Institute for the Study of War: <https://www.understandingwar.org/backgrounder/aqis-soldiers-harvest-campaign>, <https://www.understandingwar.org/report/al-qaeda-iraq-resurgent>, <https://www.understandingwar.org/report/al-qaeda-iraq-resurgent-part-ii>.

some argue laid the groundwork for its return to high levels of activity in 2013.¹² It did so despite being deeply unpopular in many areas. This suggests that the group needs relatively few active supporters to survive.

Second, exploiting the group's vulnerabilities in order to deal its major strategic setbacks is not enough to actually eradicate a group like the ISI. From 2006 through 2009 the ISI's operational capability was devastated by a combination of U.S. and allied forces, Iraqi security forces, and local Sunni militias. During some months, U.S. Special Operations forces alone averaged 10 or more raids *per night*.¹³ The counterterrorism campaign against AQI combined with the Awakening movement was as effective as it could have possibly been, given the underlying political tensions within the nascent Iraqi government.

But while the ISI stopped being a strategic threat and couldn't operate at high intensity, it wasn't eradicated. The failure of the Iraqi government from 2009 onwards to effectively target the group combined with its disenfranchisement of the Sunni populace gave the group some breathing space. Under those conditions the group's organizational structure was robust enough that it could go to ground and when the right political circumstances presented themselves, come roaring back.

UNDERSTANDING THE ISLAMIC STATE THROUGH ITS INTERNAL DOCUMENTS

The documents used in this collaboration come from a variety of sources and provide a rich series of snapshots of the insurgent activity in Iraq from 2005 to 2010. Documents range from internal (often handwritten) correspondence relating to the management of ISI to spreadsheets containing detailed income and expenditures reporting. Taken together these documents provide considerable background into day-to-day operation of the ISI organization from 2005-2010. Here we describe the types of records released to give the reader a sense of the documents, as well as where and when they were created and captured, and their contents.

¹² See, for example, Craig Whiteside, "War Interrupted Part I: The Roots of the Jihadist Resurgence in Iraq," 2014, and "War Interrupted II: From Prisoners to Rulers," 2014. Both at War on the Rocks: warontherocks.com/author/craig-whiteside/.

¹³ The number of 300 raids/month add up to 10 per night in mid-2006 is cited by GEN (Ret) McChrystal then-commander of the Special Operations task force in Iraq in interviews and public talks. See, for example, Robert Kaplan, "Man Versus Afghanistan," *Atlantic*, April 2010.

The documents focus primarily on AQI and its successor ISI. Of the 153 newly declassified documents, 140 were produced by these groups. While the documents were captured from 2005-2010, the majority of the dateable documents are from 2007. These documents were captured during a period when the ISI was under a great deal of pressure from both Sunni militias and U.S.-led Coalition Forces. Table 1 below displays the distribution of documents by group and year in the period of study.

Table 1. Documents by Group and Year

Group	Documents	Year	Documents
ISI	140	2005	1
Jaysh al-Mahdi	10	2006	16
JRTN ¹⁴	3	2007	61
Total	153	2008	6
		2009	16
		2010	4
		Unknown	49
		Total	153

The documents in this collection were captured in eight of Iraq’s 19 governorates, but as Figure 2 below shows, most of the documents—more than 60 percent—come from Diyala, Anbar, and Ninewa. This is not surprising given ISI’s higher levels of activity in those regions of Iraq. As Figure 2 demonstrates, the documents captured in these times and locations are not representative of all types of activity, or all time periods. For example, the documents tracing human capital come from only two governorates: Anbar and Salah-al-Din.

Even though the documents are unlikely to be representative of all ISI documents, they clearly show that administrators produced and stored a broad range of documentation. Some of this was likely for their own management purposes, but some was also clearly done in expectation of communication with and oversight from ISI headquarters.¹⁵

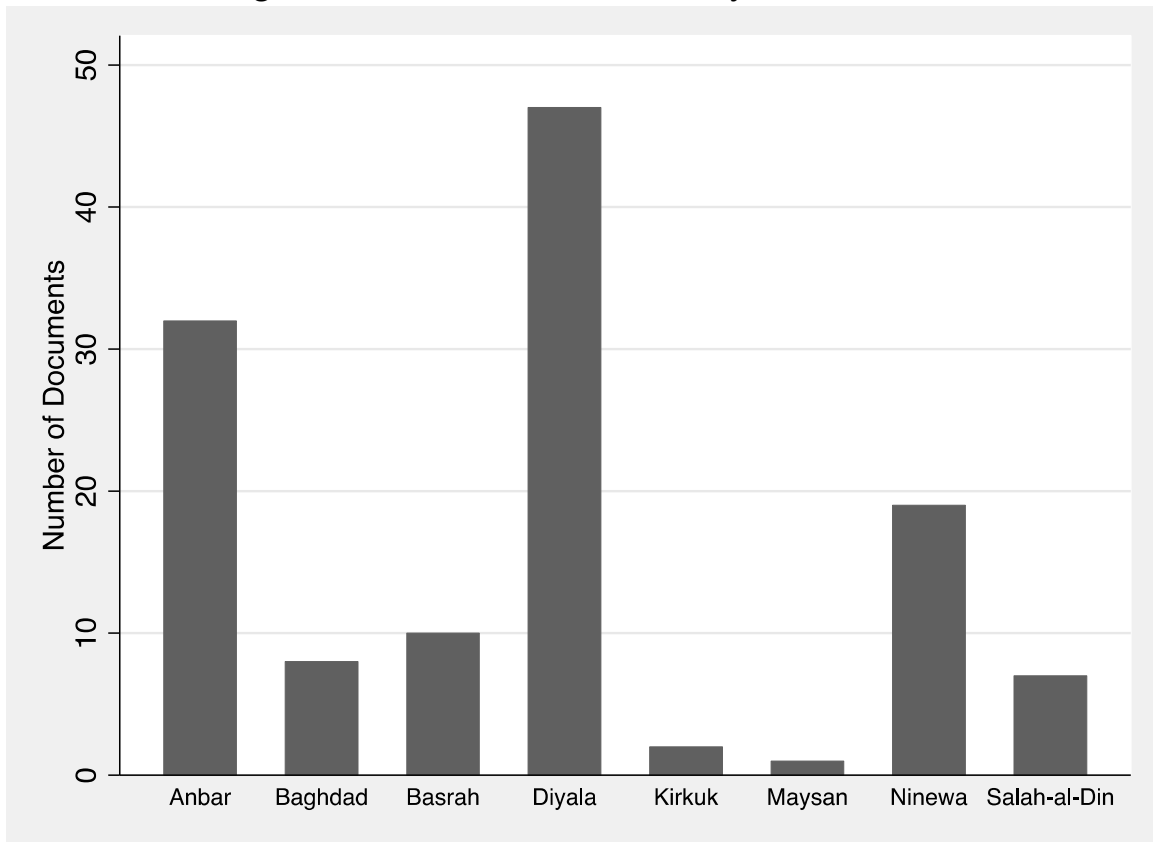
¹⁴ JRTN refers to Jaysh Rijal al-Tariqa al-Naqshbandia, a large and prominent Sufi insurgent group in Iraq. See the Mapping Militant Organizations website at Stanford University for more information: <http://web.stanford.edu/group/mappingmilitants/cgi-bin/groups/view/75>.

