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Iraq and Asymmetric Warfare: The US vs. FRL/Islamist Duel

**Changing Grand Strategy, Strategy, Tactics,
Technology, and Training**

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Iraq and Asymmetric Warfare: Attack and Counterattack

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The last few months have seen a steady escalation in the asymmetric war between the US and its coalition allies, and a hostile mix of former regime loyalists and largely Sunni Islamist extremists. The resulting conflict is asymmetric in the broadest sense of the term. The two sides have different grand strategic objectives, strategic objectives, and tactical methods and goals.

The end result has been that each side has had to alter its grand strategic objectives. At the same time, each side has evolved a relatively stable strategy and mix of tactical options to implement it. These tactics continue to evolve over time, but what some reports call “new” tactics are often simply variations in the mix of tactics each side uses or variations and intensifications of past methods of attack.

This analysis attempts to summarize the state of play for each side in terms of grand strategy, strategy, and tactics.

Grand Strategy

Neither side can now achieve their original grand strategic objectives. This has forced each side to limit its objectives to the point where neither side may be able to “win” in grand strategic terms.

US Grand Strategy

In the case of the US, several factors are clear:

- The US has achieved one important objective. It has ended the regime of a cruel and aggressive dictator.
- The US has halted Iraqi proliferation but cannot achieve the objective of removing an urgent and imminent threat because there is no evidence such a threat existed.
- The same problems apply to any linkage between Iraq and the war on terrorism. Iraq at best played a peripheral role in terrorism, with limited and unimportant links to Al Qaeda and other terrorist groups with limited operational meaning. If anything, the US may have triggered more Arab and Islamic anger aimed at the US although there is little evidence that Iraq is a “magnet for terrorists.” Less than 500 of some 12,000 suspected members of the opposition that the US has arrested in Iraq have been foreign. Only 25 have had suspected ties to Al Qaeda and only 5 remain major suspects.

- The US may be able to give Iraq significant new opportunities, but it will not be able to shape Iraq into a modern democracy or free market economy. The US will have to leave long before the political, economic, and energy issues in Iraq play out, and Iraq will then face years, if not a decade, of instability.
- Iraq will not become any near term example to the region of what a state should be, or of the US ability to create a democracy. There may be positives in Iraq over time, but they will be at least partially offset by negatives, while other Middle Eastern states will be driven by their own internal dynamics.
- The US could not help unleashing the confessional and ethnic forces of Arab and Kurd and Shiite and Sunni in Iraq that Saddam had ruthlessly crushed. However, the half-formed US vision of “federalism” will not prevent those forces from playing out over the years to come.
- Iraqis may tolerate the US if Iraq emerges from US and Coalition rule as a reasonably stable and secure state, but the US will not win the hearts, minds, or friendship of the Iraqi people. The war will generate as much anger as gratitude.
- It will be years before Iraq’s role in regional energy supplies is clear, and it is uncertain whether the end result will be any more secure, or produce higher net exports, than the US Department of Energy projected as coming from Iraq before the war.
- The US will have removed a potential military threat to Israel, but the new post-US regime is unlikely to be any more sympathetic to Israel than any other Arab state.
- The situation in Iraq is far more likely to compound US problems with Islamic movements than reduce them, and will probably produce a significantly less secular regime over time.
- Iraq’s military threat to neighboring states will be ended for at least a decade, but the end result will be a power vacuum in the Gulf that is likely to inspire continuing Iranian, Syrian, and Turkish pressure and cause concern to the Arab Sunni states.

Former Regime Loyalist and Hostile Iraqi Grand Strategy

It now seems almost impossible that anything like Saddam’s past regime could reemerge, no matter what the outcome of the war may be. Even if Saddam and senior supporters like Al Douri do play a major role in directing the current fighting, their past power base is largely destroyed.

Moreover, the forces attacking the US and the Coalition are now a diverse mix of true regime loyalists, Ba’ath and other opportunists who see no other future, Arab and Iraqi

nationalists, criminals, paid activists, Iraqis hostile to the US or seeking revenge, foreign volunteers without clear affiliation, Iraqi Sunni and other Islamists hostile to the US, Iraqis who fear US domination and neoimperialism, foreign Islamic extremist without and without ties to groups like Al Ansar and Al Qaeda, Sunnis who fear the loss of power and wealth they had under Saddam and the Ba'ath, and young male Iraqis caught up in momentum of such attacks at a time unemployment is 50-60%.

