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Iraq's Evolving Insurgency:

The Nature of Attacks and Patterns and Cycles in the Conflict

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Working Draft, Revised: February 3, 2006

Executive Summary

The war in Iraq does not as yet show any clear trend in the insurgency. MNF-I intelligence estimates that the number of insurgent attacks on coalition forces, Iraqi forces, and Iraqi civilians; and acts of sabotage; rose by 29% in 2005. The total rose from 26,496 in 2004 to 34,131 in 2005.¹ These attacks have had a relatively consistent average success rate of 24% (attacks that cause damage or casualties.)²

At the same time, there has been a shift to attacks on Iraqis, rather than Coalition troops. A total of 673 US troops were killed in 2005, versus 714 in 2004, and the number of wounded dropped from 7,990 to 5,639, a drop of 29%.³ US forces saw fewer casualties largely because more Iraqi forces were in the field and there were no major urban battles like the battle of Fallujah, and also because the insurgents shifted to Iraqi targets that were more vulnerable and had far more political impact at a point where it has become clear that the US and its coalition partners wanted to withdraw many of their forces.

These trends scarcely mean the insurgency is “winning.” It is not able to increase its success rate, establish sanctuaries, win larger-scale military clashes, or dominate the field. It is active largely in only four of Iraq's 18 governorates. (Some 59% of all US military deaths have occurred in only two governorates: Al Anbar and Baghdad.)⁴ Much of its activity consists of bombings of soft civilian targets designed largely to provoke a more intense civil war or halt the development of an effective Iraqi government, rather than progress towards control at even the local level. So far, the insurgency has done little to show it can successfully attack combat-ready Iraqi units, as distinguished from attack vulnerable casernes, recruiting areas, trainees or other relatively easy targets.

At the same time, the insurgents are learning and adapting through experience. They have shown the ability to increase the number of attacks over time, and they have hit successfully at many important political and economic targets. Provoking civil war and undermining the Iraqi political process may not bring the insurgents victory, but it can deny it to the Iraqi government and the US, and the Sunni insurgents continue to strike successfully at politically, religiously, and ethnically important Shi'ite and Kurdish targets with suicide and other large bombings.

The insurgents continue to carry out a large number of successful killings, assassinations, kidnappings, extortions, and expulsions. These include an increase in the number of successful attacks on Iraqi officials, Iraqi forces, and their families, and well over 2,700 Iraqi officials and Iraqi forces were killed in 2005. The insurgents continue to succeed in intimidating their fellow Sunnis. There is no way to count or fully assess the pattern of such low level attacks, or separate them from crime or Shi'ite reprisals, but no one doubts that they remain a major problem.

Suicide attacks have increased, and killed and wounded Iraqis in large numbers. The number of car bombs rose from 420 in 2004 to 873 in 2005, and the number of suicide car bombs rose from 133 to 411, and the number of suicide vest attacks rose from 7 in 2004 to 67 in 2005.⁵ In case after case, Shi'ite civilians and Sunnis cooperating with the government were successfully targeted in ways designed to create a serious civil war.

The use of roadside bombs (improvised explosive devices IEDs) remains a major problem for US and other Coalition forces. The total number of IED attacks nearly doubled from 5,607 in 2004 to 10,953 in 2005. While the success rate of IED attacks dropped significantly, from 25-30% in 2004 to 10% in 2005, they still had a major impact. During 2005, there were 415 IED

deaths out of a total of 674 combat deaths, or 61.6 % of all combat deaths. IEDs accounted for 4,256 wounded out of a total of 5,941, some 71.6% of the wounded. From July 2005 to January 2006, IED's killed 234 US service members out of a total of 369 total combat deaths, or 63.4%. They accounted for 2314 wounded out of 2980 total combat wounded, or 77.7 %.

To put these numbers in perspective, IEDs caused 900 deaths out of a total of 1,748 combat deaths, or 51.5 % during the entire post-Saddam fall from March 2003 and January 2006. IEDs caused 9,327 wounded out of a total of 16,606 or 56.2%.⁶ However, the numbers of personnel killed and wounded by IEDs are scarcely the only measure of insurgent success. Casualties may have dropped but the number of attacks has gone up. IED attacks tie down manpower and equipment, disrupt operations, disrupt economic and aid activity, and interact with attacks on Iraqi civilians and forces to limit political progress and help try to provoke civil war.

Insurgents carried out more than 300 attacks on Iraqi oil facilities between March 2003 and January 2006. The end result was that oil production dropped by 8% in 2005, and pipeline shipments through the Iraqi northern pipeline to Ceyan in Turkey dropped from 800,000 barrels per day before the war to an average of 40,000 barrels per day in 2005. In July 2005, Iraqi officials estimated that insurgent attacks had already cost Iraq some \$11 billion. They had kept Iraqi oil production from approaching the 3 million barrel a day goal in 2005 goal that the Coalition had set after the fall of Saddam Hussein, and production had dropped from per war levels of around 2.5 million barrels a day to an average of 1.83 million barrels a day in 2005, and level of only 1.57 million barrels a day in December 2005.⁷ These successes have major impact in a country where 94% of the government's direct income now comes from oil exports.

In short, there are cycles in an evolving struggle, but not signs that the struggle is being lost or won. For example, the number of attacks peaked to some 700 per week in October 2005, before the October 15th referendum on the constitution to 430 per week in mid-January, but this was more a function of insurgent efforts to peak operations in sensitive periods than any outcome of the fighting. Similarly, the number of US killed has averaged some 65 per month since March 2003. The total of US killed was 96 in October 2005, 84 in November 68 in December, and 63 in January 2006.⁸ This reflected shifts in the cycles of attacks and in their targets. US experts estimated that some 500 Iraqis were killed between the December 15, 2005 elections and mid-January 2006, an "average" period in US casualties.⁹

There have, as yet, been no decisive trends or no tipping points: simply surges and declines. This, however, does not mean the counterinsurgency campaign cannot be won. Much of the reason the insurgency continues is that Iraqi forces are not yet deployed in the strength to replace Coalition troops and demonstrate the legitimacy of the Iraqi government in the field.

Similarly, there seems to be little doubt that the most extreme acts of insurgent violence come from a relatively small minority of Neo-Salafi Sunni extremists. If the December 15, 2005 elections produce an inclusive national political structure that gives Iraq's Sunnis incentives to join the government and political process, many current Iraqi Sunni insurgents are likely to end their participation in the insurgency and the more extreme elements will be defeated.

The risk, of course, is that either Iraqi forces will not be successful, or that the political process will fail. These, however, are considerations that go far beyond the analysis of the patterns in the insurgency that follows.

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I. The Growth and Character of the Insurgent Threat

The mistakes the Coalition made before and during the effort to drive Saddam Hussein from power were compounded by the mistakes it made as the insurgency unfolded. The US-led Coalition initially tried to restrict the development of Iraqi armed forces to a token force geared to defend Iraq's borders against external aggression. It did not try to create police forces with the capability to deal with serious insurgency and security challenges. As time went on, it ignored or did not give proper priority to the warnings from US military advisory teams about the problems in organizing and training Iraqi forces, and in giving them the necessary equipment and facilities.

The US failed to treat the Iraqis as partners in the counterinsurgency effort for over a year after the fall of Saddam Hussein, and did not attempt to seriously train and equip Iraqi forces for proactive security and counterinsurgency missions until April 2004 – nearly a year after the fall of Saddam Hussein and two-thirds of a year after a major insurgency problem began to emerge.^x

Denial as a Method of Counter-Insurgency Warfare

Both US policymakers and the US military initially lived in a state of near-denial about the rise of terrorism and insurgency. The US assumed for much of the first year after the fall of Saddam Hussein that it was dealing with a limited number of insurgents that Coalition forces would defeat well before the election. It did not see the threat level that would emerge if it did not provide jobs or pensions for Iraqi career officers, or co-opt them into the nation building effort. It was slow to see that some form of transition payments were necessary for the young Iraqi soldiers that faced massive, nation-wide unemployment. The US still failed to acknowledge the true scale of the insurgent threat and the extent to which popular resentment of Coalition forces would rise if it did not act immediately to rebuild a convincing mix of Iraqi military and security forces.

The US failed to establish the proper political conditions to reduce Iraqi popular resentment of the Coalition forces and create a political climate that would ease the task of replacing them with effective Iraqi forces. It failed to make it clear to the Iraqi people that the US and Britain had no economic ambitions in Iraq and would not establish permanent bases, or keep Iraqi forces weak to ensure their control. In fact, Lt. Gen. Jay Garner, the first American Administrator in Iraq, suggested in early 2004 that US forces might remain in Iraq for “the next few decades,” adding that securing basing rights for the US should be a top priority.^{xi}

Failing to Admit the Scope of the Problem though Mid-2004

As a result, the US failed to come to grips with the Iraqi insurgency during the first year of US occupation in virtually every important dimension. It was slow to react to the growth of the insurgency in Iraq, to admit it was largely domestic in character, and to admit it had significant popular support. The US military and intelligence effort in the field did begin to understand that the terrorist and insurgent threat was serious and growing by the fall of 2003.

For all of 2003, and most of the first half of 2004, senior US officials and officers did not act on this plan or respond effectively to the growing insurgency. They kept referring to the attackers as “terrorists”, kept issuing estimates that they could not number more than 5,000, and claimed they were a mixture of outside elements and diehard former regime loyalists (FRLs) that had little popular support. The US largely ignored the previous warnings provided by Iraqi opinion polls, and claimed that its political, economic, and security efforts were either successful or would soon

become so. In short, the US failed to honestly assess the facts on the ground in a manner reminiscent of Vietnam.

As late as July 2004, some senior members of the Bush Administration still seemed to live in a fantasyland in terms of their public announcements, perception of the growing Iraqi hostility to the use of Coalition forces, and the size of the threat. Its spokesmen were still talking about a core insurgent force of only 5,000, when many Coalition experts on the ground in Iraq saw the core as comprised of at least 12,000-16,000. They also ignored signs of Sunni versus Shi'ite tension, and growing ethnic tension in the north.

Such US estimates of the core structure of the Iraqi insurgency ignored the true nature of the insurgency. The US was dealing with a mixture of Iraqi nationalism, Sunni resentment and anger, popular opposition to any form of Western occupation, and a slowly growing number of foreign and Iraqi neo-Salafi Sunni Islamist extremists. It also faced a lesser but still significant threat from Iraqi Shi'ite Islamist "activists." The problem was broad support, not a small group of "bitter enders." From the start, there were many part-time insurgents and criminals who worked with insurgents. In some areas, volunteers could be quickly recruited and trained, both for street fighting and terrorist and sabotage missions.

As in most insurgencies, "sympathizers" within the Iraqi government and Iraqi forces, as well as the Iraqis working for the Coalition, media, and NGOs, often provided excellent human intelligence without violently taking part in the insurgency. Saboteurs can readily operate within the government and every aspect of the Iraqi economy.

From the start, Iraqi and foreign journalists provided an inadvertent (and sometimes deliberate) propaganda arm, and media coverage of insurgent activity and attacks provided a de facto command and communications net to insurgents. This informal "net" provides warning, tells insurgents what attacks do and do not work, and allows them to coordinate their attacks to reinforce those of other insurgent cells and groups. As in all insurgencies, a race developed between the insurgents and the Coalition and Iraqi Interim Government forces to see whose strength could grow faster and who best learns from their enemies.

Evolving Threat Tactics and Pressure on Government Forces

During the summer and fall of 2003, Iraqi insurgents emerged as a serious threat with significant popular support in Arab Sunni areas, and developed a steadily more sophisticated mix of tactics. In the process, a native and foreign Islamist extremist threat also developed which deliberately tried to divide Iraq's Sunni Arabs from its Arab Shi'ites, Kurds, and other Iraqi minorities. By the fall of the 2004, this had some elements of a low-level civil war, and by June 2005, it threatened to escalate into a far more serious civil conflict.

There are no reliable unclassified counts of insurgent attacks and incidents, or of the casualties on both sides. The US only publicly reported on its own casualties, and the Iraqi government stopped making its own estimates public. Moreover, in many cases of individual killings, disappearances, and kidnappings there often is no record or the record does not provide any basis for identifying who was responsible or whether insurgent action was involved, Shi'ites and Kurds were taking reprisals, or the attack was simply a revenge killing or crime. Estimates of insurgent casualties are tenuous at best, and in all cases involving Iraqis the data that are available tend to focus on deaths and not wounded -- particularly if the wound did not require hospitalization.

The NGO Coordinating Committee on Iraq did, however, make useful rough estimates of the patterns of attack between September 2003 and October 2004. These patterns seem broadly correct and both illustrate key patterns in the fighting, and the need for competent and combat-capable Iraqi government military, security, and police forces:

- From September 2003 through October 2004, there was a rough balance between the three primary methods of attack, namely improvised explosive devices (IEDs), direct fire, and indirect fire, with a consistent but much smaller number of vehicle-borne improvised explosive devices (VBIED). Numbers of attacks varied significantly by month. There was a slow decline from well over 400 attacks each by improvised explosive devices (IEDs), direct fire weapons, and indirect fire weapons to around 300. There was also, however, a slow increase in attacks using VBIEDs.
- Attack distribution also varies, with a steadily rising number of attacks in the area of Mosul in the north. Baghdad, however, has been the scene of roughly twice as many attacks and incidents as the other governorates, with 300-400 a month on average. Al Anbar, Salah-al-din, and Ninewah have had roughly one-third to one half as many. Babil and Diyala average around 100 per month, lower levels of attack have taken place in Tamin and Basra.
- Since the Shi'ite fighting with Sadr has ceased, the peak of insurgent activity in the south has declined. There have been relatively low levels of attack in the Karbala, Thi-Qar, Wassit, Missan, Muthanna, Najaf, and Qaddisyaa governorates.
- Irbil, Dahok, and Sulaymaniyah are northern governorates administrated by the two Kurdish Regional Governments (KRGs) and have long been relatively peaceful.
- Attacks fit a broad pattern during the day, although 60% of the attacks reported are unspecified. Of those that do have a specific time reported, 10% are in the morning, 11% are in the afternoon, and 19% are at night.

A rough estimate of targets and casualties from September 2004 to October 2004 is shown in Figure I.1 below, and helps illustrate the continuing diversity of the attacks and that far more than American casualties were involved from the start of the conflict:

Figure I. 1: Illustrative Patterns in Targeting and Casualties: September 2003-October 2004

Target	Number of Attacks/Incidents	Killed	Wounded
Coalition Forces	3227	451	1002
Coalition Air Convoy	49	55	32
CPA/US Officials/Green Zone	32	60	206
Diplomatic Mission	11	7	9
Local Authority	31	56	81
Contractor	113	210	203
Civilian	180	1981	3467
Criminal & Suspect	49	31	972
ICDC	58	191	310
Kurds Army	31	25	8
Police	209	480	1012
UN	67	2	3
IO	1	2	0
NGO	5	5	11
Journalist	8	27	38
Interpreter	7	17	6
Public Property	182	5	15
Unspecified	43	1	1

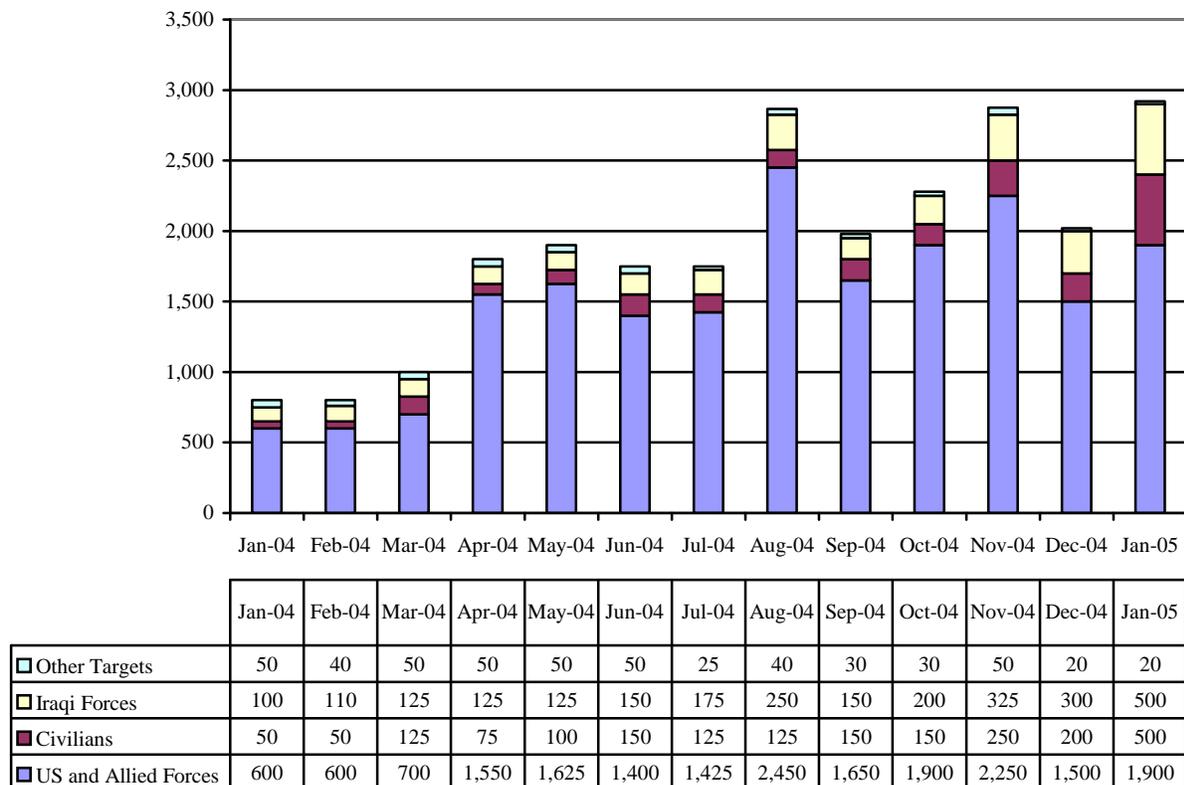
Figure I.2 shows how the war intensified from 2004 through 2005. As shown, insurgent attacks against Iraqi security forces increased dramatically during the final months of 2004. This trend continued into early 2005, although insurgents began to focus on softer, easier Iraqi targets rather than well-trained and well-equipped US forces after the January 30, 2004 elections. One Iraqi official described the new insurgent tactic in the following way: “In the past, they were targeting the American forces because they were in charge of security...After the new Iraqi army and police were established...they shifted their attacks.”^{xii}

The short-term effect of this shift was to decrease the number of insurgent attacks against US forces by more than 25 per cent during the early months of 2005. The number of US fatalities also decreased during this period, from 107 in January 2005 to 58 in February 2005 and 36 in March 2005. But the shift away from targeting US forces in favor of Iraqi forces appears to have been short-lived. US fatalities climbed to 52 in April and 80 in May 2005.^{xiii} The number of daily attacks also climbed during this period, from 45 in March to more than 60 in April and stayed there. Since then, the daily number of insurgent attacks has increased steadily, averaging around 100 in October 2005.^{xiv}

Although insurgents refocused their efforts in attacking Coalition troops, their attacks against Iraqi security forces did not level off. On June 27, 2005, insurgents launched a wave of attacks against Iraqi police and security forces in the northern town of Mosul. In the span of 16 hours, four suicide bombs went off, killing at least 37 Iraqi policemen and soldiers. In one of the deadliest attacks, a suicide bomber exploded a truck with 1,000 pounds of explosives outside a police station, killing ten policemen and ripping the station apart. Later in the day, a suicide bomber struck Al Kasik, an army base west of Mosul, killing 16.^{xv}

At the same time, an increase took place in attacks on infrastructure targets. As discussed below, the frequency of these attacks increased in the summer and fall 2005.

Figure I.2: Illustrative Patterns in Targeting: January 2004-January 2005



Note: Figures are rough estimates based on graphical data presented in the [New York Times](#).

Source: "A Report Card on Iraqi Security," [New York Times](#), April 11, 2005.

Political, Psychological, and Information Warfare Lessons

The goals and methods of the strategy and tactics the various insurgent groups have used evolved steadily after the summer and fall of 2003. Almost from the beginning, however, Iraqi insurgents, terrorists, and extremists exploited the fact that the media tends to focus on dramatic incidents with high casualties, gives them high publicity, and spends little time analyzing the patterns in the insurgency. The fact that there were different groups of insurgents and terrorists also led the patterns of insurgent activity to evolve in ways that included a steadily wider range of tactics that each group of actors exploited whenever it found them to be convenient, and which all groups of attackers could refine with time.

While various insurgent elements evolved different approaches to warfare, they came to exploit a mix of the following methods and tactics relating to political, psychological, and information warfare:

- **Attack the structures of governance and security by ideological, political, and violent means:** Use ideological and political means to attack the legitimacy of the government and nation building process. Intimidate and subvert the military and security forces. Intimidate and attack government officials and institutions at the national, regional, and local levels. Strike at infrastructure, utilities, and services in ways

that appear to show the government cannot provide essential economic services or personal security. A July 2005 letter to Zarqawi from Ayman al-Zawahiri admonished the Al Qaeda in Iraq leader for focusing too much on military attacks and not enough on political actions. In the letter, Zawahiri said freeing the country from Americans “does not depend on force alone” and urged Zarqawi to “direct the political action equally with the military action.”^{xvi}

- **Create alliances of convenience and informal networks with other groups to attack the US, various elements of the Iraqi Interim Government and elected government, and efforts at nation building:** The informal common fronts operate on the principal that the “enemy of my enemy” is my temporary friend. At the same time, movements “franchise” to create individual cells and independent units, creating diverse mixes of enemies that are difficult to attack.
- **Attack Iraqi elites and ethnic and sectarian fault lines; use them to prevent nation building and governance by provoking civil war:** As the US and Coalition phased down its role, and a sovereign Iraqi government increased its influence and power, insurgents increasingly shifted their focus of their attacks to Iraqi government targets, as well as Iraqi military, police, and security forces. At the same time, they stepped up attacks designed to prevent Sunnis from participating in the new government, and to cause growing tension and conflict between Sunni and Shi'ite, and Arab and Kurd.