¹⁵ While we do not know where ISI headquarters were based at different times, several documents mention the headquarters organization, including MNFV-2007-000403 pictured on pg. 13.

Based on the documents we have seen, ISI headquarters was most interested in personnel and financial documents, which is reflected in Figure 3.

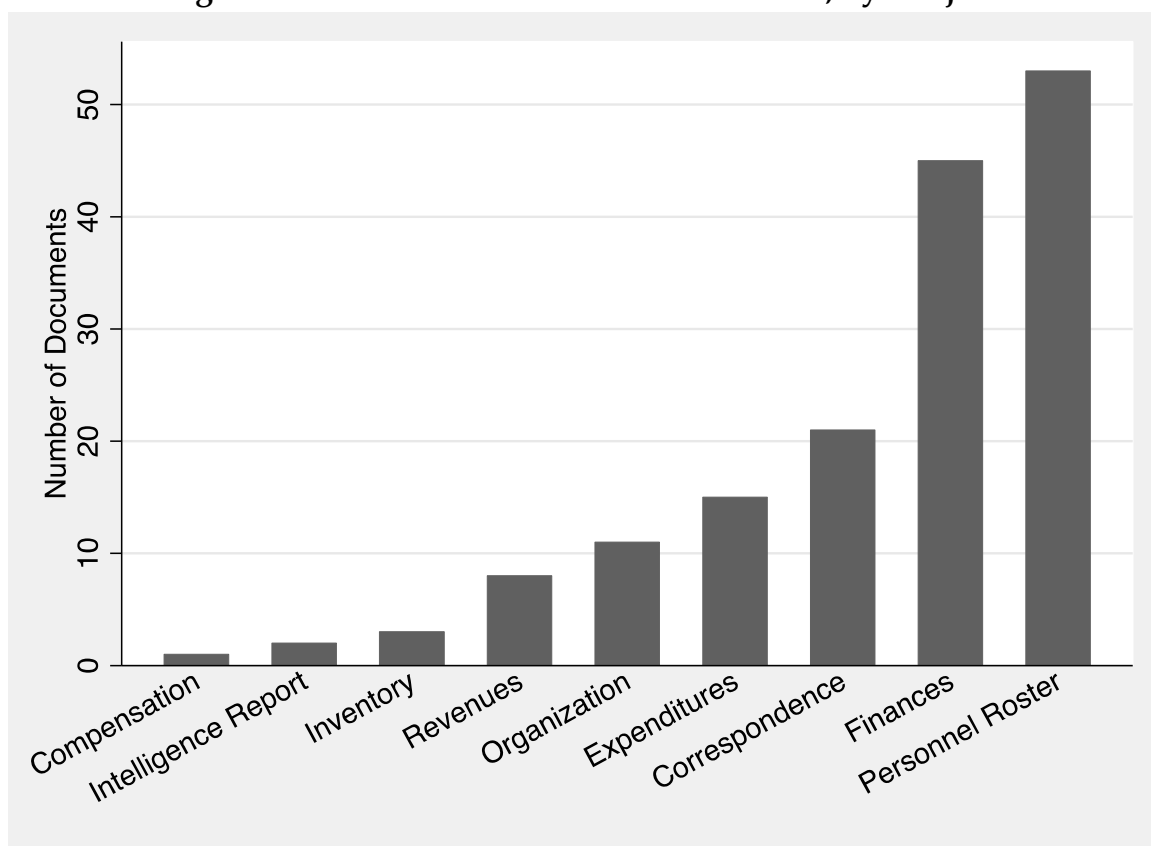
These documents varied significantly in type of content. Figure 3 displays the frequency of different types of documents in the collection. Personnel rosters are the most common type of document captured, indicating that management and payment of personnel was an important piece of management.

Figure 2. Number of Documents, by Governorate



NOTES: Bars represent the total number of documents that were attributed to insurgent units located in the governorates shown on the x-axis. Not all documents are specific to a governorate.

Figure 3. Number of Declassified Documents, by Subject



NOTE: Bars represent the number of documents categorized according to the topics on the x-axis.