US officials have never identified either the command structure of these forces, or talked about their unity. The most they have said is that:

- There is evidence that Saddam's regime planned and organized the fight the kind of war that is now underway before the US invaded,
- The former regime may have been slow to implement this war because of the shock of the rapid US advance and sudden fall of Baghdad,
- The worst resistance has occurred in the Sunni towns and cities in the "Sunni Triangle" to the north and west of Baghdad that the US did not fully occupy or fight in because of the sudden collapse of Saddam's regime.
- Evidence has slowly emerged of some degree of local, regional, and perhaps national coordination.
- The leadership of the "FRL" effort does not seem to have a rigid structure, but has some degree of hierarchy and there are local "cells" of leaders and organizers who provide funds, and weapons.
- There are no accurate counts of such cells or of the number of regular "FRL" forces and part time forces. Guesstimates have been made that there might be some 25 cells or bands, and roughly 5,000 volunteers. Other Guesstimates talk about 8-12 cells of 80-100 men each in the Greater Baghdad area, with smaller cells of 10-20 men for actual raids or combat. Experts stress, however, that any effort to quantify the hostile forces is extremely uncertain and can only be a guesstimates. Moreover, some interviews with "fighters" reflect a much tighter cell structure where many of those conducting attacks are pulled together in small groups for an individual operation, with no clear understanding of the hierarchy above them. Iraqis hired for an operation, and foreign fighters, may have little or no knowledge of the structure above them.
- Some Israeli sources like Debka have reported that the "FRL" does have organized elements of Saddam's Fedayeen, and have cited the appearance of Fedayeen like uniforms in Samarra. It is clear that the US has actively sought Saddam's Izzat Ibrahim al-Douri, and there are Debka reports that his son, Mohammed al-Douri, a senior Saddam Fedayeen commander, heads the remnants of Fedayeen brigades with 300-400 fighters trained for urban guerrilla warfare in built-up and open terrain and suicide assaults. US commanders, however, do not believe that anything like organized combat units exist, as distinguished from 80-100 men groups of largely irregular fighters.
- The "FRL" does have foreign volunteers, but there is little evidence of a separate, organized Islamist effort except for relatively small remnants of Al Qaeda.
- The "FRL" effort is seeking to co-opt both Sunni and Shi'ite Islamists, often uses Islamic and Pan Arab rhetoric, and uses false flag names like "Mohammed's Army."
- There is an organized political and propaganda effort designed to exploit foreign Arab and Western media, and which spreads conspiracy theories, helps stage manage Iraqi civilian claims

about collateral damage and civilian casualties, and makes an ongoing effort to systematically discredit CPA, Coalition, and US reports.

- There is evidence of an organized effort to intimidate and kill Iraqis who support the Coalition and nation building effort, whether civilians, officials, security forces, or contractors.
- “FRL” intelligence has some degree of organization and is becoming steadily more effective.

All of the various hostile groups are generally lumped together in US military briefings as former regime loyalists or “FRLs.” No one knows their numbers, the trends, or the relative mix of elements under this title, but the past history of such wars is that whatever Saddam and the regime may have planned and now intend, the resulting mix of activists is simply too diverse not to mutate into a new political and military structure beyond the regime’s control – and one which may well continue to operate in a new form even if Saddam, Al Douri, and other top Ba’ath leaders are killed or captured.

The Kurds and Shi’ites have the power to secure a major share of Iraq’s political and economic resources, and the new “fighters” emerging as former regime loyalists are reacting much more out of general ethnic affiliation and Arab nationalism than any love of Saddam and the Ba’ath. Coupled to a significant rise in the role of Sunni Islamists, the end result is a “new Iraq” even in the Sunni triangle.

As a result, both sides now have to adopt more modest grand strategic objectives. The US would like to leave with some hope that its legacy will eventually be a democratic, stable, and free market Iraq. The bulk of the former regime loyalists seem to want a return to Sunni dominance under a strong man and something like the Ba’ath, although it is far from clear that they necessarily want Saddam and something exactly like the Ba’ath dictatorship.