There are no clear lines of division between insurgents, but the Iraqi Sunni insurgents focused heavily on attacking the emerging Iraqi process of governance, while Islamist extremist movements used suicide bombing attacks and other bombings to cause large casualties among the Shi'ite and Kurdish populations – sometimes linking them to religious festivals or holidays and sometimes to attacks on Iraqi forces or their recruiting efforts. They also focused their attacks to strike at leading Shi'ite and Kurdish political officials, commanders, and clergy.

Targeting other groups like Shi'ites and Kurds, using car bombings for mass killings, hitting shrines and festivals forces the dispersal of security forces, makes the areas involved seem insecure, undermines efforts at governance, and offers the possibility of using civil war as a way to defeat the Coalition and Iraqi Interim Government's efforts at nation building.

For example, a step up in Sunni attacks on Shi'ite targets after the January 30, 2005 election, led some Shi'ites to talk about “Sunni ethnic cleansing. This effect was compounded by bloody suicide bombings, many of which had some form of government target, but killed large numbers of Shi'ite civilians.”^{xvii} These attacks included the discovery of 58 corpses dumped in the Tigris, and 19 largely Shi'ite National Guardsmen bodies in a soccer stadium in Haditha. They also included a bombing in Hilla on March 1, 2005 that killed 136 – mostly Shi'ite police and army recruits.^{xviii}

Similar attacks were carried against the Kurds. While the Kurds maintained notably better security over their areas in the north than existed in the rest of the country, two suicide bombers still penetrated a political gathering in Irbil on February 1, 2004, killing at least 105. On March 10, 2005, a suicide bomber killed 53 Kurds in Kirkuk. On May 3, 2005, another suicide bomber – this time openly identified with the Sunni extremist group Ansar al-Sunna blew himself up outside a recruiting station in Irbil, killing 60 and wounding more than 150 others.^{xix} At the same time, other attacks systematically targeted Kurdish leaders and Kurdish elements in Iraqi forces.

By May 2005, Shi'ites had begun to retaliate, in spite of efforts to avoid this by Shi'ite leaders, contributing further to the problems in establishing a legitimate government and national forces. Sunni bodies were discovered in unmarked graves, as well as Shi'ite ones, and killings struck at both Sunni and Shi'ite clergy.^{xx}

In addition to assassinations aimed at disrupting the judicial and political process, insurgents have carried out assassinations of religious leaders as part of their larger goal of using sectarian violence to provoke a civil war. There appeared to be an up-turn in these assassinations in late summer and early fall 2005:

- July 19, 2005: Gunmen assassinate Sheikh Ahmad al-Juburi, the imam at Al-Taqwa Mosque in Al-Dawrah in southern Baghdad.
- August 17, 2005: Gunmen assassinate Ali al-Shimmari, a local imam and a member of the Association of Muslim Scholars, in northeastern Baghdad.

- September 1, 2005: Gunmen kill Sheikh Salim Nusayyif Jasim al-Tamimi, the imam of Al-Mustafa Mosque in Baghdad and a member of the Association of Muslim Scholars.
- September 15, 2005: A bomb exploded at Rawdat al-Wadi mosque in Mosul killing Sheikh Hikmat Husayn Ali, the imam of the mosque.
- September 16, 2005: Insurgents kill Fadhil Amshani, a Shiite cleric and follower of Moqtada al Sadr.
- October 2, 2005: Gunmen in southeast Baghdad killed Salah Hassan Ayash, a Sunni imam.
- November 14, 2005: Insurgents kill the administrator of Al-Hamid Mosque in the Al-Saydiyah neighborhood of Baghdad.
- November 23, 2005: Gunmen wearing Iraqi army uniforms burst into the home of Khadim Sarhid al-Hemaiyem, a Sunni and the head of Iraq's Batta clan, killing him along with three of his sons and his son-in-law.
- November 26, 2005: In Basra, Iraqi police discover the body of Sheikh Nadir Karim, the imam of a Sunni Mosque. Karim had been abducted from his home the previous night.
- November 28, 2005: Gunmen kidnapped Shihab Abdul-Hussein, a member of the Badr Organization, in Baghdad.
- November 29, 2005: In Fallujah, armed men kill Sheikh Hamza Abbas Issawi, a Sunni cleric who had called for Sunni participation in the upcoming parliamentary elections.

According to some reports, more than 60 Sunni imams have been killed since the start of the insurgency.^{xxi} Insurgent attacks on mosques and religious gatherings also intensified in the run up to the December 15 elections:

- October 29, 2005: A suicide bomber struck a small marketplace near a Shi'ite mosque in Huweder, six miles north of Baquba, killing at least 25 and wounding 45.
- November 3, 2005: A suicide bomber driving a minibus detonated his explosives outside a Shi'ite mosque in Musayyib, south of Baghdad, killing 20 and wounding 64. The mosque was the site of a previous explosion in July, when a suicide bomber blew up a fuel tanker nearby, killing 54 people.
- November 9, 2005: Two car bombs exploded near a Shi'ite mosque in Baghdad, killing six people.
- November 18, 2005: Suicide bombers struck two mosques in the largely Kurdish town of Khanaqin, near the Iranian border. The attacks, against the Sheik Murad and Khanaqin Grand mosques killed at least 80 Shi'ite worshippers and wounding more than 100. A third would-be suicide bomber was arrested shortly after the attacks.
- November 19, 2005: A suicide bomber struck a crowd of Shi'ite mourners in the village of Abu Saida, near Baquba, killing at least 36 people. More than 120 Shi'ites have been killed in the last 48 hours.
- November 28, 2005: In Dora, a neighborhood in southwest Baghdad, insurgents ambushed a bus carrying British Muslims to Shi'ite shrines, killing two and wounding four.
- November 30, 2005: Gunmen kill nine Shi'ite laborers near Baquba.
- November 30, 2005: Gunmen fired on the home of Salama Khafaji, a prominent Shi'ite politician.

Although the upsurge in violence in late November was a deliberate attempt by insurgents to disrupt the upcoming December 15 parliamentary elections, the largely sectarian nature of the violence was also partly due to the November 13 US discovery of 173 mostly Sunni malnourished and abused detainees in an Interior Ministry prison in Baghdad. The discovery of the secret torture center run by Shiite-led government security forces sparked renewed sectarian violence and led to a number of tit-for-tat murders in late November.

- **Link asymmetric warfare to crime and looting; exploit poverty and economic desperation:** Use criminals to support attacks on infrastructure and nation building activity, raise funds, and undermine security. Exploit unemployment to strengthen dedicated insurgent and terrorist cells. Blur the lines between threat forces, criminal elements, and part-time forces.

Attack petroleum and oil facilities, electric power, water, and other critical infrastructure: Attacks on power and water facilities have been used to both offset the impact of US aid and cause Iraqi anger against the government. Al Qa'ida and Ba'athist groups have found oil facilities and pipelines to be particularly attractive targets. The continuing threat to electric facilities forced many Iraqis to rely on home or neighborhood generators even in the areas with power, rolling power cuts in most areas, and major shortages in others. It was also a reason that the US was only able to spend \$1.0 billion of \$4.4 billion in programmed aid money on the electricity sector by the end of April 2005, and \$261 million out of \$1.7 billion on the petroleum sector.^{xxii}

Sabotage and theft helped cripple many of the country's 229 operating water plants by the spring of 2005, and some 90% of the municipalities in the country lacked working sewage processing plants, contaminating the main sources of water as they drained into the Tigris and Euphrates.

- **Strike at US and other aid projects to undermine Iraqi acceptance of the MNSTC-I and the perceived legitimacy of the Iraqi government.** It is unclear just how systematic such attacks have been, but a report by the Special Inspector General for Iraq Reconstruction indicates that at least 276 civilians working on US aid projects had been killed by March 31, 2005, and at least 2,582 had been wounded. The number of contractors killed also rose by 19% (to 44) in the first quarter of 2005. The cost impact is also high. The report indicates that the security costs of USAID funded aid projects were only 4.2% of the total cost from March 2003 to February 2004, but rose to 22% during the final nine months of 2004.^{xxiii} Other reports indicated that contractors had filed 2,919 death and injury claims for US and foreign workers between the beginning of the war on March 19, 2003, and May 10, 2003, with 303 killed.^{xxiv}
- **Focus on Large US Installations:** As the insurgents became better organized, they moved from hit and run firings at US installations to much larger and better organized raids that could capture major media attention even when these largely failed. The major Zarqawi organization raid on Abu Ghraib prison in early April 2005 was an example of such a raid.^{xxv} Other examples are the suicide bombing and infiltration attacks on the "Green Zone" in Baghdad and other major US military facilities in areas like Mosul. The use of Iraqi uniforms, security and army vehicles, false IDs, and intelligence gained from infiltrators also became more sophisticated.
- **Exploit Arab satellite television as well as traditional media:** Islamist movements and other insurgents learned how to capture maximum exposure in regional media, use the Internet, and above all, exploit the new Arab satellite news channels. Insurgents and terrorist also pay close attention to media reactions, and tailor their attacks to high profile targets that make such attacks "weapons of mass media." Al Qa'ida has repeatedly demonstrated a sophisticated understanding of the role the media plays in advancing or weakening their organization. Ayman al-Zawahiri, Al Qa'ida's No.2, has described the conflict as taking place "in the battlefield of the media" and has admitted that the organization is engaged "in a media battle in a race for the hearts and minds of [Muslims]" with the West.^{xxvi}

Zarqawi's Al Qa'ida in Iraq group took their attempted manipulation of the news media to new heights in June 2005. In an Internet statement, the organization severely criticized the Al Jazeera satellite television station for what it called impartial reporting. It claimed that Al Jazeera, long criticized by US officials, had "sided" with the US over Iraq.

In recent months, however, there has been some evidence to suggest that the jihadists might be losing the media battle. In what may be a new trend, Zarqawi has begun to issue "retractions" or "clarifications" after unpopular attacks or statements. After his declaration of "total war" on Shiites in the summer of 2005 received a very cool response from the larger jihadi community, Zarqawi issued a partial retraction. Zarqawi responded in a similar way after the November 9 bombings in Amman. The backlash from the Muslim world, especially within Jordan itself, was enough to prompt Zarqawi to issue several statements denying Jordanians had been the targets of the attacks. Such statements and retractions suggest Zarqawi may be on the defensive and that his group is growing increasingly vulnerable to Muslim public opinion.

In what may prove to be a harbinger of future tactics, insurgents have begun to attack the media directly. On July 14, 2005, gunmen attacked a television crew in Baghdad, wounding three men. In October 2005, unknown gunmen attacked a broadcasting and television compound in Mosul in October.^{xxvii}

- **Exploit the internet as well as traditional media; a tool for propaganda as well as communication and exchange of tactical methods and techniques:** More and more web sites appear from extremist movements and terrorist groups that publicize the actions of such groups or make false or exaggerated claims. Iraqi terrorist and insurgent organizations have learned the media and analysts regularly monitor such sites and they furnish a low-cost source of publicity. According to one report, the number of Iraqi insurgent websites increased from 145 to 825 between January and December 2005.^{xxviii} At the same time, the flood of web site activity makes it difficult to know when sites are being used for communications, and terrorist and insurgent organizations from all over the world have established the equivalent of an informal tactical net in which they exchange techniques for carrying out attacks, technical data on weapons, etc.
- **Use the media to target and develop the equivalent of swarming techniques:** Iraqi terrorist and insurgent organizations have learned that media reporting on the results of their attacks provides a powerful indicator of their success and what kind of attack to strike at in the future. While many attacks are planned long in advance or use "targeting" based on infiltration and simple observation, others are linked to media reporting on events, movements, etc. The end result is that insurgents can "swarm" around given types of targets, striking at vulnerable points where the target and method of attack is known to have success.
- **Maintain a strategy of constant attrition, but strike hard according to a calendar of turning points and/or at targets with high political, social, and economic impact:** Insurgents and Islamists learned the importance of a constant low-level body count and the creation of a steady climate of violence. This forces the US into a constant, large-scale security effort; makes it difficult for Iraqi forces to take hold; puts constant pressure on US and Iraqi forces to disperse; and ensures constant media coverage.

At the same time, insurgents and Islamists showed a steadily more sophisticated capability to exploit holidays, elections and other political events, and sensitive targets both inside the countries that are the scene of their primary operations and in the US and the West. Attacks on Kurdish and Shi'ite religious festivals are cases in point.

So was an attack on Abu Ghraib prison, the site of many media reports on the abuse of Iraqi prisoners on April 2, 2005. The prison still held some 3,446 detainees and the insurgent attack was conducted by 40-60 insurgents, lasted nearly 40 minutes, and was large and well organized enough to wound 20 US troops.^{xxix}

- **Push "hot buttons:" Try to find forms of attack that provoke disproportionate fear and "terror" to force the US Iraqi forces into costly, drastic, and sometimes provocative responses:** Terrorists and insurgents have found that attacks planned for maximum political and psychological effects often have the additional benefit of provoking over-reaction. Hamas and the Palestinian Islamic Jihad exploited such tactics throughout the peace process.

One example of such attacks that put constant pressure on Americans, demonstrated insurgent "strength," and got high profile media attention was the long series of attacks on the secure areas in the "Green Zone" in Baghdad and along the road from that zone to the Baghdad airport.

Attacking the airport road was an almost perfect way of keeping up constant psychological and political pressure. It passed through a hostile Sunni area, was almost impossible to secure from IEDs, VBIEDs, rocket and mortar attacks, and sniping without pinning down large numbers of troops. This helps explain why there were well over 100 attacks on targets moving along the road during January 30 through May 4, 2005.^{xxx}

- **Game Regional, Western, and other outside media:** Use interview access, tapes, journalist hostage takings and killings, politically-led and motivated crowds, drivers and assistants to journalists, and timed and targeted attacks to attempt to manipulate Western and outside media. Manipulate US official briefings with planted questions.
- **Use Americans and other foreigners as proxies:** There is nothing new about using Americans and other foreigners as proxies for local regimes, or attacking them to win support for ideological positions and causes. There has, however, been steadily growing sophistication in the timing and nature of such attacks, and in exploiting softer targets such as American businessmen in the country of operations, in striking at

US and allied targets in other countries, or in striking at targets in the US. It is also clear that such attacks receive maximum political and media attention in the US.

- **Attack UN, NGO, embassies, aid personnel, and foreign contractor business operations:** Attacking such targets greatly reduces the ability to carry out nation building and stability operations to win hearts and minds. Attacking the “innocent,” and curtailing their operations or driving organizations out of the country has become an important focus of insurgents and Islamist extremist attacks. Iraqi insurgents have pursued this tactic since the first days of the insurgency.

In November of 2005, Al Qa'ida divulged new details about the April 19, 2003 bombing of the U.N. headquarters in Baghdad, one of the first major attacks of the Iraqi insurgency and the first to intentionally target foreigners. The 2003 bombing killed 23 people, including the head of the U.N. mission, Sergio Vieira de Mello, the Iraqi coordinator for the U.N. children's fund, UNICEF, and several World Bank staffers, and injured more than 150. In a statement posted on an Islamic radical website, Al Qa'ida said the attack had been planned by Thamir Mubarak Atrouz, a Sunni Arab from the town of Khaldiyah in Anbar province. Atrouz, a former officer in Saddam Hussein's army had fled to Saudi Arabia but returned to Iraq before the US-led invasion of Iraq began in March 2003 in order to fight Americans. He was killed by US forces in Fallujah in April 2004.^{xxxii} The 2003 bombing of U.N. headquarters in Baghdad, although the most famous attack on diplomatic offices in Baghdad, is hardly the only such incident since the insurgency began, however. Insurgents have also periodically fired mortars against US facilities inside the Green Zone.

Insurgents stepped up their attacks against foreign diplomats in the summer and fall of 2005. In July, Al Qa'ida in Mesopotamia killed two Algerian diplomats and one Egyptian. The group also attempted to kidnap Bahraini and Pakistani embassy staff, though the former escaped with light wounds and the latter was unharmed. Insurgent attacks against diplomats in the fall of 2005 included:

- October 10, 2005: Gunmen ambushed a convoy of Arab League diplomats in Baghdad, wounding two Iraqi policemen.
- October 20, 2005: Two Moroccan embassy employees were kidnapped on the highway from Amman to Baghdad. On November 3, Al Qa'ida in Mesopotamia posted a statement on a website saying Abdelkrim el-Mohsfidi, a Moroccan diplomat, and Abderrahim Boualem, his driver, would be executed. The group said the executions were meant as "an example for others who are still thinking to challenge the mujahedeen and dare to come to the land of the two rivers."
- November 7, 2005: A Sudanese diplomat, Taha Mohammed Ahmed, is hit by a stray bullet while walking in the garden of the Sudanese Embassy in Baghdad.
- November 9, 2005: Hammouda Ahmed Adam, a Sudanese Embassy employee was killed by unknown gunmen while driving in the Mansour district of Baghdad.
- November 12, 2005: Insurgents attacked the Omani Embassy in Baghdad, killing an Iraqi police officer and an embassy employee.

As is evident from the examples listed above, insurgents have repeatedly singled out envoys from Arab and Muslim countries in their attacks. Al Qa'ida in Mesopotamia's strategy appears to be aimed at driving representatives of these countries from Iraq in order to weaken the new Iraqi government and to divide US allies.

In a statement released on November 3, the organization called on diplomats in Baghdad to “pack their bags and leave” or face certain death.^{xxxiii} The statement, signed by the military wing of Al Qa'ida in the Land of the Two Rivers, read: “We are renewing our threat to those so-called diplomatic missions who have insisted on staying in Baghdad and have not yet realized the repercussions of such a challenge to the will of the mujahedeen.”^{xxxiii}

Al Qa'ida's strategy has, however, had some success. The Philippine Embassy in Baghdad relocated its staff to Jordan after the July 2005 attacks on Algerian and Egyptian diplomats. The previous summer, the Philippine government granted insurgent's demands and withdrew its peacekeeping contingent from Iraq in order to secure the safe release of a Filipino hostage. The kidnapping of Angelo de la Cruz in July 2004 led Manila to issue a ban on its citizens working in Iraq. The government re-issued the ban in November 2005, after two Filipino contract workers were killed in Iraq.^{xxxiv}

While there were as many as 40 diplomatic missions in Iraq as of late 2005, several countries have been hesitant to send ambassadors to Baghdad. At least two of Iraq's neighbors, Jordan and Saudi Arabia, have postponed doing so until the security situation in the country improves.^{xxxv}

- **Kidnap, kill, and/or intimidate women and cadres of foreign workers:** Killing and kidnapping women, particularly those working in NGOs and aid projects gets great media attention and leads some organizations to leave the country. Kidnapping or killing groups of foreign workers puts political pressure on their governments, gets high local and regional media attention, and sometimes leads governments to stop their workers from going to Iraq.

Counts of kidnappings in Iraq, and analyses of responsibility, are necessarily uncertain and sharply undercount the number of kidnappings of Iraqis – many of which are never reported. An analysis of kidnappings from April 1, 2004 to January 31, 2005 showed, however, that there were 264 foreign civilian kidnappings. Some 47 were killed, 56 remained missing, 150 were released, five escaped, and a total of six were rescued. Given the fact there were some 100,000 expatriates in Iraq at the time, this meant a roughly 1 in 380 chance of being kidnapped, and roughly 20% of the foreigners kidnapped were killed or beheaded.^{xxxvi}

In November of 2005, the New York Times reported that of the more than 200 foreigners who had been abducted since the start of the war, several dozen had been killed and at least twenty were still missing. The tactic appears to have peaked in late 2004 however. When US troops entered Fallujah in November of 2004 they discovered bunkers where captives had been held and tortured. After Fallujah, however, the number of foreign kidnappings dropped significantly.^{xxxvii}

The kidnapping of foreigners by insurgents returned in the fall of 2005. In late October, two Moroccans were kidnapped by insurgents and held hostage. The following month, four aid workers, two Canadians, a Briton and an American, were also kidnapped. A group calling itself “Swords of Truth” issued a claim of responsibility, saying the four were “spies of the occupying forces.”^{xxxviii} Also in November, two Filipino contract workers were killed in a bombing of their convoy and a German archaeologist was kidnapped.

- **Expand the fighting outside Iraq:** In an interview with ABC News in mid-November, Iraq's Interior Minister Bayan Jabr said he believed Zarqawi might be planning out-of-area operations. Jabr said his ministry had uncovered information that Al Qa'ida in Mesopotamia was planning at least two other attacks—one in Yemen and the other in Egypt—against foreigners and Americans. Jabr also claimed that foreigners had been recruited to come to Iraq in order to receive training so that they could return to their home countries to carry out attacks. A few days later, US Army Maj. Gen. William Webster, whose 3rd Infantry Division is responsible for security in Baghdad, said he believed it “a distinct possibility” that insurgents were training in Iraq for attacks for other countries.^{xxxix}

It is not clear exactly when Zarqawi and other insurgents began to consider attacking targets outside Iraq, and when actual attempts began. Zarqawi is a Jordanian and began to attack targets in Jordan long before he went to Iraq. In late 1999, he organized attacks on the Radisson SAS hotel in Amman and Jewish and Christian religious targets. In October 2002, his followers killed Laurence Foley, as US diplomat assigned to the US Embassy in Amman. He seems to have played a role in the bombing of the Jordanian Embassy in Baghdad in August 2003.

There are some indications that Zarqawi's group began planning and attempting such attacks in late 2003. Jordan also reported that a Zarqawi agent named Azmi al-Jayousi led a cell that attempted to carry out a massive explosive and chemical attack on the US Embassy, the headquarters of the Jordanian General Intelligence Directorate, office of the prime minister and other targets in Amman in mid-April 2004.

Some sources say Jordan halted further attack attempts after that time, including a rocket attack on a US warship in Aqaba earlier in 2005. One senior Jordanian source claimed that Jordan had foiled two attacks in 2003, eight in 2004, and 10 in 2005.^{xl}

Zarqawi was the first major insurgent leader to openly threaten to expand the fighting to foreign countries, however, although his open statements only began to get serious publicity in the summer of 2005. Jordanian intelligence reported that it had intercepted signals that Zarqawi had ordered some of his fighters to leave Iraq to carry out attacks in other Arab and Islamic countries in October 2005.