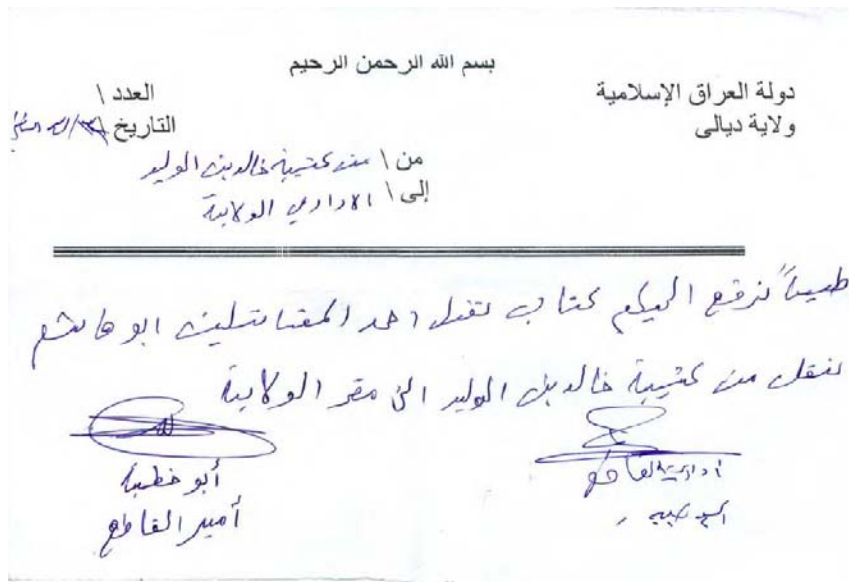
SAMPLE OF DOCUMENTS

The documents vary from short, handwritten notes to large, multi-sheet Excel spreadsheets. At the latter end of this spectrum, the documents represent a highly sophisticated set of tools to track and analyze operations and finances, on par with what similarly sized corporate organizations might use. They display communications between various levels of the ISI administration and personnel. Below we outline a small sample of the CTC documents available. They highlight the role of personnel rosters, the ISI's efforts to track financial outlays, and the continued concerns it had about managing corruption and defection within the organization.

For example, Figures 4 and 5 both outline personnel information from within Diyala. Figure 4 shows communication from a district-level unit to the provincial headquarters

regarding a personnel transfer. Figure 5 shows a translated communication from the provincial headquarters to ISI headquarters regarding several personnel matters.

Figure 4. Example of Correspondence within ISI in Diyala regarding personnel transfers



In the Name of the Merciful and Compassionate God
The Islamic State of Iraq
Diyala Province

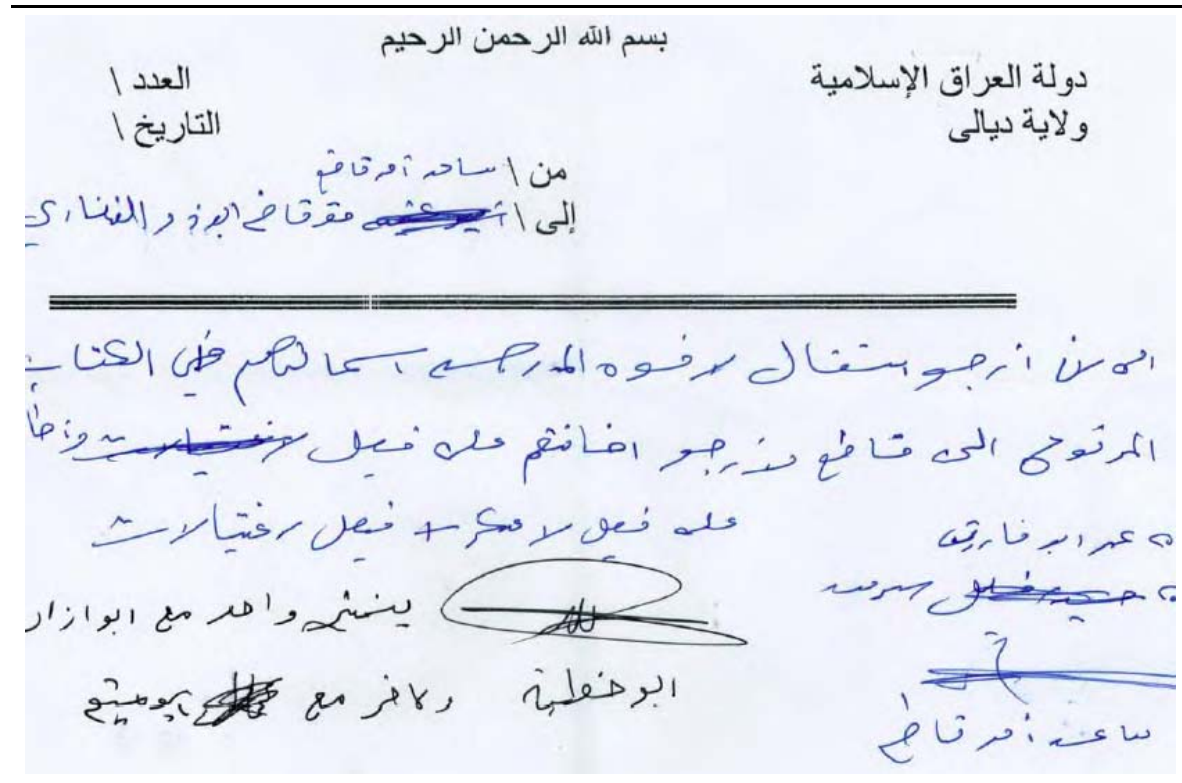
From: the Khalid Ben Al-Walid Regiment
To: the Provincial Administration

We wish to submit to you a transfer notice for one of the fighters, Abu Hashim, from the Khalid bin Al-Walid Regiment to Provincial Headquarters.