Why Neither Side May “Win”

It is one of the ironies of the present fighting that neither the US, nor its present opponents, are now likely to achieve even the grand strategic objectives even if they “win” the fighting. A US defeat of Iraq’s former regime loyalists and largely Sunni Islamist extremists is not going to create a model or stable Iraq that will somehow catalyze the rest of the region into democratic change. It is increasingly clear that even a victorious US will have to give up control over Iraq long before it can shape the form of a new state or economy takes, or achieve Iraqi political stability.

At the same time, it is equally hard to see how former regime loyalists and Sunni Islamist extremists can “win” a victory that prevents Iraq’s Shi’ites from acquiring a vastly great share of wealth and power. If nothing else, the disbanding of the Ba’ath security forces and Saddam’s army, and the creation of large Iraqi security and police forces – coupled to the emergence of strong religious leaders in the Shi’ite portion of the country is likely to make the old concept of a secular Sunni strong man impossible. The strength of the Kurds will reinforce this. The so-called “Sunni” triangle is, after all, a small slice of 15-20% of the population in Iraq’s confessional and ethnic sandwich.

Picking “winners” and “losers” is pure guesswork at this point in time, but the most likely winners are going to be Iraq’s religious Shi’ites and the Kurds, followed by those who oppose the US, at least in terms of military intervention. If this happens, Iran and Syria will to some extent become “winners” among Iraq’s neighbors, although both may find the new Iraq assertive in ways that disturb the Syrian Ba’ath dictatorship and Iran’s hard-liners. Turkey and the Sunni Arab states on Iraq’s borders may become “losers” in the sense that Iraq ceases to be a strong, secular Sunni state. Given the past, however, this may also make them “winners.” An unstable and demilitarized Iraq may in fact be an easier neighbor to live with.

As for the US, it may end up as either a limited “winner” or a limited “loser.” It is possible that the current fighting will undermine both the secular Sunni elements in Iraq and the US image in the Arab and Islamic world, thus stimulating Islamic extremist terrorism and violence. One needs to be careful, however, about such predictions. If the US defeats the present threat from former regime loyalists and largely Sunni Islamist extremists, and leave an Iraq that is clearly Iraq for and by the Iraqis, it may be much harder to sell the concept of a conspiratorial and hostile US.

Strategy

In terms of strategy, the war is as sharply asymmetric as it is in terms of grand strategy. Each side is now pursuing a strategy designed to exploit both its strengths and its opponent’s weaknesses, and each side is having mixed success.

US Strategy

The US and its Coalition allies are now pursuing the following strategy:

- Restructure US forces to act as low intensity combat forces making primary use of human intelligence and Iraqi sources to aggressively seek out and attack hostile forces, and to locate and destroy their leaders, financing, and arms.
- Use allied forces to secure the center and southern areas of Iraq, while seeking additional allied force elements.
- Reduce the US role in force protection and security missions as much as possible, and minimize the backlash from a US presence in Iraqi towns and cities, by replacing the US forces with Iraqi police and security forces. Use Iraqis as a key source of human intelligence (HUMINT).
- Support the military effort with a military civil action program including extensive local contacts with Iraqi officials and direct aid in the form of CERP.
- Reduce vulnerability to hostile Iraqi attacks by using aircraft, helicopters, and artillery to counter hostile Iraqi rocket and mortar attacks, and use them to target

Iraqi facilities and hostile groups without warning and the delays inevitable in using ground forces.

- Deter outside intervention by nations like Iran, Syria, and Turkey with diplomatic pressure and threats; extend counterterrorism activity outside Iraq in an effort to limit infiltration and support from outside groups.
- Win Iraqi “hearts and minds” by creating a new Iraqi government clearly selected by Iraqis and controlled by them through a process that wins broad Iraqi political support and approval without triggering confessional and ethnic tension or conflict.
- Maintain Shi’ite support or tolerance of the US-led occupation, knowing the Shi’ites are the emerging majority (60%+), while retaining Kurdish support and seeking to minimize the alienation of the Sunnis and their fears of the loss of power, influence, and wealth. At the same time, emphasize Iraq’s secular political development. This, in turn, would help contain a threat which is largely Sunni and confined largely to the Sunni triangle and Sunni areas in Mosul, Baghdad, and Basra with well under 12% of Iraq’s population.
- Win Iraq “hearts and minds” through a \$22 billion grant aid program (FY2003 and FY2004) and economic modernization reform efforts that can move Iraq towards a viable market economy and the ability to exploit its oil wealth, and do so in ways that do not lead to charges of exploitation and imperialism, or trigger confessional and ethnic conflict.
- Internationalize the political aid and military efforts as much as possible -- without losing the ability to win the war and move the nation-building effort forward -- to win international and Iraqi support and reduce the burden on the US.
- Create an effective information campaign to inform the Iraqis and win their support using TV, radio, print, and direct contact.