Some experts believe the July 23, 2005 Sharm el-Sheik bombings signaled the expansion of Zarqawi's network beyond Iraq. But the bombings at the Red Sea resort, which killed at least 88 and wounded more than 150, appear to have been the work of Egyptian radical Islamists. Three groups—the “Abdullah Azzam Brigades”; “Tawhid and Jihad Group in Egypt” and the “Holy Warriors of Egypt”— claimed responsibility for the bombings. But although all three are believed to have ties to Al Qa'ida, there is no evidence to suggest Zarqawi was directly involved in the attack.

On November 9, 2005, Zarqawi's operation in Iraq carried out three suicide bombings of US owned hotels in Amman. The attackers specifically targeted Jordanians -- including a large wedding party – and killed at least 60 people from some six different countries and wounded more than 100. Only a few Americans were killed or hurt in the attacks on the Radisson, Grand Hyatt and Days Inn, but the casualties also included four Palestinian officials, one of who was Lt. General Bashir Nafe, the head of West Bank security.

- **Kidnap, kill, and/or intimidate professionals, Iraqi media and intelligentsia, “mystery killings:”** Steady killing and intimidation of individual professionals, media figures, and intelligentsia in threatened areas offers a series of soft targets that cannot be defended, but where a cumulative pattern of killing and intimidation makes governance difficult, creates major problems for security and police forces, weakens the economy, and exacerbates the general feeling of insecurity to the point where people lose faith in the Iraqi government, Coalition, and political process. According to the head of Iraqi Journalists Syndicate, Shihab al-Tamimi, kidnappings and assassinations targeting Iraqi journalists surged in the weeks leading up to the January 30 election.^{xii}

The US State Department report on Human Rights for 2004 states that the Ministry of Human Rights claimed that at least 80 professors and 50 physicians were assassinated during 2004. Reporters Without Borders noted that 31 journalists and media assistants were killed during the year. Universities also suffered from a wave of kidnappings. Researchers, professors, administrators, and students were all victims, including some who disappeared without a trace.^{xiii} According to the Iraqi newspaper Al-Mashriq, more than 3000 Iraqi doctors have left the country in order to save their lives since the start of the insurgency.^{xiiii}

In September 2005, a local Iraqi newspaper reported that after doctors and university professors, bakers had become the most popular target among insurgents in Iraq. In one 48-hour period, insurgents killed ten bakers in Baghdad alone. A number of bakeries were forced to close after receiving threats from insurgents.^{xlv}

Beginning in the fall of 2005, there were signs that insurgents had selected a new target: teachers. Up until that time, teachers had largely been spared the violence inflicted upon other occupations. In late September Sunni insurgents dressed as Iraqi police officers stormed the Jazeera primary school in Muwelha, a Sunni suburb of Iskandariya, killing five teachers and their driver.^{xlv} The attack raised fears among many Iraqis that insurgents would now begin to target Iraqi schools. A few days later, on September 29, gunmen opened fire on a mini-bus transporting teachers in the Al-Mansuriyah district of Baquba, killing one and wounding several.^{xlvi}

On October 9, gunmen entered a school in Samarra and executed a teacher in front of students and other teachers.^{xlvii} In all of the incidents, the teachers were Shiites, leaving many to believe that the attacks were motivated by sectarian violence rather than insurgent hostility toward their profession. A number of schools, many in Shiite neighborhoods, have responded to the wave of attacks by erecting security barriers and hiring guards.^{xlviii} On October 20, a mortar hit a public school in the al-Mansour neighborhood of Baghdad, killing one student and wounding four others.^{xlix} Attacks on schools, however, are still relatively rare. University professors have also become popular targets for insurgents. In a five-day period in late November 2005 five university professors were killed, three of them in greater Baghdad area.ⁱ

Targeted political assassinations also appeared to be on the rise in the summer and fall of 2005. Popular targets include local political and religious leaders, the heads of local police forces and ministry officials from Baghdad. For the month of August, these attacks included:ⁱⁱ

- August 1, 2005: In Baghdad, gunmen storm the house of Haider Mohammed Ali al-Dujaili, an aide to Iraqi Deputy Prime Minister Ahmad Chalabi, and kill him.

- August 3, 2005: Gunmen kill General Abdel Salam Rauf Saleh, the head of the Interior Ministry's commando unit. Also in Baghdad, gunmen kill a police colonel and two finance ministry employees.
- August 4, 2005: In Diyala, gunmen kill the director of planning for the region.
- August 8, 2005: In Baghdad, gunmen assassinate two officials from the Oil Ministry and wound two others.
- August 9, 2005: Gunmen assassinate Abbas Ibrahim Mohammed, an Iraqi Cabinet employee, in Baghdad.
- August 10, 2005: Gunmen kidnap Brig. General Khudayer Abbas, head of administrative affairs for the Ministry of the Interior.
- August 14, 2005: In Baghdad, gunmen kidnap Husam Kazim Juwayid, general manager of the central bank.
- August 15, 2005: Gunmen assassinate Muhammad Husayn, a member of the municipal council of Al-Khalis. A failed assassination attempt is carried out on Iraqi Vice-President Adil Ab-al-Mahdi in Al-Azim.
- August 16, 2005: Gunmen attack and wound several bodyguards of former Iraqi Prime Minister Iyad Allawi
- August 17, 2005: Gunmen assassinate Ali al-Shimmari, a local imam and a member of the Association of Muslim Scholars, in northeastern Baghdad.
- August 18, 2005: Unknown gunmen assassinate Jasim Waheeb, a Baghdad judge.
- August 19, 2005: Insurgents in Mosul gun down three members of the Iraqi Islamic Party, the country's largest Sunni party. Gunmen kill Aswad al-Ali, an Arab member of a local council near Kirkuk.
- August 22, 2005: 11 Pakistani construction workers kidnapped near Nasiriya in early August are released.
- August 25, 2005: Insurgents attack the convoy of Iraqi president Jalal Talabani south of Tuz Khormato killing two bodyguards and wounding three others
- August 26, 2005: In Mosul, gunmen kill Jiyam Huseein, the leader of the local Reform Party. Gunmen assassinate an Iraqi police officer in northeast Baghdad
- August 27, 2005: Insurgents kill Lt. Col. Mohammed Salih in Kirkuk. Also in Kirkuk, gunmen kill Lt. Col. Muhammad Fakhri Abdullah.
- August 29, 2005: Gunmen kill Brig. Gen. Numan Salman Faris, director of the rapid response team for Baghdad's Azamiyah district.

Periods of relative calm could be followed by sudden escalations. For example, in one twenty-four hour period in late September 2005, insurgents assassinated Colonel Fadil Mahmud Muhammad, the head of Diyala's Police Command; killed four workers from the Ministry of Displacement and Migration in Baghdad; and, carried out other assassinations in Baquba, Ramadi, Latifiyah and Mosul.ⁱⁱⁱ On October 30, gunmen assassinated Ghalib Abdul Mahdi, adviser to the cabinet of Prime Minister Ibrahim al-Jaafari and brother of Vice President Adel Abdul Mahdi. Madhi was being driven to work in Baghdad by his driver when the two were ambushed and killed. Gunmen struck again later in the day, wounding the deputy trade minister, Qais Dawood al-Hassan.ⁱⁱⁱ Such attacks, attempts by the insurgents to weaken the new government, are becoming more frequent.

In what appears to be a new twist in political assassinations, gunmen have begun to target those involved in the trial of former regime officials like Saddam Hussein. On October 20, one day after the start of the trial in Baghdad, gunmen assassinated Saadon al-Janabi. Al-Janabi had been defending Awad al-Bandar, a former Ba'ath Party official. Two weeks later, on November 8, gunmen killed Adel al-Zubeidi, the lawyer for former Vice President Taha Yassin Ramadan. Al-Zubeidi was riding in his car in the Sunni

neighborhood of Adil in western Baghdad when insurgents sprayed the car with bullets, injuring another attorney, Thamir al-Khuzai in the process.

In response to the attacks, more than 1,100 Iraqi lawyers withdrew from Saddam Hussein's defense team on November 12. The attorneys had earlier said they would not return to court until security was stepped up and reaffirmed their intention not to return to court on November 28 when the trial was scheduled to resume. In the statement they released, the attorneys said they withdrew because "there was no response from the Iraqi government, US forces and international organizations to our demands for providing protection to the lawyers and their families."^{iv} Many of the lawyers have rejected the Interior Ministry's offer to supply them with bodyguards, claiming the Shiite-led police and security forces are behind many of the political assassinations.^v

Iraqi police arrested eight Sunni Arabs in Kirkuk on November 26, two days before Saddam's trial was scheduled to resume in Baghdad. The men were accused of plotting to assassinate Raed Juhi, one of the judges who prepared the case against Saddam. When told of the threat on his life, Juhi said: "As an Iraqi citizen and a judge, I am vulnerable to assassination attempts...If I thought about this danger, then I would not be able to perform my job...I will practice my profession in a way that serves my country and satisfies my conscience."^{vi}

- **"Horror" attacks, atrocities, and alienation:** Whether or not the tactics were initially deliberate, insurgents in Iraq found that atrocities like desecrating corpses and beheadings are effective political and psychological weapons for those Islamist extremists whose goal is to divide the West from the Islamic world, and create an unbridgeable "clash of civilizations."

Experts have long pointed out that one of the key differences between Islamist extremist terrorism and previous forms of terrorism is that they are not seeking to negotiate with those they terrorize, but rather to create conditions that can drive the West away, undermine secular and moderate regimes in the Arab and Islamic worlds, and create the conditions under which they can create "Islamic" states according to their own ideas of "Puritanism."

This is why it serves the purposes of Islamist extremists, as well as some of the more focused opponents of the US and the West, to create mass casualties and carry out major strikes, or carry out executions and beheadings, even if the result is to provoke hostility and anger. The goal of Bin Laden and those like him is not to persuade the US or the West, it is rather to so alienate them from the Islamic and Arab world that the forces of secularism in the region will be sharply undermined, and Western secular influence can be controlled or eliminated. The goal of most Iraqi insurgents is narrower – drive the US and its allies out of Iraq – but involves many of the same methods.

Seen in this context, the more horrifying the attack, or incident, the better, even if it involves Iraqi military, security, and police forces. Simple casualties do not receive the same media attention. They are a reality of war. Killing (or sometimes releasing) innocent hostages does grab the attention of the world media. Large bombs in crowds do the same, as does picking targets whose innocence or media impact grabs headlines. Desecrating corpses, beheading people, and similar acts of violence get even more media attention – at least for a while.

Such actions also breed anger and alienation in the US and the West and provoke excessive political and media reactions, more stringent security measures, violent responses, and all of the other actions that help instigate a "clash of civilizations." The US and the West are often provoked into playing into the hands of such attackers.

At the same time, any attack or incident that garners massive media coverage and political reactions appears to be a "victory" to those who support Islamist extremism or those who are truly angry at the US – even though the actual body count is often low, and victory does not mean creating stronger forces or winning political control. Each such incident can be used to damage the US and Western view of the Arab and Islamic worlds.

Two incidents in particular, both involving the murder and mutilation of US contractors, deserve special mention. On March 31, 2004, insurgents in Fallujah attacked two SUVs carrying four civilian contractors charged with providing security for food convoys in the area. The insurgents attacked the vehicles with rocket-propelled grenades and small arms fire before pulling the bodies from the burning vehicles and

dragging them through the street. Several of the bodies were mutilated and two were strung up on a nearby bridge while local crowds chanted "Fallujah is the graveyard of Americans." Footage of the burned and mutilated corpses was broadcast around the world.^{lvii}

The brutality of the attack drew comparisons to a similar incident in Mogadishu a decade earlier when American soldiers were dragged through the streets by angry mobs.^{lviii} Experts like John Pike of GlobalSecurity.org said the comparison to the 1993 attack was spot-on and suggested the Mogadishu attack probably served as an inspiration for the Fallujah attack: "They knew how to stage that. They are trying to frighten Americans. They want to frighten us out of Iraq...It was premeditated, planned, skillfully staged terrorism. They know the degree of dread it will inflict in American family members."^{lix} In July, after a three-week siege of Fallujah by US Marines, a militant group calling itself the Islamic Army in Iraq claimed responsibility for the attack.^{lx}

A similar incident occurred on September 20, 2005, when insurgents attacked a convoy of US contractors north of Baghdad. The convoy, which included US military guards, came under attack after making a wrong turn in the largely Sunni city of Duluiyah, 45 miles north of Baghdad. Insurgents opened gunfire on the convoy, killing four and wounding two.^{lxi} The British newspaper *The Daily Telegraph* broke the story more than a month later, with a grisly account of the attack. The paper described how the insurgents dragged two contractors from their truck and forced them to kneel, "[k]illing one of the men with a rifle round fired into the back of his head, they doused the other with petrol and set him alight. Barefoot children, yelping in delight, piled straw on the screaming man's body to stoke the flames." Afterwards, a crowd dragged the corpses through the street, chanting anti-US slogans.^{lxii} The military did not confirm the attack (in fact, no mention of it seems to have appeared before the *Telegraph* account,) until October 22, and said only it was investigating the incident.

- **"Body dumps" became a variation on this theme:** The bodies of Iraqi forces and other Iraqis have been dumped in rivers, soccer stadiums, and other public places where they were found without any clear picture as to who had killed them or why. In mid March 2005, for example, some 80 bodies were found in four dumps in Iraq, many of who were police officers and soldiers.^{lxiii} Other notable discoveries in late 2005 included:^{lxiv}
 - April 20, 2005: 100 bodies were retrieved from the Tigris River, near the town of Madain.
 - April 22, 2005: The bodies of 19 Iraqi soldiers were found near Beiji.
 - May 15, 2005: The bodies of 38 men shot execution-style were discovered at an abandoned chicken farm, west of Baghdad.
 - May 28, 2005: The mutilated bodies of 10 Iraqi Shia Muslim pilgrims were found in the desert near the town of Qaim.
 - June 10, 2005: The bodies of 16 people were discovered in western Iraq.
 - June 12, 2005: Police discover 28 bodies in and around Baghdad.
 - August 14, 2005: Captured insurgents lead Iraqi police to a grave containing 30 bodies in southern Baghdad.
 - August 25, 2005: Iraqi police discover 36 bodies in southeastern Baghdad.
 - September 3, 2005: Police discover three bodies in the Tigris River, north of Baghdad.
 - September 5, 2005: The bodies of three local politicians were found in Tal Afar.
 - September 8, 2005: Police discover 14 bodies near Mahmoudiyah.
 - September 9, 2005: The bodies of 10 decapitated Iraqis were found.
 - September 12, 2005: Police in Baghdad discover the bodies of 10 Iraqi men.
 - September 17, 2005: A total of 11 bodies, handcuffed and blindfolded, were found around the country.
 - September 18, 2005: 20 bodies were pulled from the Tigris River, north of Baghdad.
 - September 22, 2005: The bodies of 10 Iraqis were discovered in Mosul.

- September 28, 2005: The bodies of seven Sunni men from Hurriya were found in Shula.
- October 3, 2005: Three bodies were found in Baghdad.
- October 7, 2005: The bodies of 22 executed Sunnis are discovered in Badra, near the border with Iran.
- October 11, 2005: A US Army patrol in Tikrit discovers three bodies with multiple gunshot wounds.
- October 26, 2005: The bodies of nine Iraqi border guards are found in Karbala.
- October 27, 2005: The bodies of 17 Sunnis are found in Al-Nasiriyah Governorate.
- October 30, 2005: Iraqi police discover 14 bodies near Tal Afar. The victims appeared to have been killed between one and three months ago.
- November 10, 2005: Iraqi soldiers discover the bodies of 27 executed civilians near the border with Iran.
- November 14, 2005: Four bodies are discovered in northern Baghdad.

As the list shows, most of the body dumps have been found in the greater Baghdad area. According to the Associated Press, at least 204 of the 566 bodies that have been found since the interim government was formed on April 28 were discovered in Baghdad. Although the identities of most victims are unknown, the Associated Press has identified 116 Sunnis, 43 Shiites and one Kurd among the victims.^{lxv} The frequency of these discoveries appeared to increase in the run-up to the October election, though they did not appear to subside in the weeks thereafter.

- **Deprive the central, regional, and local governments' efforts to expand legitimacy. Attack nation-building and stability targets:** There is nothing new about attacking key economic targets, infrastructure, and aspects of governance critical to the functioning of the state in an effort to disrupt its economy, undermine law enforcement and security, and encourage instability. Iraqi insurgent and Islamist attacks on aid workers and projects, and their role in encouraging looting, sabotage and theft did, however, demonstrate a growing sophistication in targeting stability efforts and tangible progress in aid and governance. These tactics also interact synergistically with the above tactics.
- **Confuse the identity of the attacker; exploit conspiracy theories:** Insurgents and Islamists learned that a mix of silence, multiple claims to be the attacker, new names for attacking organizations, and uncertain levels of affiliation made it harder for the US to respond. They also produced more media coverage and speculation.

As of yet, the number of false flag operations has been limited. However, in Iraq and elsewhere, attacks have often been accompanied by what seem to be deliberate efforts to advance conspiracy theories to confuse the identity of the attacker or to find ways to blame defenders of the US for being attacked. In addition, conspiracy theories charging the US with deliberately or carelessly failing to provide an adequate defense have been particularly effective.

- **Seek to create sanctuaries like Fallujah and the river areas in Al Anbar, Ninevah, and Mosul Provinces; and to take shelter in mosques, shrines, and high value targets, and targets with high cultural impact:** Again, exploiting facilities of religious, cultural, and political sensitivity is not a new tactic. However, as operations against Sadr and in Fallujah have shown, the tactics raise the media profile, create a defensive deterrent, and can be exploited to make the US seem anti-Islamic or to be attacking a culture and not a movement.

In a different case, driving insurgent cells out of Iraq's cities in 2004 led them to move into Al Anbar Province in the West, and to shelter in towns along the route from the Syrian border along the Euphrates, and through Qaim, Rawa, Haithah, and Fallujah to Baghdad. Insurgents have also taken refuge in the largely Sunni towns and cities along the Tigris from Mosul to Baghdad. The areas along the rivers gave the insurgents a population to hide in and disperse among. Unlike the flat desert areas, there were also hills, tree cover, and numerous built up areas, with many potential ambush sites and predictable lines of communication where IEDs could be implanted. While Coalition forces could always enter such areas, they could rarely stop the insurgents from dispersing, and could then regroup – at least in those cases where no

permanent garrison and defense force was deployed and the Iraqi government did not provide effective governance.^{lxvi}

- **Exploit, exaggerate, and falsify US attacks that cause civilian casualties, collateral damage, friendly fire against local allies, and incidents where the US can be blamed for being anti-Arab and anti-Islam:** Terrorists and insurgents have found they can use the media, rumor, and conspiracy theories to exploit the fact that the US often fights a military battle without proper regard for the fact it is also fighting a political, ideological, and psychological war.

Real incidents of US misconduct such as the harsh treatment of detainees and prisoners, and the excessive security measures are cases in point. So too are careless political and media rhetoric by US officials and military officers.

Bin Laden, the Iraqi insurgents, etc., all benefit from every Western action that unnecessarily angers or frustrates the Arab and Islamic worlds. They are not fighting to influence Western or world opinion; they are fighting a political and psychological war to dominate Iraq and the Arab and Islamic worlds.

- **Kidnap, kill, and attack official envoys and diplomats from Muslim countries seeking to engage the Jafari government.** As discussed above, insurgents have singled out diplomats from Sudan, Algeria, Egypt, Morocco and Jordan for attack. This limits the ability of the elected government to establish international legitimacy and credibility. Governments whose personnel suffer an attack may not have the will to continue to pursue relations in the face of domestic discontent over any casualties and the Iraq war in general, as was the case with the Philippines. Such attacks can make the Iraqi government look powerless.
- **Kill members of the constitutional committee** either to discourage participation, or in the case of the Sunni delegation, deprive the committee of the necessary numbers of Sunni participants to move forward. Proceeding without the requisite numbers of Shi'ites, Sunnis, and Kurds would thus bring the committee's legitimacy into question.

After weeks of protesting their lack of representation on the constitutional committee, Sunni Arab groups reached a compromise with senior members of the Shi'ite dominated body on June 16, 2005. Under the deal, 15 Sunni Arab representatives joined the committee. As a result, the committee grew in size from 55 to 70. An additional 10 Sunni Arabs were given special advisory roles, serving as consultants in the constitutional process. US officials strongly supported the changes, in the hopes that it would lead to greater Sunni participation in the upcoming constitutional referendum.

Insurgents did not take long to strike, however. On July 19, gunmen assassinated Mijbil Issa, one of the newly appointed Sunni delegates working on the constitution. His bodyguard and one of the Sunni consultants, Dhamin Hussein al-Obeidi, were also killed. The three men were leaving a Baghdad restaurant when three gunmen inside a minibus opened gunfire on the car carrying them. For many of Iraq's Sunnis, the violence showed the consequences of participating in Iraq's new political process.

On July 20, the 12 remaining members of the Sunni Arab delegation -two had earlier resigned after being threatened by insurgents-suspended their membership in protest over the murder. Five days later, the delegation ended its boycott and returned to the committee.

- **Kidnap, kill and attack candidates running in the December 15 parliamentary elections** as well as local election officials in order to disrupt the political process. Members of the Iraqi National Assembly were frequent targets of attacks by insurgents in 2005. Although many believed Sunnis members of the Assembly were being singled out for attacks, a list of some of those killed shows that both Shi'ites and Kurds were among the victims as well:
 - April 27, 2005: Insurgents in Baghdad gun down Lamia Abed Khadouri Sakri. She was elected in January as part of Prime Minister Ayad Allawi's Iraqi List Party, which received 40 seats in the new cabinet. Sakri is the first member of the Iraqi National Assembly to be assassinated.
 - June 28, 2005: A suicide attack takes the life of Sheik Dhari Fayad, the oldest member of the Iraqi National Assembly.

- July 30, 2005: Sheik Khalaf Aliyan, a member of the Sunni National Dialogue Council, escaped an assassination attempt in southern Baghdad.
- September 17, 2005: Gunmen kill Faris Nasir Hussein, a member of Iraq's Shabak ethnic minority. Hussein was elected to parliament on the Kurdish ticket. The attack, which took place on a road from Mosul, also injured another politician, Haidar Qassem.