S/Abu Khatab
Section Head

Source: MNFV-2007-000383

Figure 5: Correspondence between Abu Mas'ab Platoon in Diyala and ISI about personnel



In the Name of the Merciful and Compassionate God
 The Islamic State of Iraq
 Diyala Province/Al-Katoun

From: Abu Mas'ab Platoon Headquarters
 To: Headquarters of the Islamic State

Nr. 8
 Date: April 4, 2007

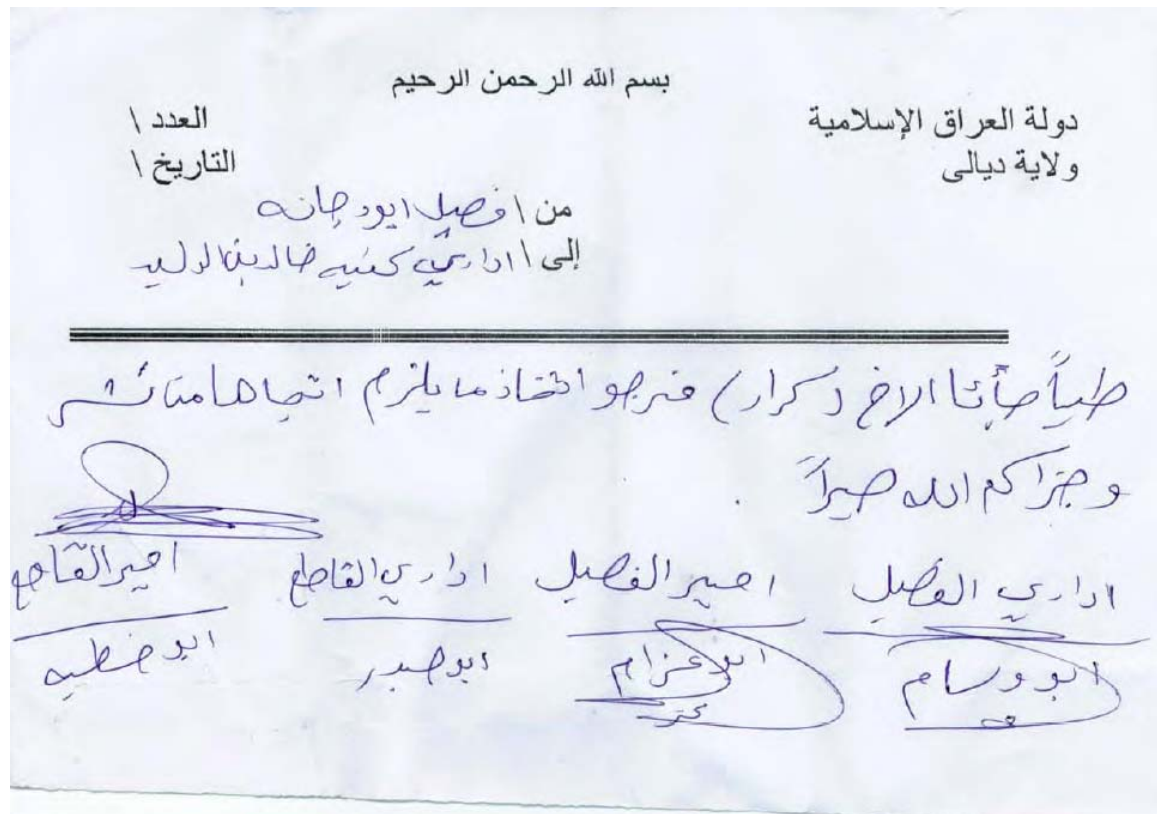
1. We wish to inform you that on March 10, 2007 two personnel from the platoon went missing and we don't know to which side or in which place. The first one is Jawad and the second is Abu Saja. Take the required measures concerning them.
2. We wish to inform you also that the so-called Mahir has transferred to the Martyr's Group.
3. We also wish to inform you that Brother Hasan was martyred right after he shot at an American in the Al-Rahma area.

s/Platoon Headquarters, Abu Zaynab

Source: MNFV-2007-000403

Concern over managing (mis)behavior of ISI members is a repeated theme in the correspondence between administrators. Figure 6 below shows a screenshot of a document in which an individual in Diyala is noted to have defected from ISI and the recipient (at the next higher level of command) is asked to take “the required measurement.” The note is signed by four different administrators (at the local unit level).

Figure 6. Letter regarding a member who has defected



In the name of Allah
Islamic State of Iraq / State of Diyala
From: Abu Dagana Company
To: Khalid Ibn Al Walid Regiment
Brother Karar Abandoned his belief. Please take the required measurement for such act.

No: 1
Date:

Area prince
Abu Khutba

platoon prince
Abu Azzam

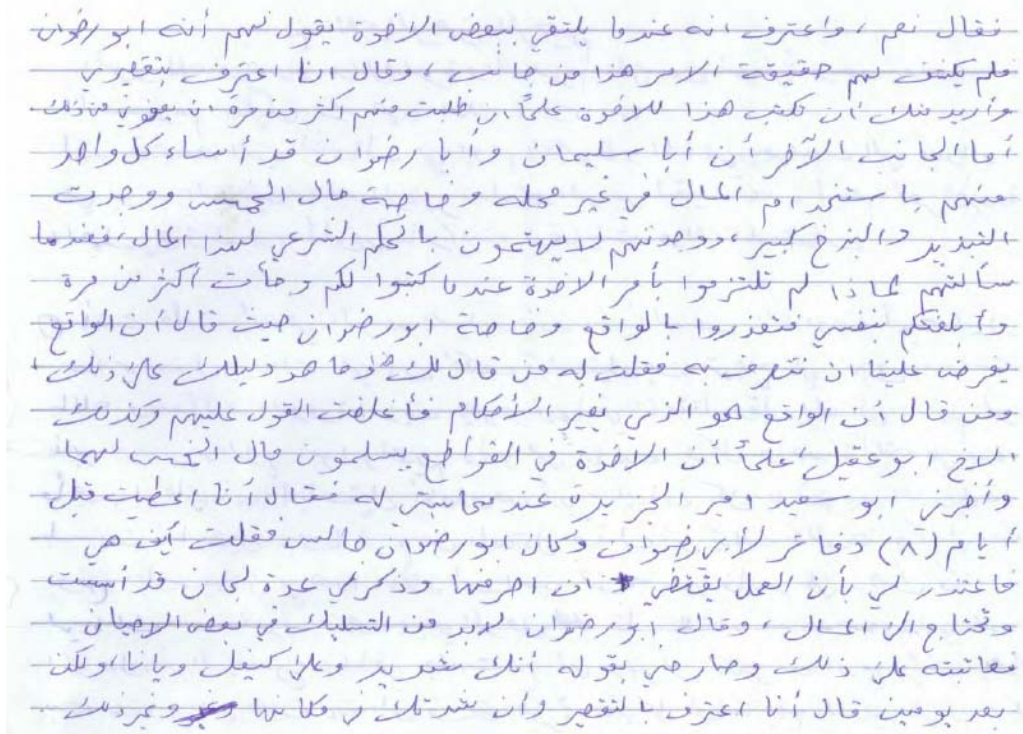
area administrator
Abu Haidar

platoon administrator
Abu Wisam

Source: MNFV-2007-000433

Figure 7 continues the theme, showing an excerpt from correspondence that expresses extreme frustration at the actions of an ISI member who has misrepresented himself, misused funds, and engaged in bribery.