The US is having mixed success in all of these strategic efforts, in part because it failed so dismally to effectively prepare for conflict termination, nation building, security missions, and the risk of low intensity conflict before and during the conventional phase of the Iraq War, and because the Bush Administration’s ideological view of Iraq and the region was badly decoupled from reality.

The US has made real progress in restructuring its military effort to fight low intensity conflict and do so with the HUMINT and civil-military action programs it needs. Britain and other allies do play a critical role, and the effort to train and use Iraqis in security and human intelligence missions has had some success.

The US-led political effort, however, has an uncertain future at best. It has uncertain support from Shi’ite leaders, and lacks popular support. Its broad aid effort has had some

success, but they have been too slow to win much gratitude or influence hearts and minds. The effort to restore oil revenues has also made progress, but is vulnerable and also has not helped the US win hearts and minds.

The US-led information campaign remains a near-disaster; the Iraqi media are filled with conspiracy theories and are often hostile. Television is dominated by hostile Arab satellite TV stations, and many educated Iraqis turn to hostile Western and outside Arab media.

Former Regime Loyalist and Hostile Iraqi Strategy

Almost inevitably, the strategy being used by the former regime loyalists and other opponents of the US and its Coalition allies is a twisted mirror image of US strategy. Like the US, it is also a strategy that is in the process of evolution.

If the US failed dismally to properly prepare and organize to win the peace after it won the conventional war, Saddam's efforts to create a resistance force also often failed. Much of the Popular or Jerusalem Army never showed up, many arms caches were established that never seemed to have been properly exploited, the leadership and its supporting cadres did a poor initial job of taking cover, and their efforts seemed to have been badly disrupted by the sheer pace and shock of the US advance. In retrospect, it is hard to believe that anything like the present threat could ever have evolved if the US military CPA had been prepared for a realistic and properly supported nation building and security effort.

The regime's loyalists did, however, have months to reorganize in which they did not face well organized Coalition security forces or a well-planned and effective nation building effort. They were able to take advantage of the large-scale release of criminals, an initial failure to provide ex-military with any financial security, broad Arab and Islamic resentment or anger at the US over a host of issues, Iraqi nationalism, Sunni fears of losing power and wealth, outside volunteers, and young men desperate for money.

The end result became the diverse group of different elements now called former regime loyalists or "FRLs." At this point, it is unclear how much central or regional direction they have, although the US almost certainly has gathered significant intelligence from the roughly 12,000 men it captured or arrested as of 1 December. Only about 350 out of the 12,000 captured or held at interrogated as of 1 November were foreign volunteers, many of which had entered the country before the war. A maximum of 25 were suspected at some point of having serious ties to Al Qaeda, and only 3-5 remained suspect as of 1 December. (The US had in excess of 5,000 Iraqis and foreign volunteers in custody as of 27 November.)

What does seem clear is that the FRLs are organized cells of true former regime loyalists directing and funding the effort. There now seems to be a rough chain of command in the sense there is some hierarchy or pyramidal structure, with true "FRL" cells at the top, regional cells below, and then large numbers of part or full time attackers.