After the success of the October referendum, insurgents stepped up their attacks against Iraqi politicians in preparation for the December 15 parliamentary elections. As part of pre-election violence, insurgents unleashed a wave of assassinations and kidnappings targeting candidates running in the elections as well as election workers. For the month of November, these included:

- November 3, 2005: An internet statement posted on a website by Al Qa'ida in Iraq says the group had kidnapped Majida Yussef Sael, a candidate in the December elections and a member of Prime Minister Iyad Allawi's party.
- November 8, 2005: In Kirkuk, insurgents kidnap Hatam Mahdi al-Hassani, the brother of a leading Sunni Arab politician.
- November 12, 2005: Jamal Khaz'al, the chairman of the Iraqi Islamic Party in Basra, escaped an assassination attempt.
- November 13, 2005: Insurgents assassinate Kiaweh, a member of the Al-Naafi Advisory Council.
- November 17, 2005: Tariq al-Ma'muri, the deputy chairman of the Al-Ummah al-Iraqiyah Party and a candidate for the upcoming elections, escaped an assassination attempt in Al-Qut.
- November 18, 2005: For the second day in a row, Ma'muri escaped an assassination attempt. This time in southern Baghdad.
- November 18, 2005: Insurgents kidnapped Tawfiq al-Yasiri, secretary general of Iraqi Democratic Coalition and Shams al-Iraq candidate.
- November 22, 2005: Unknown gunmen broke into the headquarters of the Communist Party's branch offices in Sadr City, and killed two activists.
- November 23, 2005: Insurgents wearing Iraqi army uniforms burst into the home of Khadim Sarhid al-Hemaiyem, a Sunni candidate in the upcoming elections and the head of Iraq's Batta clan, killing him along with three of his sons and his son-in-law.
- November 26, 2005: In a statement posted on an Islamist website, Al Qa'ida in Iraq announced it had killed Miqdad Ahmed Sito, a Kurdish election activist, on November 22 in Mosul.
- November 28, 2005: Gunmen in Baghdad kill Ayad Alizi and Ali Hussein. Both were members of the Iraqi Islamic Party, a Sunni party that had boycotted the January elections but was running candidates in the December elections. Alizi had been selected to run as part of a Sunni ticket.
- November 28, 2005: Gunmen in southern Baghdad killed Ghalib al-Sideri, a candidate for the Iraqi Front for National Dialogue.
- November 28, 2005: Insurgents attacked members of the Assyrian Party in Mosul, killing two and wounding two others.
- November 30, 2005: Gunmen fired on the home of Salama Khafaji, a prominent female Shi'ite politician, wounding two guards.

A number of local and regional government officials were also killed in November. Because of the sectarian nature of the new political parties, however, it is unclear whether or not the murders were politically or religiously motivated.

Lessons About Methods of Attack and Combat

There is no clear division between the mix of insurgent and terrorist tactics focused on the political and psychological nature of war and those that focus on directly attacking targets like MNF-I and Iraqi government forces, Iraqi and Coalition officials, and the Iraqi economy and nation building process. The insurgents again made major adaptations in their tactics and methods of attack that still further increased the problems in creating effective Iraqi forces:

- **Adapt targets to place maximum pressure on Iraqi social and political apparatuses:** Insurgents have adapted their tactics as well, focusing greater attention on Iraqi military forces and police. In January 2005, 109 Iraq police and military were killed through insurgent activity. By May, this number had spiked to 259, and by July 304.^{lxvii} As the Iraqi constitutional process unfolded – which the Sunnis were largely absent from due to their widespread boycott of the Parliamentary election – sectarian violence became increasingly apparent. Sunni attacks on Iraqi security and political figures increased as radicals sought to derail the political process. On August 19, 2005, three Sunni election workers were kidnapped in Mosul, driven to Al Noor and executed before a throng of people gathered before the Al Noor Mosque. Of the election workers murdered, one was identified as Faris Yunis Abdullah, a senior official in the mostly Sunni Iraqi Islamic Party. The three men were posting placards encouraging Iraqis to vote in the October 15 election when they were abducted.^{lxviii}
- **Suicide bombs, car bombs, and mass bombings:** The use of such tactics increased steadily after late 2003, in part due to the high success rate relative to alternative methods of attack. By late 2004, exploding vehicles accounted for approximately 60% of Iraqi police and recruit fatalities.^{lxix} Suicide attacks have increased, and killed and wounded Iraqis in large numbers. The number of car bombs rose from 420 in 2004 to 873 in 2005, and the number of suicide car bombs rose from 133 to 411, and the number of suicide vest attacks rose from 7 in 2004 to 67 in 2005.^{lxx} In case after case, Shi'ite civilians and Sunnis cooperating with the government were successfully targeted in ways designed to create a serious civil war.

It is not always clear that suicide-bombing techniques were tactically necessary. In many cases, timed devices might produce the same damage. Events in Iraq showed, however, that suicide bombers had a major psychological impact and gain exceptional media attention. They also came to serve as symbols of dedication and commitment, can be portrayed as a form of Islamic martyrdom, and attract more political support and attention among those sympathetic to the cause involved.

The “cost” of suicide bombers was also low. While no reliable figures are available, only about 10% seemed to have been Iraqis as of August 2005, and most had been recruited from outside Iraq by various Islamist organizations. Key sources were North Africa, the Sudan, Jordan, Syria, Gulf states like Saudi Arabia, and Central Asia.

The limited evidence available indicates that many were chosen because they can be persuaded to seek Islamic martyrdom, and do so collectively and without trying to call great public attention to themselves. They often could be rapidly indoctrinated and given minimal training and then be used as “force multipliers” for relatively small Islamic extremist groups. A single volunteer could use a strap-on bomb, or single vehicle filled with explosives, penetrate a crowded area or high profile target area, and then set off an explosion producing high casualties.

Even when such attacks fail to reach their target the explosion often got intense public and media attention. They also became political weapons by exploiting the fact Arab Sunni Islamists were being used to kill and maim large numbers of Arab Shi'ites and Kurds, as well as any Sunni volunteers and military in the Iraqi forces. Some of the larger weapons approached the status of weapons of mass terrorism, and even much smaller levels of casualties got enough attention to make them weapons of mass media and weapons of mass politics – tools that could be used to encourage ethnic and sectarian civil war. In the spring of 2005, some 170 such attacks were conducted in April, 151 in May, and 133 in June.

These attacks generate even greater public and media attention when women carry them out. Zarqawi has asserted that many Iraqi females have come to him asking to be dispatched on suicide missions. In the past, he has used this to try and shame Iraqi males into volunteering for suicide missions.^{lxxi} Although Saddam Hussein's security forces used female bombers at least once during the 2003 war, Al Qa'ida in Iraq did not

begin using female suicide bombers until the fall of 2005. (Prior to 2005, Coalition forces had reported capturing a number of female suicide bombers on foot, including one trying to enter the Green Zone in October 2003.^{lxxii})

The first female suicide attack occurred on September 28 in the city of Tal Afar. After having been denied entry to a civil military operations building, the bomber detonated her explosives in a nearby square where Iraqi civilians and US soldiers often interacted. The attack claimed the lives of five civilians and injured more than 30. Zarqawi's organization asserted responsibility for the attack in an Internet posting saying a "sister" of the Malik Suicidal Brigade had carried out the successful mission.^{lxxiii}

The first female suicide attack of the insurgency was followed closely by a female suicide car bombing. On October 11, a female suicide bomber detonated her car near a group of US soldiers on patrol in Mosul. The only other known incident of a female suicide car bomber occurred in Haditha in April of 2003 when two women, acting on the orders of officials in Saddam Hussein's regime, killed three US soldiers.^{lxxiv}

In response to the bombing in Tal Afar, the regional police chief-General Ahmed Mohammed Khalaf-issued the following statement:

Today's attack seems to represent a new tactic by the insurgents to use women, who are rarely searched at the Tal Afar checkpoints because of religious and social traditions that grant women special treatment.

Because of the bombing, Gen. Khalaf said women and children would now be searched "in the same manner as men".^{lxxv} Cultural and religious barriers have made any interaction between US forces and Iraqi women difficult in the past. Following the attacks, the Ministry of Defense announced there would be no new security measures other than "being more aware that females as well as men can be suicide bombers."^{lxxvi}

The most well-known Iraqi female suicide bomber was that of Sajida Mubarak al-Rishawi, a 35-year-old mother of four from Ramadi, who was to have been the fourth suicide bomber of the November 9 hotel attacks in Amman. Rishawi fled the Radisson hotel after her husband detonated his explosives and her own failed to go off. She was picked up by Jordanian police three days later and made a televised statement that was subsequently aired around the world.

Hussein al-Dulaimi, a cousin of Rishawi, believes she was motivated by anger and humiliation. As discussed later, three of her brothers were killed by US forces in Iraq. According to Dulaimi, the family was often harassed by US troops:^{lxxvii}

"In one incident, Sajida's house was raided, and an American soldier put his boot on the head of Sajida's husband...That made her very angry, as this was a big insult against her and her husband."

Rishawi's case is unusual in that it is believed to be the first case of husband and wife suicide bombers.

In late November, reports surfaced that a European woman had been involved in a suicide attack in Iraq. Iraqi officials believe a November 9 attack on a US military convoy in Baghdad was carried out by a Belgian woman who had converted to Islam after marrying a radical Muslim. The woman, identified as Muriel Degauque, was the only fatality in the attack and had traveled to Iraq to carry out jihad with her husband.^{lxxviii} The case was the first instance of a European female suicide bomber.

- **Use foreign Islamist volunteers as cannon fodder; put "paid" and low value Iraqi insurgents in high risk positions:** Both Islamist extremist cells and more nationalist cells and groups learned to exploit young men recruited from outside Iraq as "Islamic martyrs" in suicide bombings and other high risk missions. They developed foreign recruiting networks, often staging such volunteers through Syria and Jordan, indoctrinating them, and then using them ruthlessly. Alternatively, groups and cells learned to isolate their leaders, financiers, and experts from high risk and front line missions, sending in inexperienced and junior personnel to take risks – sometimes young Iraqis paid token fees for risking the actual attack. In at least some cases, the difference between suicide attack and other attack was minimal. Iraqis were sent out to conduct attacks where the planner must have known they had little or no chance of survival.

- **Stay behinds, diehards, and suicide squads:** During and after Fallujah, insurgents increasingly had teams stay behind who seem to have been prepared to die or to seek martyrdom. Many were Iraqis. Their willingness to defend a building or small area with suicidal determination and no regard for retreat often inflicted higher casualties on MNF-I and Iraqi forces.
- **Mix crude and sophisticated IEDs:** Hezbollah should be given credit for having first perfected the use of explosives in well structured ambushes, although there is nothing new about such tactics – the Afghans used them extensively against the Soviets. Iraq has, however, provided a unique opportunity for insurgents and Islamist extremists to make extensive use of improvised explosive devices (IEDs) and vehicle borne improvised explosive devices (VBIEDs) by exploiting its massive stocks of arms. The insurgents were able to draw on large stocks of explosives, as well as large bombs and artillery shells. Nearly 400 tons of HMX and RDX plastic explosive disappeared from the Qaqaa weapons facility alone after the fall of Saddam Hussein's regime.

The Iraqi attackers also learned to combine their extensive use of low grade IEDs, more carefully targeted sophisticated IEDs, very large car bombs and other devices to create a mix of threats and methods that is much more difficult to counter than reliance on more consistent types of bombs and target sets.^{lxxxix}

The insurgents based many of their initial efforts on relatively simple weapons designs, some of which seem to have been adapted from the Arabic translations of US field manuals on booby traps and similar improvised devices. The insurgents soon learned, however, to use more sophisticated detonators and triggering systems to counter US electronic countermeasures, and increase their distance away from the bomb. According to one report, only 10% of the IEDs used in Iraq as of May 2005 were modeled on the pressure-detonation devices shown in US Army Field Manual 5-31 and in a direct Iraqi translation published in 1987.^{lxxx} Insurgents had also learned how to make crude shaped-charges to attack US armored and other vehicles.

By the summer of 2005, insurgents were attempting an average of 65 IED attacks a day. Many were detected and defeated, but their use of shaped charges had become more sophisticated, using technology first developed by the Lebanese Hezbollah. In addition, the insurgents had learned to cluster and stack anti-tank mines, and use brute force IEDs like adapted 500-pound bombs.^{lxxxi} They also learned the vulnerabilities of US and Coalition armored vehicles, and which held the most troops and/or crew. They learned more about the probable routes Coalition and Iraq forces would have to take, and which kind of attacks would do most to disrupt a given movement.

Insurgent organizations improved in structure to the point where key personnel directing operations, financing them, and providing technical support were far less active in the field, and more and more use was made of foreign volunteers, Iraqis recruited with little background, and Iraqis paid small sums to do part of the work in implanting IEDs.

Small, largely independent cells came to carry out many operations – a technique which ensured that operations were hard to detect and penetrate and making it difficult to roll up an organization by catching men in the field or interrogating members of any one cell. In some cases, holes and locations for IEDs were be prepared by one small team -- sometimes using vehicles with holes cut in the bottom to defeat visual detection. A different team might cruise through an area and plant an IED quickly on a target of opportunity basis to defeat surveillance and patrols. Al Qa'ida in Iraq and Ansaar al Islam became particularly skilled in such operations. In short, the insurgents advanced both their IED technology and tactics in tandem.^{lxxxii}

The insurgents also paid close attention to US intelligence collection methods, and counter-IED operations and change their behavior accordingly. They also use improved methods of concealment, like digging holes in a road and then "paving over" the hole. Other methods have included stealing police, military, and government vehicles, and uniforms and IDs, to penetrate in to secure areas, and linking bombings to ambushes with rifles and RPGs – or additional IEDs – to attack the response force.

In September 2004, General Richard Cody, the US Army Vice Chief of Staff, stated that some 500-600 IEDs were then going off each month, and roughly half either harmed US personnel or damaged US vehicles.^{lxxxiii} While Coalition forces claimed to find some 30-40% of IEDs, and render them safe, by May 2005, they also reported that the number of IED incidents had steadily climbed to some 30 per day.

Lt. General James T. Conway, Director of Operations in the US Joint Staff, stated in May 2005, that a total of 70% of all Coalition casualties to date since the fall of Saddam Hussein had been caused by IEDs, an effort that had been so successful that the US announced that even uparmored Humvees were unsafe in high threat areas, and were being replaced with heavily armored 5-ton "gun trucks."^{lxxxiv} An analysis by the Iraq Coalition Casualty Count showed that IEDs had killed 336 Americans by various suicide or car bombs, as of April 29, 2005.^{lxxxv}

IEDs accounted for 189 of 720 US combat deaths in 2004 -- about 26 percent. Deaths caused by IEDs rose by more than 41% during the first five months of 2005, compared with a similar period in 2004, and accounted for 51% of the 255 combat deaths as of June 9, 2005. There were 85 deaths attributed to IEDs in the first five months of 2004, and 120 in 2005. This was a primary reason that the number of uparmored Humvees in US forces rose from around 200 in the summer of 2004 to 9,000 in June 2005.^{lxxxvi}

The use of roadside bombs (improvised explosive devices IEDs) remains a major problem for US and other Coalition forces. The total number of IED attacks nearly doubled from 5,607 in 2004 to 10,953 in 2005. While the success rate of IED attacks dropped significantly, from 25-30% in 2004 to 10% in 2005, they still had a major impact. During 2005, there were 415 IED deaths out of a total of 674 combat deaths, or 61.6 % of all combat deaths. IEDs accounted for 4,256 wounded out of a total of 5,941, some 71.6% of the wounded. From July 2005 to January 2006, IED's killed 234 US service members out of a total of 369 total combat deaths, or 63.4%. They accounted for 2314 wounded out of 2980 total combat wounded, or 77.7 %.

To put these numbers in perspective, IEDs caused 900 deaths out of a total of 1,748 combat deaths, or 51.5 % during the entire post-Saddam fall from March 2003 and January 2006. IEDs caused 9,327 wounded out of a total of 16,606 or 56.2%.^{lxxxvii} However, the numbers of personnel killed and wounded by IEDs are scarcely the only measure of insurgent success. Casualties may have dropped but the number of attacks has gone up. IED attacks tie down manpower and equipment, disrupt operations, disrupt economic and aid activity, and interact with attacks on Iraqi civilians and forces to limit political progress and help try to provoke civil war.

Similar data are not available on Iraqi casualties, a larger percent of whom seem to have been hit by suicide bombers and in ambushes, but the chronology in the Appendix to this analysis shows there have been many effective attacks. For example, three Iraqi soldiers were killed and 44 were wounded in a single VBIED bomb attack on their bus on April 6, 2005.^{lxxxviii} Iraqi military, security, and police are particularly vulnerable because they have little or no armor, and often must move into insecure facilities or go on leave in unprotected vehicles simply to perform routine tasks like bringing money to their families in a cash-in-hand economy.

The number of roadside bombs continued to increase in the fall of 2005, part of the larger wave of violence unleashed by insurgents in the run-up to the December 15 elections. The US military reported that for September and October 2005, there were more than 2,000 roadside bombs. While IED attacks had numbered around 700 a month in the spring of 2004, there were 1,029 attacks in August; 1,044 in September; and, 1,029 in October. Although both the Iraqi and US security forces were becoming more adept at detecting the bombs, the insurgents were planting explosives in greater numbers than ever before.

The lethality and effectiveness of the devices also increased. In the six month period between May and October 2005, more than 60 per cent of all US troop fatalities were caused by IEDs. Of the more than 569 attacks across Iraq that occurred during the last week of October, 40 percent involved improvised bombs. IED attacks for that period accounted for 64 percent of coalition casualties and 37 percent of Iraqi security force casualties.^{lxxxix}

Gen. Peter Pace, the chairman of the Joint Chiefs of Staff, told a press briefing in November:^{xc}

Between the increase in armor and the changes in tactics, techniques and procedures that we've employed, the number of attacks-IED attacks-that have [killed or wounded troops] has gone down...That said, there are more overall IED attacks by the insurgents, and we are working on that problem.

But US efforts to combat the effectiveness of the IEDs and find them before they detonate have not always been successful. Jammers used by US troops in Iraq to prevent insurgents from detonating IEDs with cell

phones or garage-door openers often interfere with US radio signals, causing troops to turn off the jammers when they use their radios.^{xcv}

According to Pentagon spokesman Lawrence Di Rita, IEDs pose a “tough” and evolving challenge because the problem that existed last year “is a different IED problem than the IED problem that exists today.”^{xcvii} In late fall, the Pentagon announced that insurgents were using new triggers or sensors on the devices but that it was unable to figure out where the new technology was coming from or how best to defeat it. Although most bombs were still believed to be coming from inside Iraq, the military said it had evidence that bombs and technology were entering Iraq from the outside. Iran, as discussed below, is the candidate most often suspected as the source of this new technology.

US military officials believe IEDs are likely to be a problem for US forces for years to come, and not just in Iraq. Improvised bombs could become the weapon of choice for future insurgencies and guerilla wars. A 140-person Pentagon task force began working on ways to combat the roadside bombings in mid-2004. Brig. Gen. Joseph Votel, who currently leads the Pentagon’s anti-IED effort, said in early November 2005 that IEDs “remain the only thing that we haven’t solved, I think, in terms of the enemy capability to operate against us.” Lt. Gen. James Conway, the operations director of the Joint Staff, agreed, saying the US military was placing a greater emphasis on IEDs “because it’s the only tool the enemy really has left in order to be able to take us on and be able to really cause casualties.” Similarly, Di Rita has said that once the US finds a way to eliminate the improvised devices, “it’s over.”^{xcviii}

The Pentagon has been looking at how the British and Israelis dealt with similar problems in Northern Ireland and Lebanon in order to learn from those experiences. So far, however, the taskforce, which has received more than \$1.5 billion in funding to date, has been unable to produce a “silver bullet” against IEDs.^{xciv}

- **Adapt technology to match updates in Coalition defense capabilities:** Despite technological advances and changes in tactics by the US military, insurgents continue to remain one step ahead. The summer of 2005 brought an increase in “shaped-charge” explosives, the use of sophisticated infra-red motion detectors to fire them as targets passed by, and new radio-controlled triggers with enough range and power to work from outside the range of the Coalition’s ECM bubble.

The number of American troops killed by IEDs spiked during the summer, with 35 deaths in May; 36 in June; and 39 in July.^{xcv} Another adaptation that has increased the lethality of insurgent IED attacks was the increased size of the weapons, a response to the up-arming of U.S. vehicles. Initially, IEDs in Iraq were small charges composed of single 60mm and 81mm mortars. Insurgents have since increased the size to 122mm and 152mm, and begun to use buried 500- and 1,000-lb airplane bombs to effect an explosive upward force that can render current up-arming useless.^{xcvi} The 39 deaths by bombing in July 2005 was the largest to-date monthly toll since the war began.

In early October 2005, the British government announced that the recent increase in sophisticated roadside bombs in Iraq could be traced to Iran. During the summer of 2005 insurgents began using infra-red “trip wires” rather than the less sophisticated remote control devices to detonate IEDs. The technology is similar to that used by Hezbollah in Lebanon. While cautioning that they could not be sure about the level of official or unofficial Iranian involvement, Prime Minister Tony Blair told reporters that new explosive devices being used against Coalition troops in Iraq could nevertheless be traced “either to Iranian elements or to Hezbollah.”^{xcvii} A breakaway group from Moqtada al-Sadr’s militia is believed to be using the trip-wires, as are Sunni insurgents.

- **Specialize and compartment operations, use isolation, affiliation, and “swarming:”** Insurgent groups have learned to create structures where leadership cadres are almost totally isolated from operations and communication, focusing on providing broad guidance and the propaganda and media struggle. Finance, planning, armorer, and pert operational groups are similarly isolated and physically separated from the leadership and each other. Specialized groups are created in larger organizations for IED operations, assassinations, even strikes focused on specialized groups like Shi’ite clergy. Suicide bomber groups are kept separate from those planning and arming the attacks and treated as expendable. Low level and low value cadres are expended in defensive operations or attacks, while higher value cadres disperse and seek to survive. Paid elements are used to avoid loss of cadre personnel.

Cell structures are deliberately kept loose, and direct command and communication minimized. Mission tasking replaces the kind of direct tasking and communication that the Coalition and Iraqi forces might detect. Affiliated groups and different mixes of cells may be brought in to “swarm” a given target or support a given operation, but the proliferation of different groups and elements helps ensure the survival of all insurgent groups by making it impossible to target a given set of cells and leaders.