Figure 7. Excerpt from correspondence regarding misdeeds by and ISI fighter



He said yes, and admitted that when he meets with some of the brothers, he tells them that he is Abu-Radwan. Aside from not revealing the truth to them, he admitted his negligence and asked me to write to the brothers, and added that he asked them on more than one occasion to relieve him of this position. In addition to this, both Abu-Sulayman and Abu-Radwan misused the money, especially the portion dedicated to the al-Khums [TC: Collected Zakat form of alms-giving equal to 1/5th of annual income]. I discovered a lot of waste and extravagance. I discovered that they are not applying Shari'a rules in their spending. When I questioned the reason for neglecting the brothers' written requests, and my personal visitations concerning the same matters, they blamed it on the circumstances, especially Abu-Radwan who stated that the reality dictates their acts. When I questioned his reasons, requested evidence, and inquired how circumstances can change the rules of God, he could not answer. Abu-'Aqil informed me that the brothers from the sectors deliver the al-Khums money to them. Also while settling the accounts with Abu-Sa'id, the Emir of al-Jazirah, in the presence of Abu-Radwan, he informed me that a few days ago he delivered 80,000 USD to Abu-Radwan, and when I questioned where about of the money, he told me that work requirements forced them to spend it. He mentioned a few committees that were established and required money. I also blamed him [Abu-Radwan], for mentioning that sometimes work requires bribes. At the time, he complained that I am tough with them. However, a couple of days later he admitted negligence and commended my criticism.

Source: NMEC-2010-174915

In addition to managing the defections and gross mismanagement of subordinates, ISI administrators spent significant effort recording detailed personnel information. Figure 8 displays screenshots from such spreadsheets captured in Ninewa. These documents show that administrators carefully and nearly comprehensively tracked fighter status, family structure, and compensation in two categories: "Bail," which refers to the monthly salary everyone received, and "Rent," which refers to extra payments some members got each month. It may be surprising that family structure was tracked in such detail. This was done, however, because compensation was tied to the number of dependents who lived with a fighter.

The group's "Rules for Social Assistance" found in Anbar in January 2007 listed the monthly base salary for a fighter as 60,000 Iraqi dinars, about \$41 in nominal terms at then-current exchange rates.¹⁶ The document specified that fighters receive an additional 30,000 Iraqi dinars for each child and that wages continue if a fighter is killed or captured.¹⁷ Such payments could serve several purposes. The payments might be seen as providing assurance to fighters that the compensation would continue as long as the organization survived. But even if fighters didn't believe the payments would continue, paying "martyr" salaries can help leaders signal that they will spend fighters' lives carefully by accepting a loss in future operating revenue when they get their fighters killed. That signal is sent whether or not the payments are actually made in perpetuity.¹⁸ Rather, it only requires that they be made for some time after a fighter is killed.

Regardless of the intent behind martyr payments, the "Rules" reveal a clear interest in establishing standardized salary rules that account distinctly for what will happen in a range of contingencies while abiding by norms of equity in the distribution of funds.¹⁹

¹⁶ Harmony document MNFA-2007-000566.

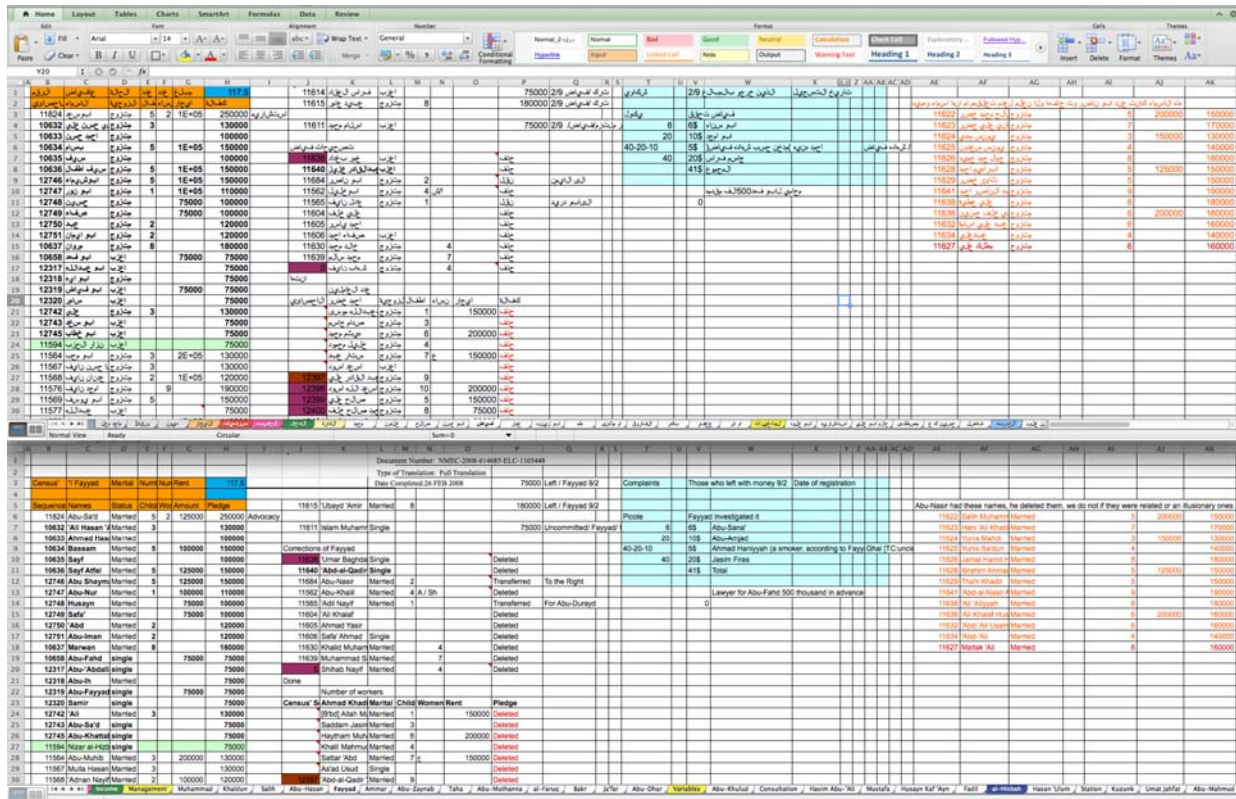
¹⁷ The Provisional IRA made similar payments to the families of captured fighters, an expense that put the group under considerable pressure over time as salaries to prisoners families came to consume a large portion of the organization's budget. See James M. Glover, 1978, "Northern Ireland: Future Terrorist Trends," Ministry of Defense, United Kingdom.