In practice, this has led the opposition to adopt a strategy with the following elements:

- Highly dispersed elements organized in a cell-like structure, often using men to conduct actual attacks with little or no understanding of the command and financing structure above them. Intimidate or kill Iraqis providing human intelligence where possible, and enhance security Shelter in areas supporting the FRLs, move constantly, and use false names and deception to complicate the human intelligence task.
- Attacks focused on high profile targets likely to get extensive media attention and to influence and intimidate Iraqis while creating the impression of a far more successful level of attack than actually exists.
- Maintain a constant stream of US casualties in an effort to have political impact in the US. Attack or kill Iraqis and personnel in Coalition forces, international organizations and contractors, and allied officials. Seek to persuade Iraqis not to support the Coalition and international organizations, contractors, and allied groups to leave.
- Steadily escalate the military threat. Create elements close to company-sized irregular combat units to try to challenge US raids and attack convoys and vulnerable targets.
- Reduce the exposure of “FRL” personnel by using longer-range weapons like mortars, surface-to-air missiles, and rockets, and by using vehicle bombs and improvised explosive devices (IEDs).
- Attack the US and coalition aid and nation building effort and do so at the points most likely to have a political impact and deprive the US of the ability to win hearts and minds.
- Broaden the area of attack as much as possible to make the FRL attacks seem broader based, force the US to disperse its forces throughout Iraq, deprive Iraqis supporting the nation building effort of any sanctuary, and undermine allied and international support for the US.
- Intimidate or kill the Iraqi police and security forces supporting the Coalition. Isolate them as much as possible, and try to provide incidents that will cause backlash against them or the US.
- Support the military effort with a military civil action program including extensive local contacts with Iraqi officials and direct aid in the form of CERP.
- Use US and Coalition attacks – including attacks using aircraft, helicopters, and artillery to counter hostile Iraqi rocket and mortar attacks – to claim excessive

force. Exploit any civilian casualties and collateral damage as a propaganda weapon. Encourage protests and individuals to claim innocence and collateral damage in front of the media --even when no damage exists. Circulate conspiracy theories and make false claims about each US attack.

- Try to provoke or exploit intervention by Syria, while trying to increase tensions with Iran and Turkey, and seek support from volunteers and outside terrorist and extremist groups, often claiming an Islamic character to “FRL” efforts that does not really exist.
- Deprive the coalition of “hearts and minds” by attacking and sabotaging the efforts to create a new Iraqi government, by killing supporters and officials, by exploiting confessional and ethnic tension or conflict, and discrediting the effort with propaganda and conspiracy theories.
- Exploit growing Sunni fear and resentment of having a minority role in Iraq, while claiming a nationalist and Islamic character to try to win Shi’ite support. Kill or intimidate Shi’ite, Kurdish, and Sunni leaders and figures that support the nation building effort or US-led occupation, knowing the Shi’ites are the emerging majority (60%+), while retaining Kurdish support and seeking to minimize the alienation of the Sunnis and their fears of the loss of power, influence, and wealth. At the same time, emphasize Iraq’s secular political development.
- Use direct attacks on facilities, the killing of aid workers and contractors, sabotage, and focused criminal activity to make aid and economic modernization reform efforts as ineffective as possible, and prevent the US and a new Iraqi government from exploiting Iraq’s oil wealth. Seek to blame the US and Coalition for the resulting hardships, and to make the outside aid program unpopular and too expensive to sustain. Try to use conspiracy theories about the allocation of aid, and problems in the effort, justify charges of exploitation and neoimperialism, and trigger confessional and ethnic conflict.
- Attack UN, NGO, foreign embassies, foreign contractors and other targets to deprive the US of international support, and force UN, NGO, and allied efforts out of the country. Make sure that much of the aid process does not function and that the US-led effort will not be replaced or supplemented by an international effort that could also deprive the "FRLs" of any chance at power.
- Use an information strategy that avoids tying the opposition too closely or openly to Saddam, while taking steps to convince Iraqis that Saddam and other key leaders are still alive and active. Portray the “FRL” effort as Iraqi nationalist, Arab nationalist, and Islamic in character. Capitalize on Iraqi and Arab tensions with the US over the Arab-Israeli conflict and its rhetoric and actions in the war on terrorism. Use Arab and Islamic media to portray the attacks on the US as pro-Arab and pro-Islam. Advocate anti-US and Coalition conspiracy theories.

The "FRLs" are having the same mixed success in these strategic efforts as the US, in large part because they remain a minority of the Iraqi people and cannot shed their linkage to Saddam and the Sunnis. It is clear, however, that the "FRLs" are learning and adapting in reaction to the US and Coalition strategy. Although, one must be careful about the degree of learning required. Virtually every aspect of the strategy the "FRLs" are using to try to counter the US, and exploit its weaknesses, is a well-established technique used somewhere else in the Middle East since 1970. The problem for both the US and Coalition, and for most US and Western journalists, is that they failed to properly assess the lessons of such attacks or never paid attention to them.