The insurgents also use their own version of “swarming.” They use media coverage, key calendar events, and other forms of “open source” targeting and reporting on the effectiveness and impact of given attacks to know which strike have high profile, what methods of attack work, and the media and military impact of their actions. The proliferation of groups and cells, attack somewhat at random, but against high value targets in given place or time, of a given type, or simply in a constant stream of diverse attacks removes the need for coordination and complex C4I/BM operations, and allows a slow and uncoordinated tempo of operations to be effective.

- **Increase the size and power of IEDs to nullify the advantages of US and Coalition armor and find countermeasures to US jamming and other countermeasures:** In two separate instances in early January 2005, IEDs destroyed a Bradley Fighting Vehicle and an Abrams tank. The two vehicles are among the more heavily armored vehicles in the US arsenal. Prior to the two bombings, both the Abrams and the Bradley Fighting Vehicle had proven relatively effective in protecting troops inside. More generally, insurgents have learned to use vehicles with holes drilled in their floors to rapidly dig holes, and only emplace IEDs when they know convoys are on the way. They have learned simply radio control devices like garage door openers and cell phones are detectable and jammable. They have imported more sophisticated trigger devices, arm IEDs before convoys or vehicles are in line of sight, and use IR motion detectors and trip wires to detonate the IED when they are not present to be counterattacked. Alternatively, they have learned to use more than one IED, fire additional weapons after vehicles have halted to deal with the first attack, and sometimes “swarm” the vehicles under attack with rapid strikes with RPGs and automatic weapons. These attacks have become more lethal as insurgent fire has become more accurate, and they have learned to strike at vulnerable points in armored and uparmored vehicles (like the windows of uparmored Humvees.)
- **Use mixed attacks, and seek to ambush military and emergency forces in follow-on attacks:** Iraqi insurgents steadily improved their ability to carry out complex attacks where an IED might be set off and then either more IEDs or other methods of attack would be used against rescuers and follow-on forces. Alternatively, an ambush might be used to lead US and Iraqi forces into an area with IEDs.

By the spring of 2005, insurgents increasingly used such mixed attacks to strike at US facilities. For example, they used a mix of gunmen, suicide car bombs, and a large fire truck filled with explosives to attack a US marine base at Camp Gannon at Husaybah near the Syrian border on April 11, 2005.^{xviii} On May 9, 2005, they used a hospital at Haditha as an ambush point, and then attacked the US forces that responded with suicide bombs once they are entered. This mix of unpredictable attacks, many slowly built up in ways difficult for US intelligence methods to detect, has greatly complicated the operations of US and Iraqi forces, although scarcely defeated them.

- **Carry out sequential ambushes:** Increasingly carry out complex mixes of sequential ambushes to draw in and attack Iraqi and US responders to the initial or previous follow-on attacks.
- **Exploit the weaknesses in US, Coalition, and Iraqi combat and logistic vehicles:** The insurgents soon learned to target unarmored and lightly armored vehicles, and to highlight and train to hit at their weakness point. Deliberately or not, they learned this forced the US to use steadily heavier armor, disperse force to protect most movements, and pay the cost of trying to uparmor and uparm everything from truck and Humvees to armored fighting vehicles like the Stryker. At the same time, insurgents learned how to place IEDs where they could kill many armored vehicles from below –where their armor was lighter or less effective, and to use detonating devices that allowed remote triggering as armored vehicles passed above an IED or group of anti-tank mines.
- **Develop complex mixes and ambushes using small arms and light weapons:** At least through the spring of 2005, insurgents did not make effective use of looted guided anti-tank weapons, and had only been able to down one aircraft with manportable surface to air missiles (MANPADS).^{xix} They did, however, steadily

improve their tactics from single fire ambushes to multiple firings of RPGs against the same target, mixes of firing positions, and sequential fire points, ambushes, and defenses -- mixing small arms, RPGs, and light automatic weapons.

- **“Swarming” techniques, and attacks on vehicles:** The quality of urban and road ambushes improved strikingly in Iraq, as did the ability to set up rapid attacks, and exploit the vulnerability of soft skinned vehicles. Insurgents also learned to “swarm” coalition forces by rushing in from different points or firing simultaneously from multiple locations. In some cases, a single vehicle could take eight RPG rounds in a short encounter. Particularly in built-up areas, these tactics could kill or disable even heavy armor like the Abrams tank, and posed a major threat to lighter armored vehicles, as well as exposed infantry.
- **Make better use of light weapons like automatic weapons, RPGs, and mortars; attack from remote locations or use timed devices:** While much will depend on the level of insurgent and Islamist extremist access to arms, Iraq and Afghanistan have seen a steady improvement in the use of systems like mortars, anti-tank weapons, rockets, and timed explosives. It has also seen improvements in light weapons and the increasing use of armor piercing ammunition as a cheap way of attacking body armor, vehicles, and penetrating walls.
- **Import small “force multipliers”:** Rather than smuggle large numbers of arms, and create highly visible lines of supply, the insurgents imported devices like night vision systems, commercial communications, sniper rifles, and new forms of more sophisticated detonators.
- **Make effective use of snipers:** Iraqi insurgents initially had poor marksmanship and tended to fire off their weapons in sustained and poorly armed bursts. With time, however, some groups and cells not only developed effective snipers, but trained spotters, learned how to position and mix their snipers with other elements of Iraqi forces, and developed signals and other communications systems like them in tactical operations. Overall fire discipline and marksmanship remained poor through the late spring of 2005, but sniper elements became steadily more effective, and the overall quality of insurgent fire discipline and marksmanship was generally no worse than that of Iraqi soldiers, security personnel, and police. Snipers acquired new types of rifles, ant-armor ammunition, and body armor from outside Iraq, indicating they might have both support and training from Islamist extremists. Islamist web sites also began to include interactive sniper “training” data as a recruiting tool and crude training aid.^c
- **Attack lines of communication (LOCs), rear area, and support activity:** Iraqi insurgents soon found that dispersed attacks on logistics and support forces often offer a higher chance of success than attacks on combat forces and defended sites, and make the Coalition fight wars based on “deep support” rather than “deep strikes” beyond the Forward Edge of Battle Areas (FEBA). In some cases, like the road from the Green Zone and central Baghdad to the airport, insurgents also chose routes that the Coalition and government forces could not avoid, where constant attacks both harassed operations and became a political statement and symbol of Iraq’s lack of security. These “ambush alleys” allowed the insurgents to force a major Iraqi or MNF defensive effort at relatively little cost.
- **Strike at highly visible targets with critical economic and infrastructure visibility:** Water and power facilities have a broad political, media, economic, and social impact. Striking at critical export-earning facilities like Iraq’s northern export pipeline from the Kirkuk oil fields to the IT-1A storage tanks near Beiji, where oil accumulates before it is pumped further north to Cheyhan, has sharply affected the government’s revenues, forced it to create special protection forces, and gained world attention.
- **Kill Iraqi elites and “soft targets”:** The insurgents soon found it was far easier to kill Iraqi officials and security personnel, and their family members, than Americans. They also found it was easier to kill mid-level officials than better-protected senior officials. In some areas, simply killing educated elites and/or their family members – doctors, professionals, etc. – could paralyze much of the nation building process, create a broad climate of insecurity, and force the US and Iraqi forces to disperse resources in defensive missions or simply have to stand aside and tolerate continued attacks.
- **Target elections, the political process and governance:** Elections and the local presence of government are soft, dispersed targets whose operation is critical to political legitimacy. Hitting these targets helps

derail the political process, gets media visibility, offers vulnerable “low hanging fruit,” and intimidates the government and population in much wider areas than those subjected to direct attack.

In the run up to the October referendum, insurgents intensified their attacks upon political and infrastructure targets. Insurgents bombed a number of party offices, including those of the Kurdish Democratic Party and the Sunni Arab Iraqi Islamic Party. The latter was attacked after it urged its followers to vote in favor of the constitution.

Despite predictions of major violence, there are relatively few attacks by insurgents on the actual day of the referendum. Across the country, more than nine million Iraqis voted in 6,000 polling stations. Early estimates put voter turnout at 61% and only five of the capital's 1,200 polling stations are attacked. However, incidents still occurred in spite of a halt to nearly all movement by non-military and non-governmental vehicles, and placing peak levels of Coalition and Iraqi security forces on duty.

- In Ramadi, US patrols clashed with insurgents in the early morning hours. Also in Ramadi, a roadside bomb kills five US soldiers and two Iraqi soldiers. Insurgents fired six mortar rounds at a sports hall being used as a polling center.
- A roadside bomb in Saqlawiyah killed a US Marine.
- South of Basra, gunmen attacked an empty polling station at 3 a.m., but were apprehended.
- In Baquba, a roadside bomb struck an Iraqi army and police convoy on patrol, killing three soldiers and wounding another three.
- In Baghdad, insurgents targeted five polling stations: A roadside bomb exploded early Saturday near a school polling station in the Amiriyah neighborhood of western Baghdad, wounding two policemen. At 8:30 a.m., a rocket landed nearby a voting station in Azamiyah, northern Baghdad, injuring one civilian. Half an hour later, a mortar landed near a polling station in the Kazemiyah area. The mortar did not explode. Insurgents opened fire on a polling station in the Amil district of western Baghdad. Iraqi policemen returned fire, accidentally wounding three civilians on their way to vote. At midday, insurgents shot and killed a voter walking home from a polling station in western Baghdad.

As already discussed, insurgents stepped up their attacks against Iraqi politicians in preparation for the December 15 parliamentary elections. As part of pre-election violence, insurgents unleashed a wave of assassinations and kidnappings targeting candidates running in the elections as well as election workers. Attacks against party offices have also become common.

- **Strike at major aid and government projects after completion; break up project efforts when they acquire visibility or have high levels of employment:** Insurgents and terrorists often simply struck at the most vulnerable projects, but they seem to have learned that timing their attacks, looting, sabotage, and intimidation to strike when projects are completed means the Coalition and government aid efforts have maximum cost with minimum effect. They struck at projects when the security forces protecting workers and aid teams were no longer there. This often led the local population to blame the Coalition or government for not keeping promises or providing the proper protection. Alternatively, breaking up project efforts when they began to have maximum local visibility and employment impact had many of the same effects.
- **Hit the softest element of Iraqi military, security, and police forces:** The insurgents found they could strike at men on leave, their families, recruits or those seeking to enlist, green troops and trainees, and low quality units with limited fear of effective retaliation. High profile mass killings got major media attention. Moreover, isolated forward elements in hostile or threatened areas not only were vulnerable, but successful attacks broke up governance, aid efforts, and intimidated local populations. This strategy has been most damaging to Iraqi police, which remain the weakest element in the security apparatus.
- **Create informal distributed networks for C⁴I—deliberately or accidentally:** Like drug dealers before them, Iraqi insurgent and Islamist extremists have learned enough about COMINT and SIGINT to stop using most vulnerable communications assets, and to bypass many – if not most – of the efforts to control cash flow and money transfers.

The use of messengers, direct human contact, coded messages through the Internet, propaganda web pages, and more random methods of electronic communication are all cases in point. At the broader level, however, insurgents in Iraq seem to have adapted to having cells and elements operate with considerable autonomy, and by loosely linking their operations by using the media and reporting on the overall pattern of attacks to help determine the best methods and targets.

Smuggling, drug sales, theft and looting, and direct fund transfers also largely bypass efforts to limit operations through controls on banking systems, charities, etc. Under these conditions, a lack of central control and cohesive structure may actually be an asset, allowing highly flexible operations with minimal vulnerability to roll-up and attack.

The existence of parallel, non-competing groups of hostile non-state actors provides similar advantages and has the same impact. The fact that insurgent and Islamist extremist groups operate largely independently, and use different tactics and target sets, greatly complicates US operations and probably actually increases overall effectiveness.

- **Denying the Coalition and Iraqi government local victory:** The other side of the coin was that the insurgents found they could disperse and reinfiltate into many towns and parts of cities the moment Coalition and combat-ready Iraqi elements left and deny the Iraqi government the ability to either deploy police or govern. Alternatively, bombings and sabotage could prevent or restrict the recovery of a town or area, and create a level of risk that meant many would not return or attempt to live a normal life. The case of Ramadi is particularly illustrative. Even as late as November 2005, insurgents were able to capture large parts of the city and exert control.
- **Street scouts and spotters:** Like many previous insurgent groups, Iraqi hostiles learned to have children, young men, and others use cell phones, signals, and runners to provide tactical scouting, intelligence, and warning in ways that proved very difficult to detect and halt.
- **Make cities and towns urban sanctuaries and defensive morasses:** Iraqi insurgents found that cities with supportive and/or accepting populations can be made into partial sanctuaries and centers for defensive fighting and ambushes, and that tactical defeat can normally be dealt with by dispersal and hiding among the civilian population. Such tactics work well in attacks on local authorities and security forces friendly to the US, efforts to block nation building at the local level, and efforts to exploit religion, ethnicity, tribalism, etc. Several cities in Al Anbar province have served as sanctuaries for militants. Insurgents typically leave the cities before a major US operation begins and return once the operation has ended.
- **Use neighboring states and border areas as partial sanctuaries:** While scarcely a new tactic, Iraqi insurgents have made increased use of cross border operations and taken advantage of the difficulties in securing the Syrian, Iranian, and Saudi borders. By March 2005, for example, these tactics had created a near sanctuary in the area along the Euphrates from Hit and Haditha toward Syria and through Ubaydi, Qaim, Karabilah, and Qusaybah to the Syrian border along the road to Abu Kamal.^{ci} The Vietnamese used the same tactic in Cambodia and Laos, and so have many other insurgent forces. The idea of securing a nation based on securing the territory within its tactical boundaries is often a tactical myth.
- **Create dispersed and rapidly mobile operations and centers, mixed with fixed “diehard” and “sleeper” installations.** The insurgents rapidly learned not to concentrate operatives and to keep them rapidly mobile. They mixed these with “die hard” facilities designed to fight and defend themselves and inflict casualties if attacked, and with sleeper cells and stay behind operations to recover after an area was attacked, captured, and “secured” by Coalition and Iraqi forces.
- **Exploit weaknesses in US human intelligence (HUMINT), battle damage assessment (BDA), and damage characterization capabilities:** Iraqi insurgents and other Islamist extremists learned that US intelligence is optimized around characterizing, counting, and targeting things, rather than people, and that the US has poor capability to measure and characterize infantry and insurgent numbers, wounded, and casualties. They exploit these weaknesses in dispersal, in conducting attacks, in concealing the extent of losses, and in manipulating the media by claiming civilian casualties and collateral damage.
- **Counter US advantages in intercepting satellite and cellular communications:** Insurgents utilize the text messaging function of cell phones to communicate in an effort to avoid electronic eavesdropping by

the US. Insurgents will often use more than one phone to communicate a message, so that those listening in only hear part of the message.

- **Exploit slow Iraqi and US reaction times at the local tactical level, particularly in built up areas:** Learn to exploit the delays in US response efforts, and rigidities in US tactical C⁴I behavior, to attack quickly and disperse.
- **Exploit fixed Iraqi and US patterns of behavior:** Take advantage of any tendency to repeat tactics, security, movement patterns, and other behavior; find vulnerabilities and attack.
- **Hit at US HUMINT links and translators:** US dependence on Iraqi translators and intelligence sources is a key area of US vulnerability and one the insurgents have learned to focus on.
- **Use “resurgence” and re-infiltration – dig in, hide, and reemerge:** Disperse under pressure or when defeat seems likely. Let the US take an “empty” city or objective. “Resurge” when the US tactical presence declines.
- **Use incident frequencies, distribution of attacks, and tactics that strain or defeat US intelligence, surveillance and reconnaissance (IS&R) assets and ability to support Iraqi forces:** Assets like RPVs, aircraft, SIGINT systems, etc. can provide significant capability *when they are available*. It is unclear whether it is deliberate or not, but the geographic spread and daily incident count in Iraq indicates that insurgent movements and actions often reach numbers too large to cover. In fact, the US averaged some 1,700-2,000 patrols per day during May 2004. While it is nice to talk about netcentric warfare, it is a lot harder to get a big enough net.

Insurgents learned that the US has less ability to track and characterize irregular forces, insurgent/terrorist teams, and urban and dispersed infantry than forces using mechanized weapons or significant numbers of vehicles. Blending into the civilian population has worked well for local insurgents and Islamists in both Afghanistan and Iraq, and Iraqi insurgents learned that they can exploit rules of engagement where the US and Iraqi government forces do not have soldiers or agents on the ground to perform targeting and IFF functions. As valuable as IS&R assets are, they do not provide some critical kinds of situational awareness with any reliability.

- **Choose a vulnerable Iraqi and US force:** Deny the US and Iraqi forces a large, cohesive enemy while attacking small or dispersed elements of US and Iraqi forces, facilities, or targets.
- **Counter US IS&R capabilities by adapting new techniques of communication and interaction:** The steady leakage of details on US and allied intelligence collection methods has led Islamist extremist and terrorist movements to make more use of couriers and direct financial transfer; use electronic communications more safely; screen recruits more carefully, find ways to communicate through the Internet that the US cannot target, disperse better, and improve their hierarchy and cell structure.
- **Counter US and Iraqi government IS&R assets with superior HUMINT:** Developments in Iraq indicate that the US faces a repetition of its experience in Vietnam in the sense that as various insurgent factions organize, they steadily improve their intelligence and penetration of organizations like the CPA, CJTF-7, the Iraqi government and security forces, and the Iraqi factions backing nation building.

Like Vietnam, Iraq is a warning that hostile HUMINT sources are often pushed into providing data because of family ties, a fear of being on the losing side, direct and indirect threats, etc. In Iraq's case, it seems likely that family, clan, and ethnic loyalties have made many supposedly loyal Iraqis become at least part time sources, and that US vetting will often be little more than either a review of past ties or checks on the validity of data being provided. The end result may be an extremely high degree of transparency on US, Iraqi government, aid, and every other aspect of Iraqi operations. This will often provide excellent targeting data on key US and allied officials, events, etc. It can include leverage and blackmail, and vulnerability data, as well as warning of US and other military operations. Dual loyalty and HUMINT penetration of Iraqi security and military forces may be the rule, rather than the exception.

- **Use the media, infiltrators/sympathizers, and ex-detainees for counterintelligence:** Constantly monitor the media and Internet for data on US and Iraqi intelligence, targeting, and operational data. Use infiltrators

and sympathizers. Debrief released prisoners and detainees to learn what their capture and interrogation reveals about US and Iraqi intelligence efforts.

Iraqi-US Asymmetric Interaction and Non-Interoperability

The problems such changes in insurgent tactics and technology created for US forces often allowed them to continue to fight below the threshold where US, British, and other Coalition forces could exploit their superior conventional weapons and technology. They kept casualties high enough to be serious and forced Coalition forces to spend at least an order of magnitude more on countermeasures than the insurgents had to spend on new weapons and tactics.

They also exploited the much greater vulnerability of Iraqi forces. The US not only initially failed to properly assess the growth of terrorism and insurgency during the first year following the fall of Saddam Hussein, but as the insurgency rose and became steadily more effective, the US failed to react by treating the Iraqi forces it was creating as serious partners. It failed to promptly restructure its force goals – and its training and equipment effort for Iraq military, security, and police forces.

The end result was a growing asymmetry in interoperability between US military forces, and the new Iraqi forces, as the insurgency took hold. As the data in the following chapters make brutally clear, the US initially failed to provide minimal facilities and equipment such as body armor, communications and vehicles. While the US training teams and US commanders in the field made steadily better efforts to organize and train Iraqi forces to protect themselves, the US as a whole concentrated on manpower numbers and then left Iraqis out in the field to die.

The seriousness of this problem is all too clear when one considers the impact of less serious shortfalls in equipment in US forces. It is clear from the Congressional and media reaction to the discovery that the US was slow to uparmor Humvees and trucks for its ground forces in December 2004. At the same time, it is striking that the resulting debate over the equipment issued to US and Coalition forces failed to ask what equipment was being provided to Iraqi forces although they had been a prime target of the insurgents and terrorists since late summer of 2003.

I. Measuring the Evolution of the Insurgency by The Pattern of Attacks

Another way to analyze an insurgency is to look at the pattern of attacks. This is not easy. There has been a reasonable amount of summary reporting, and a flood of reporting on daily incidents. However, US and British official reporting on the insurgency has been erratic, and has left many gaps that make it difficult to analyze the insurgency's intensity and cycles, and characterize trends.

For example, the counts of attacks issued by senior US officials have generally focused on attacks directed at US and Iraqi government targets rather than all attacks, and did not include all attempts and minor incidents. They do not include Iraqi criminal activity or sabotage. DIA figures and Coalition data also tend to be skewed in favor of counts of attacks on Coalition forces and undercount attacks on Iraqi civilians, and some aspects of Iraqi officials, military, and police.

One of the tragedies of Iraq is that as part of its effort to “spin” reporting on the war in favorable directions, the Department of Defense has rarely attempted to count Iraqi casualties of any kind, or treat Iraqi military and police casualties as partners whose sacrifice deserves recognition. Coalition counts also undercount acts of sabotage. Like most such partial counts, this disguises another important shifts in the patterns in insurgency.

These problems are compounded by the fact there are no meaningful Iraqi government data. Iraqi Ministry of Defense and Ministry of Interior had stopped issuing meaningful reporting on the number and intensity of attacks in the summer of 2004.