¹⁸ And it appears the payments were not made in perpetuity. Examining two spreadsheets from Ninewa, which we believe contained the full payroll—NMEC-2008-614685 and we believe was produced in late 2007 and NMEC-2009-633789, which appears to have been made in early 2009—reveals that most of the captured or killed fighters whose families were listed as receiving payments in 2007 were missing from the rolls in 2009.

¹⁹ Harmony document MNFA-2007-000566.

The risk of corruption (as previously highlighted in Figure 6) and careful tracking of personnel and related expenses (reflected in Figure 7), were not isolated examples among these documents. Tracking often happened much more formally, as the Excel spreadsheet in Figure 8 shows. Figure 8 shows the tab that summarizes payments to 92 fighters working for a local unit leader named Fayyad. But the spreadsheet has many more tabs.

Figure 8. Screenshots of compensation spreadsheets



Source: NMEC-2008-614685

The spreadsheet contains tabs for 30 other sub-units (including “Management” with 39 active workers), each of which had its own tab, as well as tabs for “Debts,” “Rent,” “Expenses,” “Income,” and “Management.” Across these, the spreadsheet reports on payments to 1,327 workers. The emir also included a “Total Workers” tab that rolls up data on more than 850 fighters. On the tab shown in the figure above, the administrator makes a note that some of the individuals reported may not be real workers. He writes “Abu-Nasir had these names, he deleted them, we do not know if they were related

(sic) or an illusory one.”²⁰ A number of other documents in the collection are similar to this one in that they reflect the careful tracking of payments to individual fighters, though few show such acumen with Microsoft Excel.²¹

Such concerns appear to have been widespread. In a 2009 report similar to the document shown in Figure 9, the then-ISI administrative emir for Mosul, Abu Zayd, calculates the total dependents his cell leaders reported for their active fighters and compares that to the number they reported for their deceased or captured fighters.

Why would he do this? In the ISI, most cell leaders got their payroll from the administrative emir (instead of controlling their own payroll locally). And Abu Zayd’s spreadsheet calculations are consistent with his role of overseeing payroll disbursements to cell leaders. What he found is suspicious; deceased fighters systematically had more dependents than did living fighters. It could be that fighters with families tended to take greater risks, but we suspect something different. The pattern Abu Zayd found is consistent with a form of graft in which cell leaders systematically padded their payrolls by adding extra dependents to the families of martyred fighters: the ISI equivalent of padding the payroll on a highway construction project.

²⁰ The Arabic translates more properly as “fake names” or, as one subject-matter expert described it, “ghost employees.” The original NMEC translation is provided above.

²¹ For examples, see MNFA-2007-000562, MNFT-2007-005312, MNFV-2007-000322.

Figure 9. Concerns about corruption may have lead to ISI statistical calculations

عدد زوجات الراحلين	عدد اطفال الراحلين	الراحلين	عدد الزوجات	عدد الاطفال	القوة القتالية	الكتيبة القسم
			8	18	10	تصنيع الالكتروني
			23	57	21	الكتيبة الادارية
			14	33	13	سرية التمويل
			6	14	6	سرية الراحلين
			6	25	7	سرية ادارية
			17	29	36	كتيبة ابو ميسرة الغريب الاعلامية
			0	0	2	سرية اعلامية منسقة
			10	26	14	كتيبة الشيخ ابو يحيى الليبي الشرعية
			66	152	88	كتيبة ابو طلحة الحمداني فدا الله امره
			11	14	12	كتيبة التفتيح
			16	61	20	كتيبة التصنيع العسكري
			45	109	64	كتيبة الشيخ ابو عبد الله الكردي رحمة الله
			51	110	59	كتيبة الشيخ ابو مصعب الزرقاوي رحمة الله
			5	13	5	سرية المشاجب الصحراوية (محمود حديد)
489	1478	633	0	0	0	الجنود الراحلين
489	1478	633	278	661	357	الاجمالي

النسبة الزوجات	النسبة الاطفال	الزوجات	الاطفال	البيان
0.36	0.31	278	661	المقتولين
0.64	0.69	489	1478	الراحلين
		767	2139	الاجمالي