Summary Attack Patterns

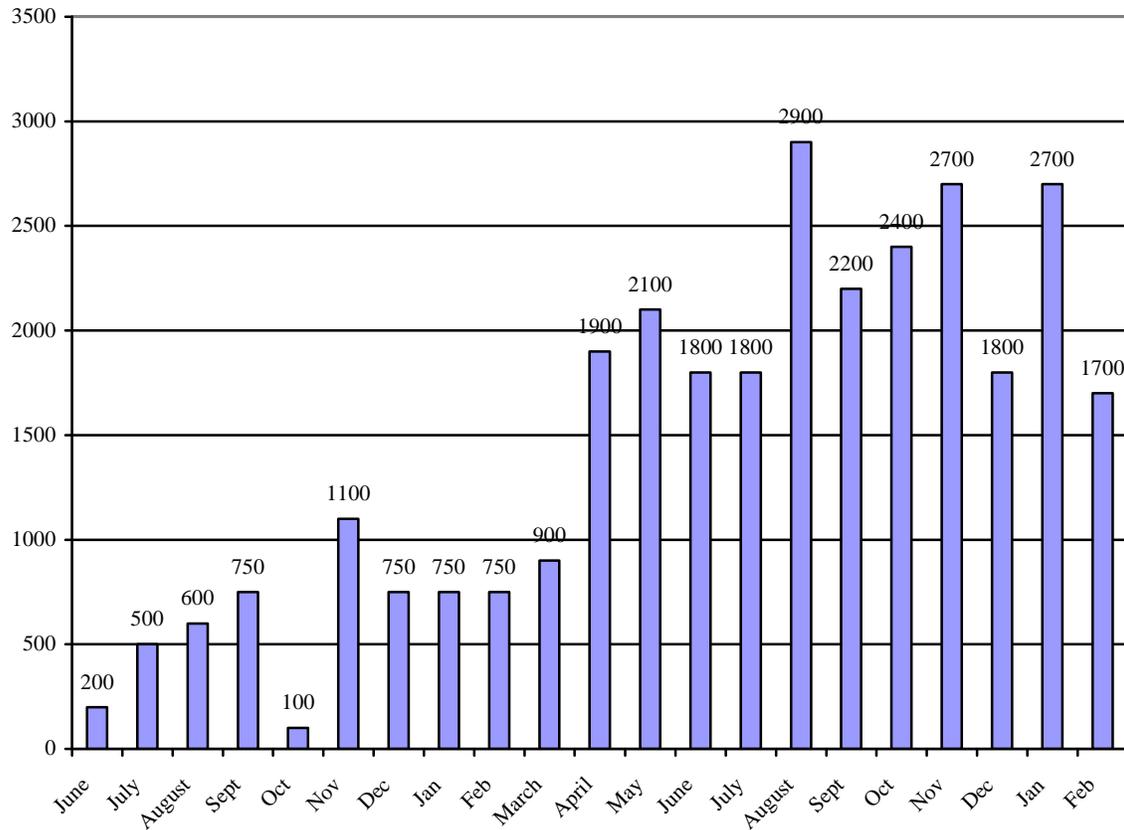
In spite of such caveats, however, enough data are available on the patterns in attacks to shed considerable insight on what is happening. Unclassified work by DIA and MNF-I showing the approximate number of total attacks per month from June 2003 to February 2004 is summarized in Figures II.1 and II.2. These data reflect patterns typical of the cyclical variations in modern insurgencies.^{cii} The same is true of the trend data on US casualties discussed later in this chapter, and it is clear from a comparison of such data that there is only an uncertain correlation between incident counts and casualty counts, and even accurate incident counts would be only the crudest possible indication of the patterns in insurgency without a much wider range of comparative metrics.

These attack counts confirm the fact that insurgent activity surged before the January 30, 2005 elections temporarily eased back, and then surged again -- rather than diminishing in any lasting way. An internal US Army analysis in April 2005 calculated that the apparent shift was more a shift in focus to more vulnerable non-US targets than an actual drop in incidents.^{ciii} Similarly, a study by the National Intelligence Council in the CIA, that was leaked to Newsweek, concluded that US government reporting had so many conflicting sources and methods of analysis that the resulting metrics could not be trusted, and that there was inadequate evidence to support any conclusions about whether the insurgents were being defeated.^{civ}

Figure II.3 shows the trend measured by a different standard: total attacks and effective attacks. It provides a much clearer picture of the intensity of the war and how sharp the cycles are in attempted attacks over time. At the same time, there is often surprisingly little correlation

between attempted and effective attacks. The cycles in attempted attacks are much smaller and the trends are largely meaningless. The level of effective attacks is nearly constant from April 2005 through the end of 2005.

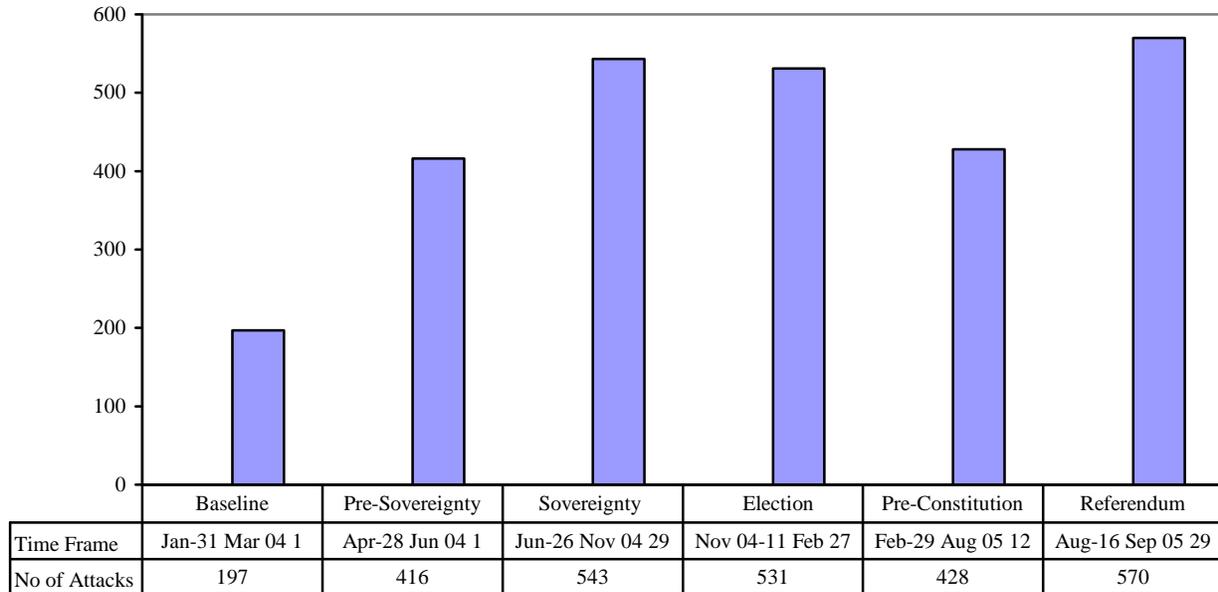
Figure II.1: Approximate Number of Major Attacks per Month: June 2003-February 2005



Note: Includes approximate number of attacks on Coalition, Iraqi security forces, Iraqi government officials, civilians, and infrastructure.

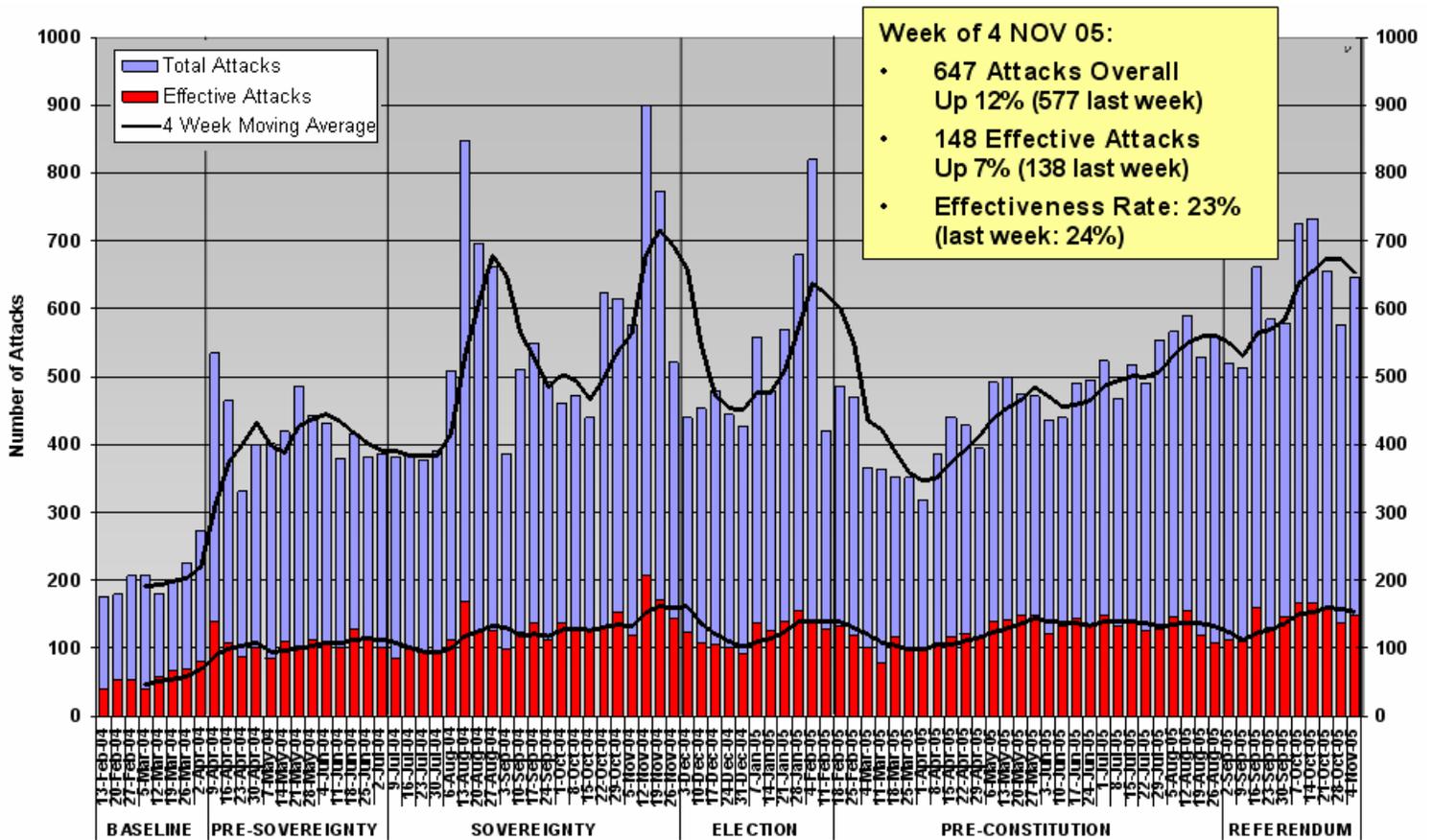
Source: Adapted from the DIA and MNF-I data presented in Joseph A. Christoff, *Rebuilding Iraq: Preliminary Observations on Challenges in Transferring Security Responsibilities to Iraqi Military and Police*, Government Accountability Office (GAO) GAO-05-43IT, March 14, 2005, p. 10.

Figure II.2: Average Weekly Attacks by Time Period: January 2004 – September 2005



Source: "Measuring Stability and Security in Iraq," DOD Report to Congress, October 13, 2005. Available at:
 Note: Referendum period only has three weeks of data; average may be skewed by spikes in attacks.

**Figure II.3: Total Average Weekly Attacks versus Effective Attacks by Time Period:
February 2004 – November 2005**



Source: Adapted from material provided by Brian Hartman, ABC News

Total Improvised Explosive Device (IED) Bombings, Vehicle Borne Bombings (VBIEDs), and Suicide Bombings, and

The trends in all forms of improvised explosive devices are shown in Figure II.4. they fluctuate over time, but show a steady increase, and a significant rise in successful detonations towards the end of 2005.

The patterns in suicide attacks, car bombings, the resulting casualties, and in the numbers of bomb makers captured and killed are more complex and shown in Figure II.5. These figures only cover 2005, but do show interesting trends. The number of attacks has gone down since a high in early 2005, but the number of casualties has not. There is no correlation between the two trends. The trend for bombers captured or killed is of interest largely because, while the number is rising, the overall total has been and remains so low.

If one looks at data from other sources, the number of car bombings rose from 65 in February 2005 to 170 in April, and the total number of major attacks per day rose from 30-40 in February and March to 70 in April and May. The intensity of the attacks also increased as more suicide bombings took place by Islamist extremists – many conducted by young men from countries like Libya, Saudi Arabia, and the Sudan who infiltrated in from across the Syria border.

The number of major attacks involving suicide bombers rose from 25% in February to a little over 50% in April. There were 69 suicide bombings in April 2005, more than in the entire period from the fall of Saddam Hussein to the transfer of power in June 2004. In May, some 90-suicide bombings were the primary cause of some 750 casualties that month.^{cv} The annual pattern was equally serious. If one only counts car bombings, there had been more than 482 successful bombings in the year since the handover of power on June 26, 2004, killing at least 2,176 people and wounding at least 5,536.^{cvi}

While the insurgents focused more on Iraqi targets, and increasingly on Shiite and Kurdish targets that might help provoke a major civil war, the attacks on MNF-I forces climbed from 40 a day in March to 55 in April, far below the peak of 130 a day before the January 30, 2005 elections – but scarcely reassuring.^{cvi} The good news for the US was that only 146 Americans died during the three-month period from February 1 to April 30, 2005, versus 315 in the previous three-month period.^{cvi}

The difficulty in analyzing the patterns in a constantly changing situation is illustrated by another surge in activity that took place as the new government was appointed. The Iraqi government announced most of its appointments on April 28, 2005 -- some three months after the election and months after the supposed deadline for doing so.

In the week that followed (April 28-May 6), there were 10 major suicide bombings, and 35 major attacks. Insurgents killed more than 270 Iraqi civilians, and at least 14 bodies were found in a Baghdad garbage dump that may have been from previous attacks. Many of the attacks were against Iraqi forces and recruits, and the intensity of the attacks is indicated by the fact that a suicide bomber from the "Army of Ansar al-Sunna" killed more than 60 people in the Kurdish city of Irbil in Northern Iraq in a single attack.^{cix} For the first time, in April, more than 50% of the car bombings were suicide attacks.^{cx}

During the same period, 80 more bodies had been found floating in the Tigris, and 19 more were discovered in a soccer stadium.^{cx} The total number of US killed now totaled 1,593 (1,216 killed

in hostile action), and 12,243 wounded. Some 180 allied military had been killed, and 86 US civilians, and unofficial estimates put the number of Iraqi dead at least 21,450-24,325.^{cxii}

These developments led some US officers and officials to claim that the insurgents were lashing out because they had taken so many casualties that they were desperate, and/or to say that the successful car bombings by Islamic extremists had little strategic meaning since they alienated the Iraqi people and could easily be carried out by a small number of largely foreign volunteers that were not representative of Iraqi Sunnis.

Such arguments could not be disproved or proved, but they were made at a time the US Marines found it necessary to conduct a major offensive along the Euphrates from Haditha to the Syrian border, the largest offensive since the attack on Fallujah. US forces also had to launch another major operation to secure the area south and west of Baghdad, and follow them up with a series of major campaigns around Mosul and in western Iraq during the summer and fall.^{cxiii}

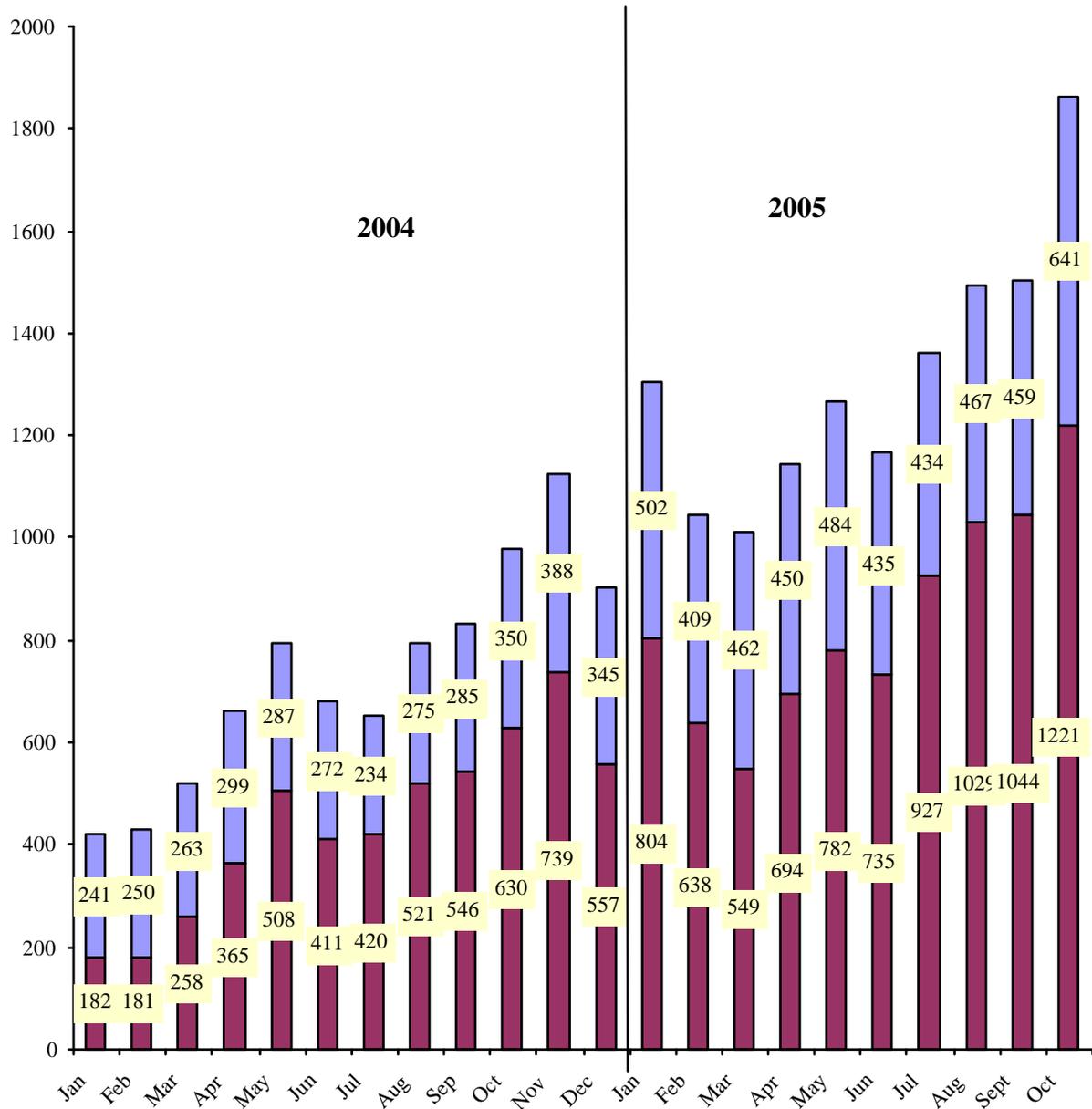
Such operations have had to be followed up again and again, largely because many of the insurgents can disperse the moment they came under pressure, and the Coalition and Iraqi forces both lacked the manpower to occupy high threat areas and the requisite Coalition or Iraqi government teams to back up tactical victories with civic action programs and efforts to establish effective governance.

As of the early summer of 2005, insurgents and terrorists continued to try to strip the new government of its perceived legitimacy. In spite of MNF-I estimates that some 1,000-3,000 insurgents were being killed and captured each month, attacks on Iraqi security forces and government officials continued, and the number of suicide bombings continued to mount.

The patterns in bombings revealed similar cycles for the rest of 2005, although considerable uncertainty sometimes emerged over such counts because the Iraqi government and Coalition did not already report consistently. There were 21 car bombings in Baghdad alone during the first two weeks of May, and 126 in the 80 days before May 18th. This compared with 25 during all of 2005. Daily attacks had averaged 30-40 a day in February, but were at least 70 a day in June.^{cxiv} Although the number of car bombings decreased from April to July 2005, (from April's high of 170 car bombings, the number fell to 151 in May; 133 in June; and, less than 100 in July) at the time, experts believed this was merely al Qa'ida "storing up" for the late summer and fall offensive.^{cxv}

The cycles were equally uncertain for the rest of year. Coalition reporting in December 2005 showed a drop in the number of suicide bombings from 70 in May to 40 in August, a rise to 50 in October, and then a drop to 23 in November. The number of bombs exploded or cleared dropped rose from 1,170 in June to 1,869 in October, and then dropped to 1,330 roadside bombings and 68 car bombings in November. There had been 130 car bombings in February.^{cxvi} The US death toll rose from 49 in September to 96 in October, and then dropped to 85 in November. By end November, the US had lost 80 or more dead in 10 of the 33 months of the war. Iraqi deaths went from 69 in August to 356 in September and 290 in November.