Battalion/Section	Combat Force	Number of Children	Number of Spouses	The Deceased	Number of Children of the deceased	Number of Widowers
Electronic Industrialization	10	18	8			
Administrative Battalion	21	57	23			
Financing Company	13	33	14			
Deceased Company	6	14	6			
Administrative Company	7	25	6			
Media Battalion of Sheikh Abu-Maysarah al-Gharib	36	29	17			
Independent Media Company	2	0	0			
Shar'i [Legal and Religious] Battalion of Abu-Yahya al-Libi	14	26	10			
Battalion of Abu-Talhah al-Hamdani, may Allah release him	88	152	66			
VBIEDs Rigging Battalion	12	14	11			
Military Industrialization Battalion	20	61	16			
Battalion of Sheikh Abu-'Abdallah al-Kurdi, may his soul rests in peace	64	109	45			
Battalion of Sheikh Abu-Mus'ab al-Zarqawi may his soul rests in peace	59	110	51			
Desert Warehouses Company (Mahmud Hadid)	5	13	5			
Deceased Soldiers	0	0	0	633	1478	489
Total	357	661	278	633	1478	489

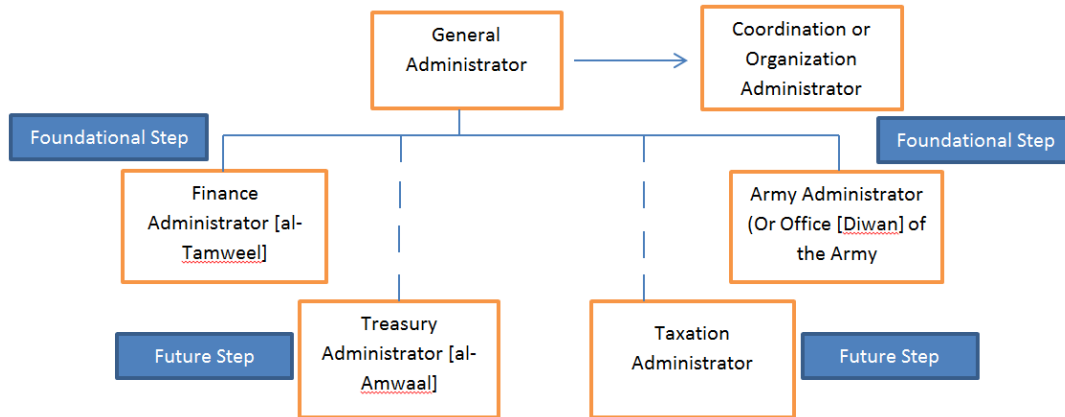
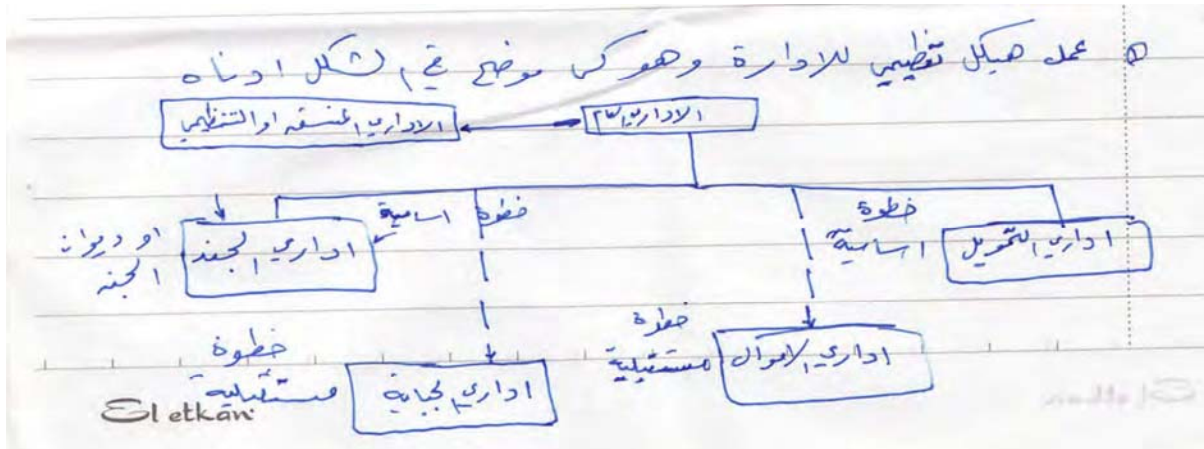
Report	Children	Spouses	Children Ratio	Spouses Ratio
Fighters	661	278	0.31	0.36
Deceased	1478	489	0.69	0.64
Total	2139	767		

Source: NMEC-2009-633789

In fact, concerns with graft even prompted discussions of major changes to the ISI organizational chart. Between August and October 2008, two senior ISI administrative emirs—Abu Wahab and Abu Qaswarah—were captured or killed. This appears to have provided the impetus for a discussion of separating revenue collection activities from disbursements and management. In a letter accompanying a report on financial activities, an ISI manager named As'ad recommended an individual for administrative duties and suggested that the financial organization be expanded in two steps, as

outlined in Figure 10.²² His logic for the change is simple; he argues that the new structure "...makes the issue of monitoring the Treasury easier and makes the Administration of Finance distinct from the Taxation of Treasury [sic], and the Administration of Taxation distinct from the Administration of Finance, and this issue is important to minimize the problem of embezzlement and fraud..."²³

Figure 10. Reorganization proposed to address corruption problems



SOURCE: NMEC-2009-636065.

KEY FINDINGS

Captured documents such as the examples shown here can provide a perspective on terrorist and insurgent organizations, and how they operate that cannot be gained through any other type or source of information. They are “honest” in the sense that they were constructed for purposes very far divorced from public relations, recruiting

²² Harmony documents NMEC-2009-636065, NMEC-2009-636153; and NMEC-2009-634370

²³ NMEC-2009-636065.

concerns, or similar public-facing considerations. The documents may reflect internal conflicts, dissembling, and deception, but they are informative in their own right. Moreover, the simple fact that the group kept such records highlights its need for control and a lack of trust in its own members. The group was, after all, an insurgent group, and at least during the period when these documents were produced, it needed to maintain a good measure of secrecy to survive in the face of aggressive Iraqi Army and Coalition operations, with the latter assisted at some points by local Sunni militias. This level of record keeping only makes sense if leaders have concerns about how members are behaving.