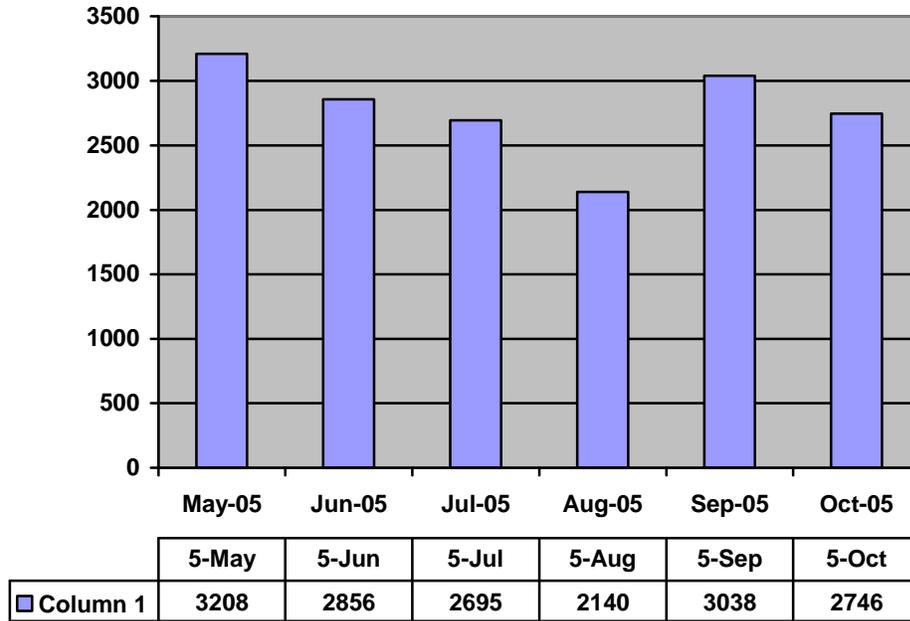
Figure II.4: Patterns IED Attacks: January 2004 to October 2005



Source: Adapted from material provided by Brian Hartman, ABC News

Figure II. 5: Patterns in Car Bombings and Suicide Bombings: February 2004 – November 2005 – Part One

Casualties



VBIEDs

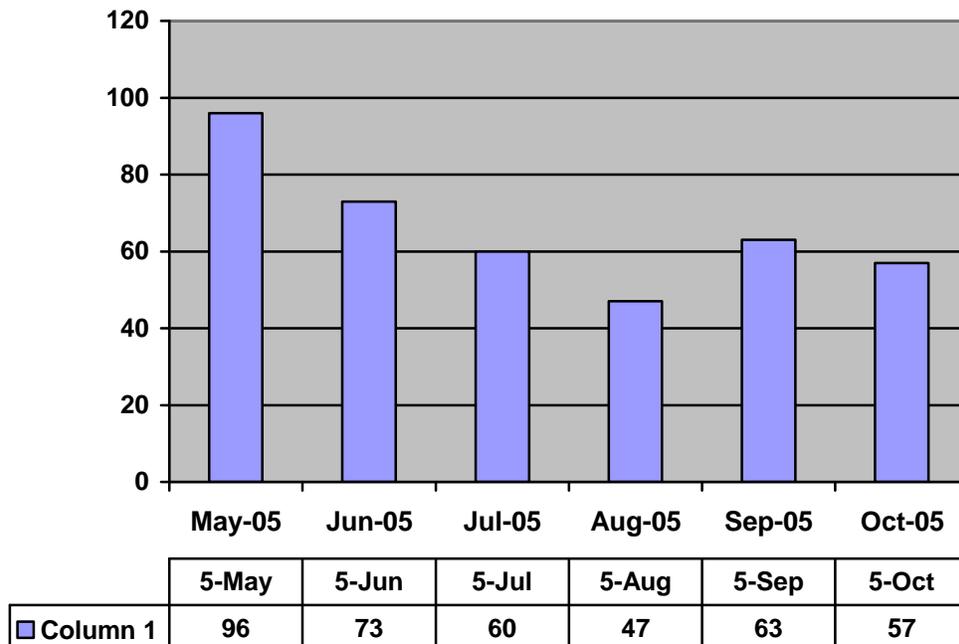
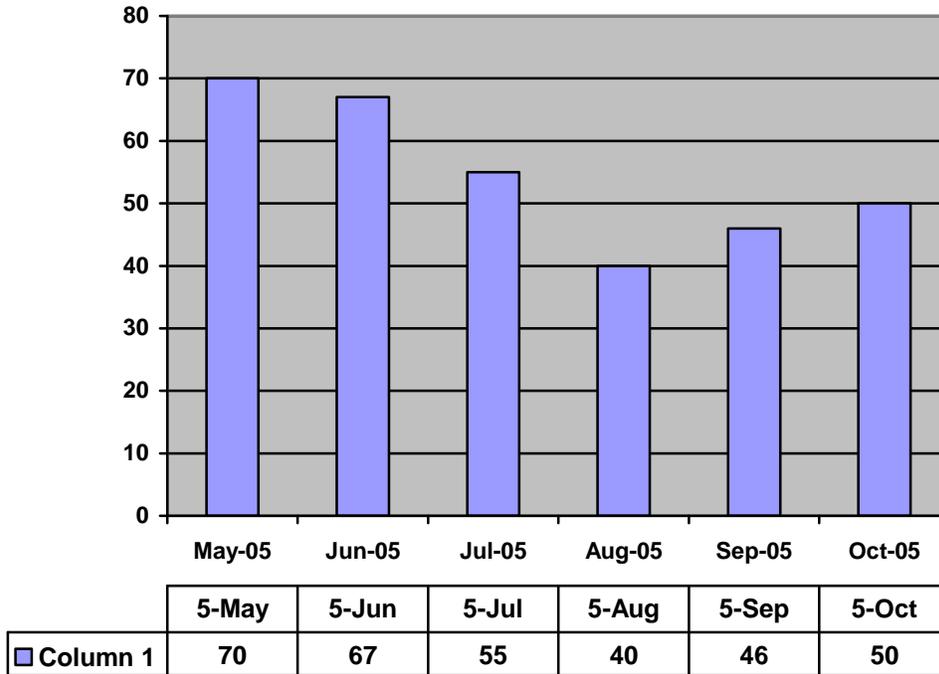
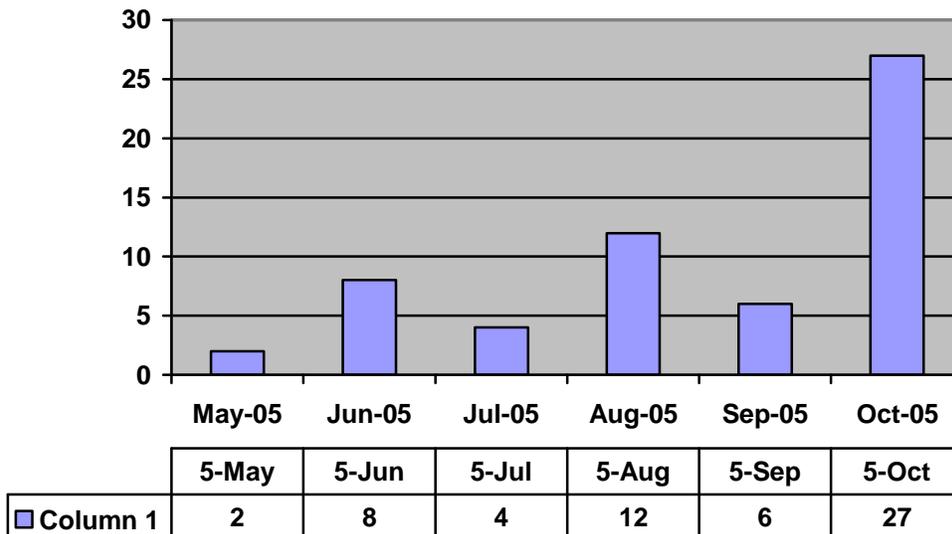


Figure II. 5: Patterns in Car Bombings and Suicide Bombings: February 2004 – November 2005 – Part Two

Suicide Attacks



Bomb Makers Captured or Killed



Source: Adapted from material provided by Brian Hartman, ABC News

Sabotage and Infrastructure Attacks

As Figure II.6 shows, insurgents have continued attacks designed to disrupt supplies of water, electricity, crude oil, gasoline and heating oil, particularly in the greater Baghdad area. The shift in attack patterns do show significant cycles, but cannot be related to the effectiveness of such attacks, and seems to reflect a massive undercount of large numbers of minor sabotage attempts and success that are not included in these figures.

If one looks at the history of such attacks in more detail, one finds the following patterns:

- Attacks on power and water facilities both offset the impact of US aid and cause Iraqi anger against the government. Al Qa'ida and Ba'athist groups found oil facilities and pipelines to be particularly attractive targets because they deny the government revenue (in the first quarter of FY 2005 Iraq lost an estimated \$887 million in export revenues due to insurgent attacks on infrastructure)^{cxvii}, affect both power and Iraqi ability to obtain fuel, get extensive media and foreign business attention, and prevent investment in one of Iraq's most attractive assets.^{cxviii}

The impact of this activity is regularly reflected in the histograms in the Department of Defense, Iraq Weekly Status Report. For example, the April 27, 2005 edition shows that electric power generation remained far below the US goal, and usually below the prewar level, from January 1, 2004 to April 21, 2005. Crude oil production averaged around 2.1 MMBD from February through April 2005, versus a goal of 2.5 MMBD, and a prewar peak of 2.5 MMBD in March 2003. For September-October 2005, the crude oil production average fell to 2.02 MMBD, still below the target goal of 2.5 MMBD.^{cxix} Exports averaged only about 1.3-1.4 MMBD from January to April 2005, largely because of pipeline and facility sabotage -- although record oil prices raised Iraqi export revenues from \$5.1 billion in 2003 to \$17.0 billion in 2004, and \$6.2 billion in the first four months of 2005. From May to September 2005, Iraqi oil exports averaged 1.42 MMBD. The increase was driven largely by strong exports (over 1.5 MMBD) for the months of July-September. Early estimates for October 2005, however, showed oil exports falling to 1.305 MMBD.^{cxx}

The continuing threat to electric facilities forced many Iraqis to rely on home or neighborhood generators even in the areas with power, rolling power cuts in most areas, and major shortages in others. It was also a reason that the US was only able to spend \$1.0 billion of \$4.4 billion in programmed aid money on the electricity sector by the end of April 2005, and \$261 million out of \$1.7 billion on the petroleum sector.^{cxxi}

Sabotage and theft helped cripple many of the country's 229 operating water plants by the spring of 2005, and some 90% of the municipalities in the country lacked working sewage processing plants, contaminating the main sources of water as they drained into the Tigris and Euphrates. The Iraqi Municipalities and Public Works Ministry calculated in April 2005 that it provided water to some 17 million Iraqis (70% of the population), and supplies were so bad that some 30% of the 17 million did not have access to drinkable water.^{cxvii}

In June, Baghdad's mayor, Alaa Mahmoud al-Timimi threatened to resign over crumbling infrastructure in the city. On September 7, a Congressional mandated report stated that the ongoing insurgency had severely hampered efforts to rebuild Iraq's water and sanitation systems. Of the more than \$24 billion the US Congress has authorized for reconstruction efforts since 2003, roughly \$2.6 billion was allotted for rebuilding water and sanitation services. Congress had initially planned on spending almost \$4 billion on water and sanitation projects, but more than \$1 billion was eventually redirected towards other priorities, including security needs.^{cxviii}

Despite this, however, some progress appears to have been made in Baghdad. In October, USAID announced that more than 15,650 houses had recently been connected to the Baghdad Water Distribution System. But the distribution system experiences 60 percent loss, a result of leaks, illegal connections and sabotage.^{cxvii} And, as late as September 2005, several water and sewage stations in Fallujah were still operating below 20% capacity.^{cxv}

The patterns of such attacks also continued to come in cycles. For example, Figure II.6 shows that insurgent attacks on infrastructure targets increased dramatically in the run-up to the October 2005 referendum.

Oil pipelines in the northern part of the country have come under repeated attacks in recent months. According to Iraqi Oil Minister Ibrahim Bahr al-Ulum, the upsurge in attacks began in mid-August 2005, following the deadline for writing Iraq's Constitution. Between August 15 and September 7, there were more than 10 attacks on pipelines.^{cxxvi}

The situation continued to deteriorate as the date of the referendum approached. The pipelines, linking oil fields in Kirkuk to Iraq's largest oil refinery in Beiji and the Turkish port of Cheyhan, were disrupted more than half-a-dozen times during September and October 2005:^{cxxvii}

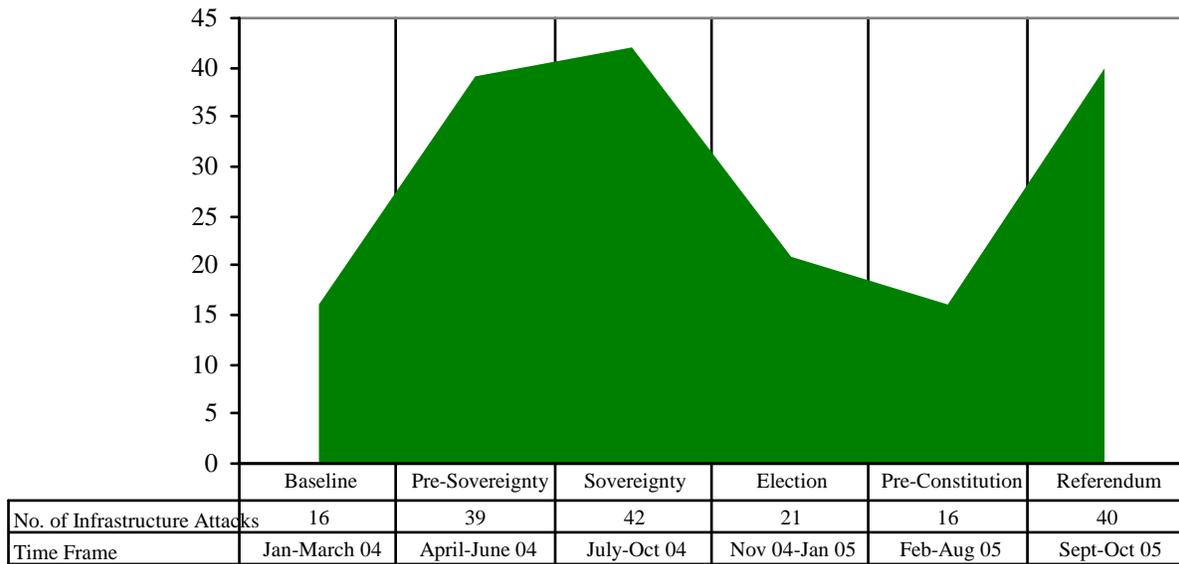
- September 3, 2005: Insurgents bomb the main pipeline running from Kirkuk to Cheyhan, disrupting Iraqi oil exports for more than two weeks and costing billions of dollars in lost revenue.
- September 13, 2005: A fire breaks out after a pipeline carrying crude oil from Kirkuk to a Beiji refinery sprang a leak.
- September 15, 2005: Another fire breaks out on an oil pipeline in Kirkuk; the cause of the fire is unknown.
- September 21, 2005: A bomb planted by insurgents damages an oil pipeline connecting the Bay Hassan oil fields to Kirkuk. Repairs are expected to take up to a week.
- October 6, 2005: Insurgents bombed a pipeline near Kirkuk.
- October 12, 2005: An explosion shuts down an oil pipeline near the city of Beiji.
- October 20, 2005: Insurgents bomb a pipeline linking Kirkuk to Beiji. Damage is expected to be significant.
- October 25, 2005: Insurgents bomb the Beiji petroleum refinery, killing at least five.

On the eve of the October referendum, insurgents attacked Baghdad's electrical grid. In a tactic designed to disrupt the vote, insurgents sabotaged power lines and electricity towers north of the capital, leaving 70 percent of the city in the dark.^{cxxviii} Even before the attack, however, the amount of electricity Baghdad received was a major bone of contention, with daily electricity service in the capital averaging less than 8 hours per day compared to the national average of 14 hours.^{cxxix}

The insurgents have scarcely paralyzed the country, but have had notable successes in virtually every area. These included significant attacks on oil export facilities, water plants, and power. For example, the national average amount of electricity generated reached a post-war high in August 2004 with 4,707 megawatts, but steadily declined throughout the rest of 2004 and most of 2005 as a result of successful insurgent attacks on electricity and oil infrastructure.^{cxxx} Because of the technological expertise involved in these attacks, some experts believed that former, Hussein-era officials were still aiding the sabotage efforts – although others felt that by this time, there was a large pool of such expertise in the various insurgent forces.^{cxxxi}

Insurgents carried out more than 300 attacks on Iraqi oil facilities between March 2003 and January 2006. The end result was that oil production dropped by 8% in 2005, and pipeline shipments through the Iraqi northern pipeline to Ceyhan in Turkey dropped from 800,000 barrels per day before the war to an average of 40,000 barrels per day in 2005. In July 2005, Iraqi officials estimated that insurgent attacks had already cost Iraq some \$11 billion. They had kept Iraqi oil production from approaching the 3 million barrel a day goal in 2005 goal that the Coalition had set after the fall of Saddam Hussein, and production had dropped from per war levels of around 2.5 million barrels a day to an average of 1.83 million barrels a day in 2005, and level of only 1.57 million barrels a day in December 2005.^{cxxxii}

Figure II.6: Average Monthly Attacks on Infrastructure by Time Period



Source: "Measuring Stability and Security in Iraq," Report to Congress, July 21, 2005. Available at: www.defenselink.mil/news/Jul2005/d20050721secstab.pdf

Measuring the Evolution of the Insurgency by Its Cost in Blood

The human cost of the insurgency is only one measure of how it has evolved, but it makes the seriousness of the conflict all too clear. The data in Figures II.7 through II.11 show that there were 12 months from March 2003 to November 2005, where US fatalities per month were greater than 75. During that same period, there were three months (April 2004; November 2004; and, January 2005) where US fatalities were greater than 100.^{cxxxiii}

Certainly US casualty rates did not alter in any predictable way. Rather than experience a decline, the average number of casualties per day had grown from 1.7 in 2003 to 2.3 in 2004, and then remained relatively constant in 2005. January 26, 2005 – just before the election -- was the worst day of the war to date with 37 American dead. Seventeen American's died on a single day on August 3, 2005, and 29 on March 23, 2005.^{cxxxiv}

In mid-November 2005 the US military reported that the survival rate for wounded soldiers was 90 percent, the highest of any war. The army credited the high survival rate to better body armor, forward deployed surgical teams, swift medical evacuations, and improved trauma care.^{cxxxv}

Also in November, the US military reported that more than 200 of the US troops killed to date in Iraq were officers. The figure accounted for 10.4% of deaths in Iraq, a number similar to the casualty rate of previous wars. Of the 58,178 US soldiers killed in Vietnam, 7,878 or roughly 14%, were officers. The casualty rate for officers in Iraq appeared to be increasing in late 2005. Between October 25 and November 15, 58 US troops were killed, of which 13, roughly 22%, were officers. But military officials do not believe the recent increase in officer deaths marks a change in insurgent tactics:^{cxxxvi}

We have no evidence pointing to the insurgents or terrorists targeting officers as opposed to other members of the military. [Suicide bombs and IEDs] are pretty indiscriminate in what they hit.

As of December 1, 2005, the U.S. had suffered 2,114 killed, of which 1,657 had been killed in hostile action, and well over 15,000 Americans had been wounded.^{cxxxvii} Coalition allies had lost 201 lives, and estimates of killed Iraqi security forces totaled in the thousands.^{cxxxviii} Approximately 23,589-26,705 Iraqi civilians and 66 international media workers had been killed as of August 31, 2005.^{cxxxix}

Patterns in Iraqi Forces and Government Casualties

Coalition views of the cycles in Iraqi casualties: The MNF and MNSTC-I have reported that they keep track of Iraqi casualties, but generally do not disclose such numbers in detail. One MNSTC-I expert stated, "Data on Iraqi casualties are collected by the Coalition, but public distribution of information about this topic should remain the purview of the Iraqi government. They have more visibility over the issue, could be more accurate in reporting and are the appropriate authority to discuss the meaning."^{cxli}

Nevertheless, Figure II.7 illustrates Coalition efforts to show the cycles in Iraqi casualties, and the numbers show a cyclical tendency towards steady escalation.

The Health Ministry has provided a breakdown of Iraqi deaths from early November 2004 until early April 2005, although this count relies on uncertain data from morgues and hospitals.

The ministry noted that during this period:^{cxli}

- 32% of the 3,853 deaths accounted for by the ministry occurred in Baghdad.

- Al Anbar witnessed the second highest number of deaths.
- Najaf had the third highest number of deaths.
- Children represented 211 out of the 3,853 deaths.
- The highest death rates per capita were Al Anbar, followed by Najaf and Diyala.
- The ministry recorded 15,517 wounded, of which men made up 91%.

Figures were not available for the months prior to August 2004 and no breakdowns of the data were made available. This gap in the data may be partly explained by the fact that until summer 2004, casualty information was gathered by the Ministry of Health and relied on information provided by hospitals and morgues.^{cxliii} Yet, reliance on hospitals and morgues alone to count deaths provides a low figure for approximate deaths. Certainly, not every dead body is taken to the hospital or morgue and certain groups of Iraqis probably avoid the hospitals altogether.

The Iraqi government has since been reluctant to release casualty data, perhaps because it fears this could show its weaknesses and discourage recruiting. The Ministry of Defense did report, however, that 85 Iraqi soldiers were killed in May 2005, compared with 40 in April, an increase of 75%. At least 79 soldiers were wounded in May, compared with 63 in April.