Our analysis of these documents is ongoing, but a number of key findings have emerged with respect to insurgent groups broadly, to the ISI, and to the IS today.

Broad Findings

- Just like any other large-scale human organization, rebels and insurgents need hierarchy and paperwork if they are to operate at scale. This fact in itself should help demystify groups like the IS.
- Models of insurgent groups in which the ability to procure fighters depends critically on local economic conditions are unlikely to be broadly applicable. As discussed elsewhere using data derived from these documents, the ISI does not appear to have been competing for fighters in normal labor markets.²⁴

Findings Specific to the ISI

- Ideology played a key role in motivating fighters. The ISI did not pay competitive wages. Its median monthly wages were less than half of what the average illiterate wage earner reported in 2007 in a nationally representative survey.²⁵ An ISI member would need 9 dependents to approach the average wage of an illiterate person in 2007. Non-monetary compensation must have been a significant part of the overall

²⁴ Benjamin W. Bahney, Radha K. Iyengar, Patrick B. Johnston, Danielle F. Jung, Jacob N. Shapiro, and Howard J. Shatz, "Insurgent Compensation: Evidence from Iraq," *American Economic Review*, Vol. 103, No. 3, 2013, pp. 518 – 522.

²⁵ Iraq Household Socio-Economic Survey, Statistical Tables, Tables 9-10 and 9-11, Central Organization for Statistics and Information Technology, Kurdistan Region Statistics Organization, and The World Bank, 2007.

package for ISI fighters.

- Pay was often lower in places with higher levels of fighting and during periods when combat was more intense. This suggests two possibilities:
 - ISI members have negative risk premiums (i.e. martyrdom is an amenity).
 - There were substantially more people willing to fight for the group in 2006 when the war was going relatively well for the group than in 2008, and their risk-adjusted pay therefore had to be higher later in the war.
- The joint US and Iraqi counterterrorism effort, combined with the robust Awakening movement, had a measurable effect on AQI's (and subsequently ISI's) operational capability. Beginning in mid-2007, we see a dramatic decrease in violent attacks and can track ISI's withdrawal from Anbar and then Diyala through various documents. In addition, ISI's internal personnel trackers highlight a significant decline in personnel in Mosul, which was at the time the group's stronghold, from the end of 2007 to early 2009. ISI went from 784 to 357 "active" fighters during that period.
- There was tremendous continuity in the group's managerial structures in the face of many changes on the battlefield. Either the group lacked the ability to reorganize when its original blueprint failed or the hierarchical structures we observe are extremely robust. Many of the unexpected aspects of the group's compensation and financial schemes were potentially useful for managing agency problems. In particular:
 - Paying low salaries could have helped screen out uncommitted members, the kinds of people like Abu-Nasir mentioned here who might have wanted to take advantage of positions of responsibility within the group.
 - Having salary structures that emphasized equity and making payments to the families of suicide bombers and other killed or detained militants make sense from the perspective of reassuring a diverse workforce with high turnover that management would not spend their lives cheaply.

Findings Applicable to the Islamic State

- Both al-Qa'ida in Iraq's and the Islamic State of Iraq's organizational structures resembled those designed by al-Qa'ida in the 1990s when the latter was engaged in

training fighters to export Salafi-jihadist militancy to various parts of the Muslim world. As of late 2014, the most authoritative reporting on the Islamic State suggests these basic structures have remained largely the same.²⁶

- Drawing upon the by-name personnel rosters we analyzed, we identified several top ISI leaders who are now key leaders within the Islamic State, including Abu Bakr al-Baghdadi (listed in a 2009 roster as Abu Du'a, his *nom de guerre*). This further highlights the direct lineage between AQI/ISI and the Islamic State.

So what does all of this mean for the United States and others who are trying to combat the Islamic State? Two conclusions relevant to current policy stand out. The first is the positive one that the group's expansion potential is ultimately limited. Formal structure and record keeping like that detailed in these documents means a steady stream of inside information is continually moving and being stored in ways its opponents can intercept and exploit. The more people the group coordinates and the larger the territory it controls, the more it needs to communicate and share information internally—and thus, the more outsiders can learn about it. Exploiting such information helped the U.S. and its allies to beat the ISI back the first time. And even though the analytical and military capacity to do so is currently lacking in much of Iraq and Syria, it is certainly present on the borders of Islamic State territory in Turkey, Jordan, and the Shia areas of Iraq. In our estimation the group's potential for expansion is thus bounded.

The negative conclusion of our analysis so far is that even the vulnerabilities implied by all this documentation were insufficient for the group to be completely eradicated in the past. From 2006 through 2009 the ISI was devastated by U.S. and allied forces, Iraqi security forces, and local Sunni militias. It stopped being a strategic threat, but it survived as an underground terrorist organization. Its managerial structures were robust enough that it could go to ground, manage what would be considered a large-scale terrorist campaign anywhere but Iraq, and wait for the right circumstances to

²⁶ See, for example: Ruth Sherlock, "Inside the leadership of the Islamic State: how the new 'caliphate' is run," *The Telegraph*, July 9, 2014; and Nick Thompson and Atika Shubert, "The anatomy of ISIS: How the 'Islamic State' is run, from oil to beheadings," *CNN*, October 7, 2014, <http://www.cnn.com/2014/09/18/world/meast/isis-syria-iraq-hierarchy/>. See also detailed hierarchy assembled by the Terrorism Research and Analysis Consortium here: <http://www.tracimages.alturl.com/Ultimate-Leadership.11.6.14.pdf>.

come roaring back.

Thus, the ultimate lesson of our analysis is that defeating groups like the IS is a political task. In Iraq this means that no matter how effectively Iraqi forces and their allies use leaked information, they are unlikely to defeat the group unless those living in IS-controlled territories feel the Iraqi government is a much better option. In Syria, it means that the IS will likely remain a problem so long as the civil war persists.