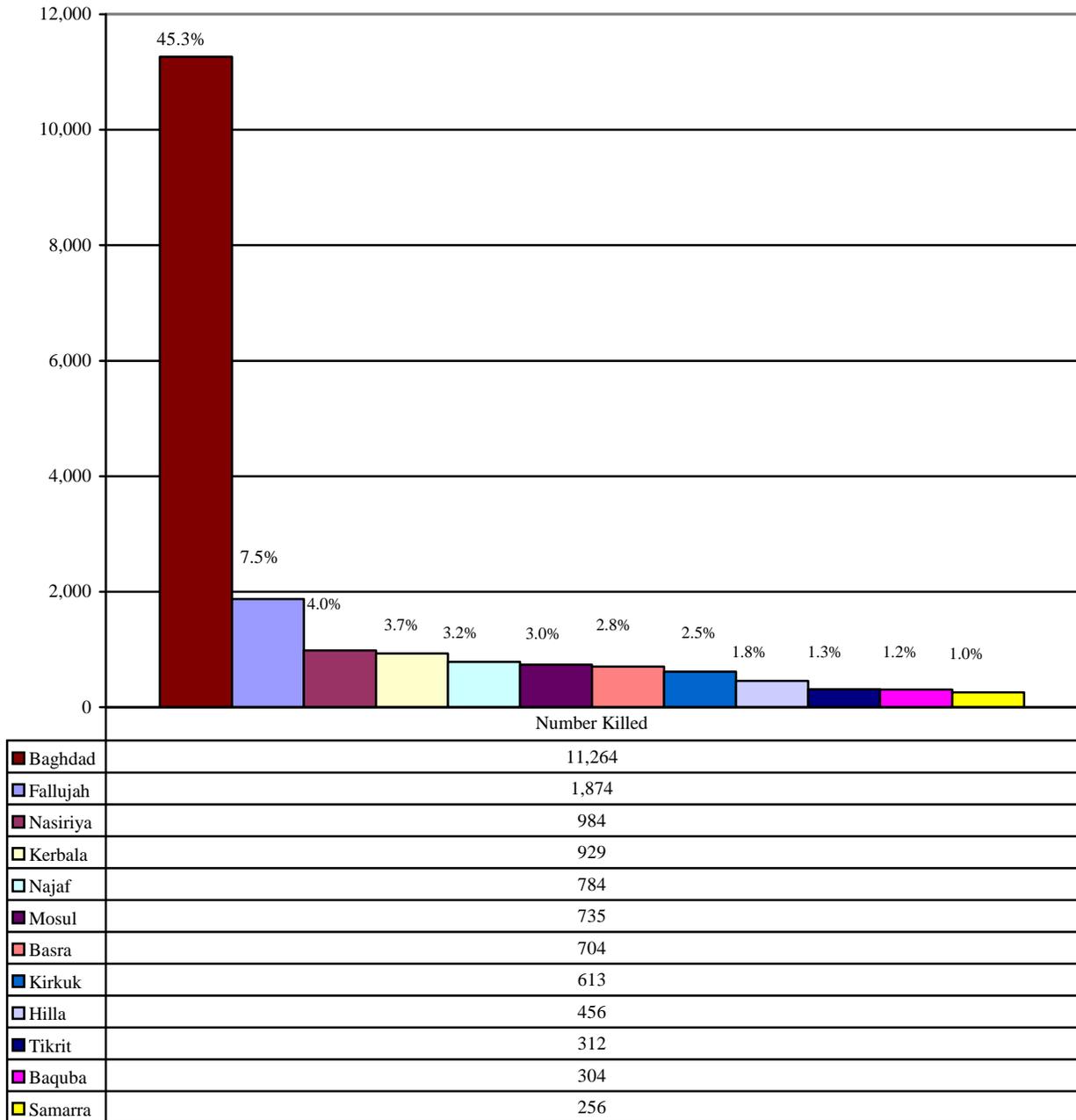
The Ministry of Interior reported that 151 Iraqi police were killed in May 2005, compared with 86 in April, an increase of 75%. At least 325 policemen were wounded in May, compared with 131 in April. The Ministry of Health reported that 434 civilians were killed in May, compared with 299 in April, and that 775 civilians were wounded, versus 598 the previous month.^{cxliiii}

In June 2005, the Iraqi Ministry of the Interior released new figures on Iraqi civilian and security force casualties. The ministry found that Iraqi civilians and police officers died at a rate of about 800 a month from August 2004 until May 2005. Reportedly, insurgents killed 8,175 Iraqis during that time.^{cxliv}

Iraqi Interior Minister Bayan Jabr stated in June 2005 that insurgents had killed approximately 12,000 Iraqis since the Coalition invasion, an average of 500 a month as reported by the New York Times.^{cxlv}

An independent count of Iraqi military and police casualties showed that some 1,300 had been killed between the fall of Saddam Hussein in April 2003 and the end of 2004, but that an increase in insurgent activity and a new focus on Iraq forces killed 109 in January 2005, 103 in February, 200 in March, 200 in April and 110 in the first week of May. This was a total of roughly 1,200 killed in the first six months of 2005, raising the total to over 2,400 killed – scarcely a decline in insurgent activity.^{cxlvi} In contrast, the MNF-I reported that "more than 2,000" Iraqi security forces personnel had been killed by the end of July 2005.^{cxlvii}

Figure II.7: Iraqi Fatalities by City: March 2003-February 2005



Source: Iraq Body Count Data, www.iraqbodycount.org

Patterns in Iraqi Civilian Casualties

There are no reliable estimates of killed and wounded for Iraqi civilians. The best data -- or "guesstimate" seems to be one by Iraq Body Count, but it is extremely uncertain. The group released a study of Iraqi casualties since the Coalition invasion in conjunction with the Oxford Research Group in mid-2005. The study concluded that approximately 25,000 Iraqi civilians were killed in 2003 and 2004 with about a third having been killed by Coalition troops.

Although men over 18 accounted for the bulk of civilian deaths, the study found that women and children accounted for almost 20% of all deaths. Almost 80% of civilian deaths occurred in 12 cities. Baghdad accounted for almost half of the civilian deaths during this period. Figure II.3 shows the breakdown.

The study relied on casualty reports made available on 152 selected websites and did not try to verify the sites' sources. Some of the sites are relatively unknown and are of uncertain reliability. It also is not clear how strenuously the IBC has tried to sift military casualties from civilian casualties. Impinging the credibility of the IBC's figures further is the fact that it is an avowed antiwar group.^{cxlviii}

In late 2005, IBC updated its database, raising its estimate of the number of Iraqis killed to 26,982-30,380.^{cxlix} Although the IBC figure is uncertain, the much higher estimates made by some other organizations; however, use methodologies and databases that are so weak that they simply lack credibility. US official data are also uncertain, but do provide some useful insights. According to the Pentagon's October 2005 "Measuring Stability and Security In Iraq" report to Congress, "Approximately 80 percent of all attacks are directed against Coalition Forces, but 80% of all casualties are suffered by Iraqis." The Pentagon data showed the average number of daily attacks against Iraqis had more than doubled since early 2004, from around 25 attacks per day to an average of 64 per day in the summer and fall of 2005. A clear trend was visible in the data, with the number of daily attacks against Iraqis climbing from 40 in the pre-election period (June-November 2004) to more than fifty during the election (December 2004-February 2005), and then increasingly dramatically to more than 60 in the run-up to the October 2005 referendum.^{cl}

The Pentagon numbers did not, however, distinguish between Iraqi security forces and civilian deaths.^{cli} Pentagon spokesman Lieutenant Command Greg Hicks played down the significance of the report, telling reporters: "It's kind of a snapshot... The Defense Department doesn't maintain a comprehensive or authoritative count of Iraqi casualties."^{clii}

A follow-on analysis of the Pentagon data carried out by several news organizations however showed 26,000 Iraqis had been killed or injured since the end of the war. Further analysis of the Pentagon data showed that for every US soldier killed in Iraq, at least 13 Iraqi civilians were also killed.

The Iraqi Ministry of Health has periodically reported casualty figures since mid-2003. In late 2003, the ministry announced that 1,764 Iraqis had been killed during the summer months.^{cliii} Data for the period between April 2004 and October 2004 show 3,853 civilians were killed and 15,517 were injured.^{cliv}

In January of 2005, the Ministry provided the BBC with the following statistics for the six-month period from July 2004 to January 2005:^{clv}

- 3,724 people in Iraq were killed and 12,657 injured in conflict related violence
- 2,041 of these deaths were the result of military action, in which 8,542 people were injured
- 1,233 deaths were the result of "terrorist" incidents

These figures, based on records from Iraqi public hospitals, do not distinguish between the deaths of civilians or Iraqi security forces, and may include insurgent casualties as well. UK Foreign Secretary Jack Straw described the Iraqi method of calculating casualties in October 2004.^{clvi}

Every hospital reports daily the number of civilians (which may include insurgents) who have been killed or injured in terrorist incidents or as a result of military action. All casualties are likely to be taken to hospital in these circumstances except for some insurgents (who may fear arrest) and those with minor injuries.

Iraqi government figures released by the defense, interior and health ministries in late October 2005 reported more than 4,000 Iraqi deaths (of whom at least 3,000 were civilian) to date for the year 2005.^{clvii} The breakdown was as follows: 3,314 civilian; 1,053 police; and, 413 soldiers. Also killed were 1,389 suspected insurgents.^{clviii}

Iraqi officials reported 702 Iraqi deaths for the month of September 2005 alone. The figure fell by 42 percent to 407 the following month. October's figure included 83 police and at least 25 soldiers. Although it was the fourth deadliest month for US forces, the death toll for Iraqi civilians and security forces was relatively low in October.^{clix}

Figure II.8: Casualty Patterns by Period Over Time

(MNSTC-I Estimate of Daily Killed and Wounded)

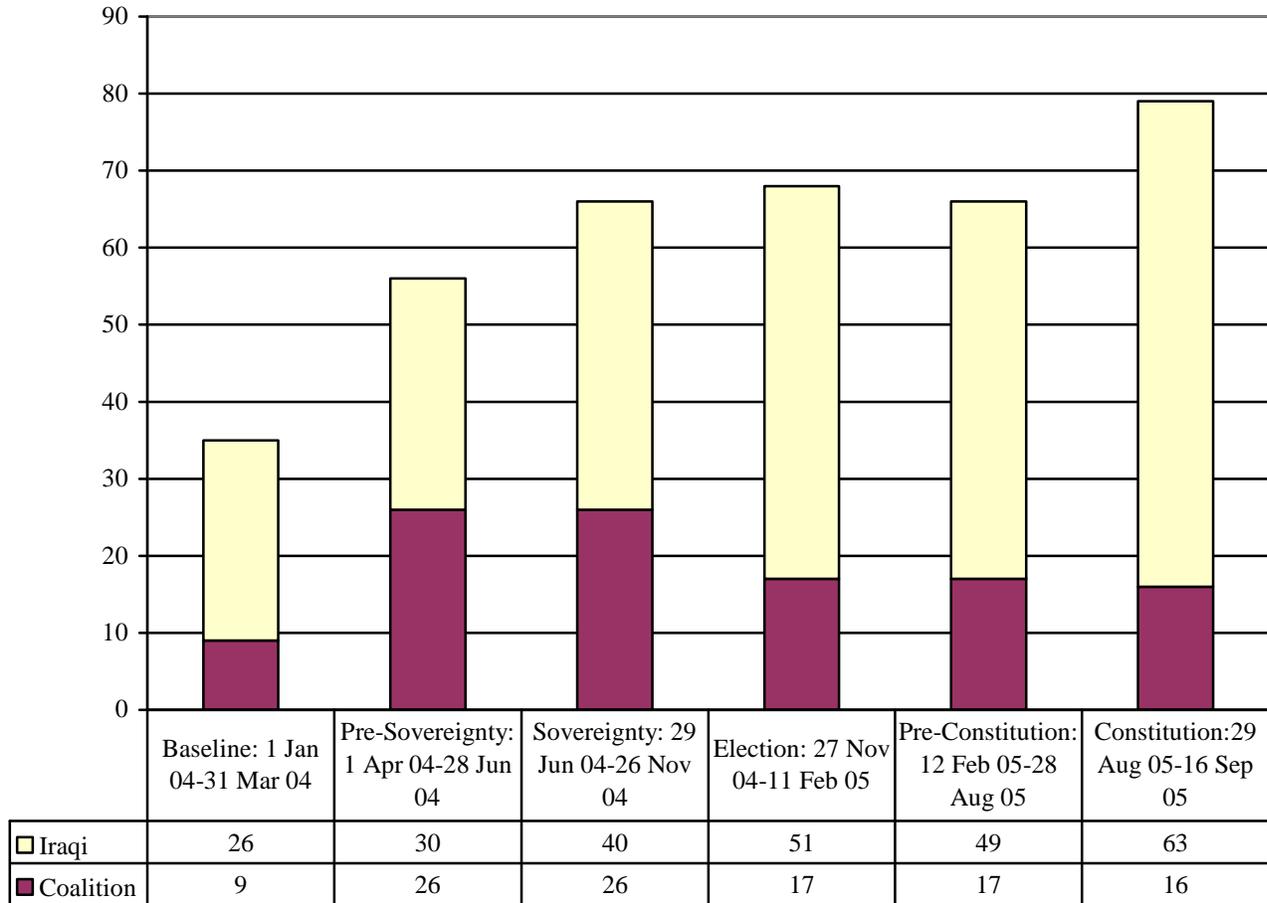
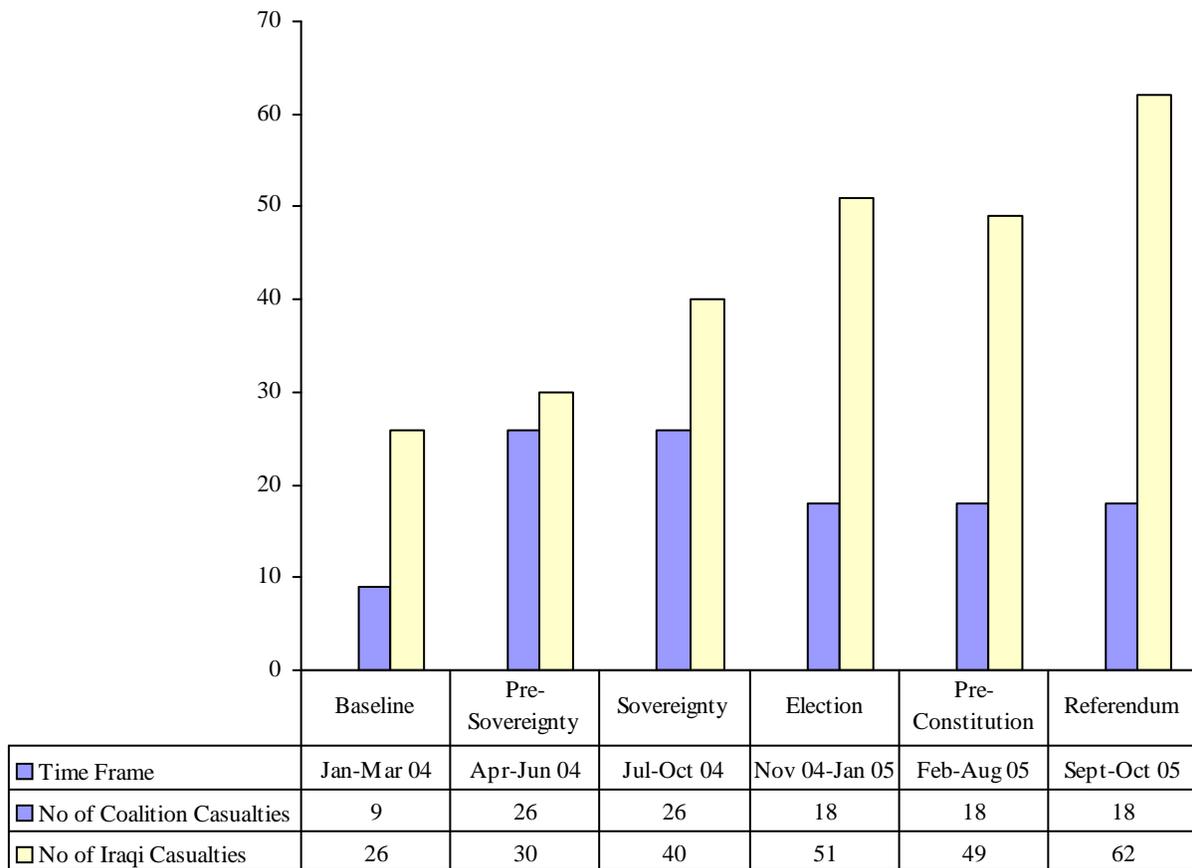
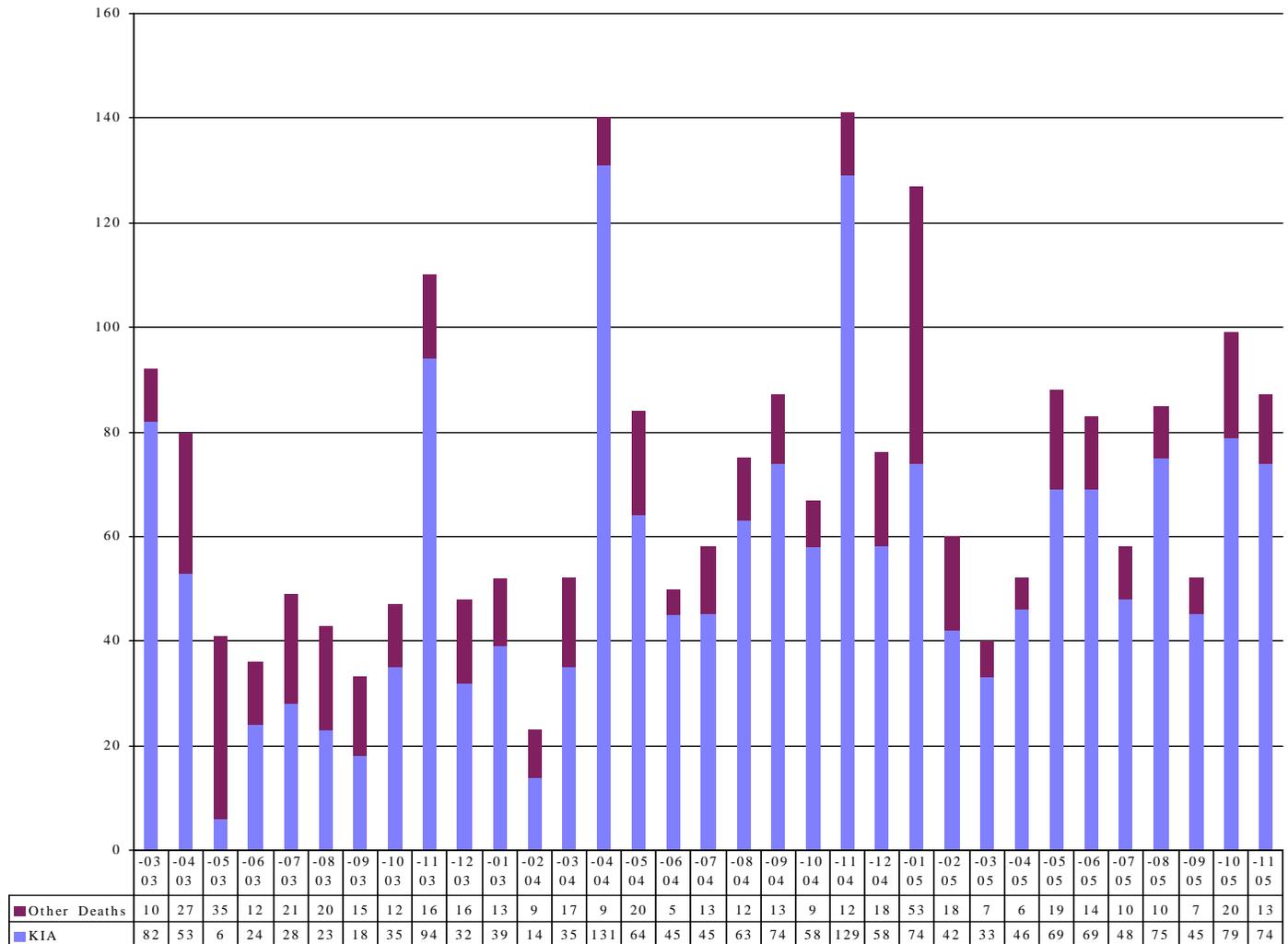


Figure II.9: Average Daily Casualties-Iraqi and Coalition: January 2004-September 2005



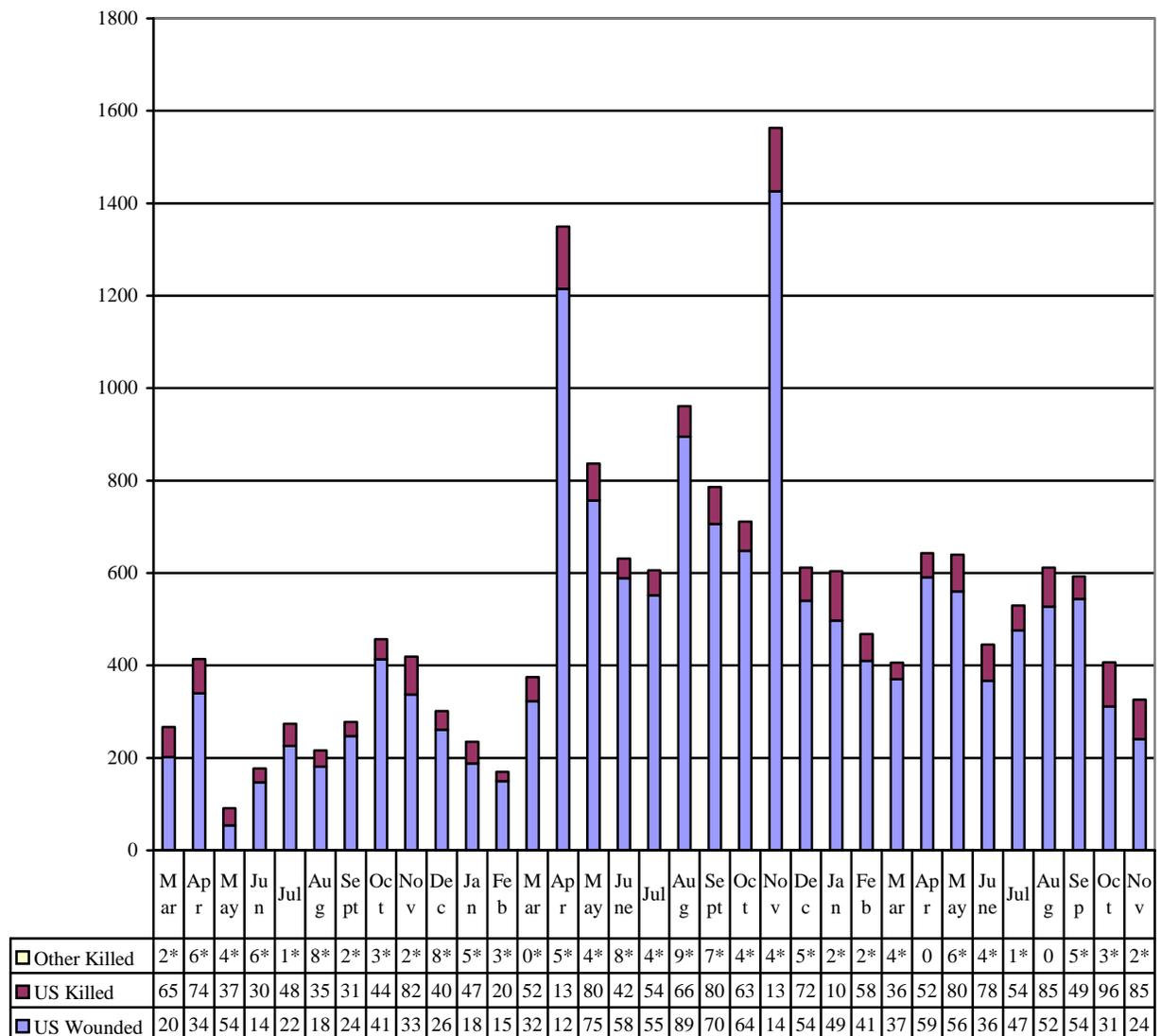
Source: "Measuring Stability and Security in Iraq," Report to Congress, October 13, 2005, Page.24.

Figure II.10: Trends in US Killed by Month



Source: Adapted from data proved by the Department of Defense, www.defenselink.mil, and the Iraq Coalition Casualty Count, <http://icasualties.org/oif/>, accessed December 1, 2005.

Figure II.11: Approximate Number of US Killed and Wounded: March 2003-October 2005



Note: Other Killed includes all other Coalition military forces but no civilians and no Iraqis.

Source: Adapted from data proved by the Department of Defense, www.defenselink.mil, and the Iraq Coalition Casualty Count, <http://icasualties.org/oif/>, accessed December 1, 2005.

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