As a result, the US and Coalition have often been "surprised by the inevitable." Journalists and analysts with no prior experience in asymmetric warfare report on "new" and "sophisticated" strategies and tactics that are actually well proven methods, and other report new tactics that the "FRLs" have exploited in some form since the fall of the regime. It is important to note that not only is asymmetric warfare based on exploiting the weaknesses of any enemy, but success is based on constantly altering the mix of tactics that make up overall strategy so that vulnerability is reduced while exploiting the areas that the enemy leaves exposed.

Tactics, Technology, and Training

It is simply too soon to predict how this grand strategic and strategic duel will turn out. So far the war has accelerated, although not in any even way. The nature of targets and engagements has changed overtime as each side has tried to exploit the other side's weaknesses, and reduced its own.

To put the level of combat in perspective, coalition forces conducted nearly 12,000 patrols and more than 230 targeted raids in the week ending November 23rd. In that very short period, they captured some 1,200 enemy forces and killed 40 to 50 enemy fighters, and wounded some 25 to 30

No day is "typical in an asymmetric war, but the following figures give a good picture of the level of military activity throughout Iraq. On December 1, 2003, "FRL" forces were average around 9 engagements per day against coalition military, two attacks on Iraqi security forces, and two attacks on Iraqi and other neutral civilians. That same day the Coalition conducted 1,658 patrols, 22 raids, and captured 115 anti-coalition suspects.

- In the Southeast, multinational division forces conducted 240 patrols, two raids, and detained 25 personnel
- Four people with Iranian paperwork, one a confirmed citizen, were captured when coalition soldiers discovered numerous arms and weapons in a minibus that was stopped at a checkpoint in al-Basra yesterday. Among the weapons seized were several rocket-propelled grenade launchers and rifles. In the center south zone, multinational division forces conducted 143 patrols, detaining 36 personnel. All those personnel were later deported back to Iran. At various points near and around Karbala City, a coalition explosives disposal team, acting on information provided by Iraqi citizens, found and destroyed a large weapons cache.

- In the West, the 82nd Airborne Division conducted six offensive operations, 173 patrols, including nine joint patrols with the border police and Iraqi police, and cleared two caches. During these operations, 10 enemy personnel were captured.
- In Baghdad, the 1st Armored Division conducted 528 patrols, five offensive operations against insurgent elements operating within Baghdad, and detained 14 individuals suspected of ties to Saddam Fedayeen and to other anti-coalition forces. Elements conducting a raid on targets suspected of attacks against U.S. forces captured three Iraqis and confiscated 1.4 million dinar, three computers, Wahhabi booklets, Osama bin Laden material, weapons and ammunition. Coalition forces in Baghdad conducted a joint raid with the ICDC against Almar Yassiri, Muqtada Sadr's operations officer in Sadr City, also believed responsible for the ambush of coalition soldiers on October 9th. He was captured without incident.
- In the northeast zone, coalition forces conducted 164 patrols, two raids, and captured 41 individuals. In a joint operation, the 173rd Airborne Brigade completed Operation Bayonet Lightning, along with the Iraqi Civil Defense Corps and the Iraqi police, conducting intelligence-based raids to target former regime elements. Twenty-six individuals were captured; all suspected former members of the Saddam Fedayeen. Based on information provided by Iraqi citizens, forces conducted a cordon and search east of Balad and a raid in Bayji. Ten persons were captured, and soldiers located and confiscated extensive weapons and ammunition.
- In the north, coalition forces conducted 197 patrols, one cordon- and-knock operation, and detained 26 individuals. Training began for the first group of Mosul police officers for the special reaction team. The police chief has personally selected 25 highly qualified members -- highly qualified police officers or former military members to form this unit.
- The 101st activated another Civil Defense Corps battalion. The unit's 854 ICDC soldiers will be responsible for securing the pipeline in critical Iraqi oil infrastructure nodes in the western portion of the Ninawa Province. To date, the 101st has trained four battalions of Iraqi Civil Defense Corps soldiers, and these units are fully integrated into combat operations and infrastructure security.

These figures illustrate the level of combat activity on a given day, and that the “war after the war” is a real conflict, but there is no way to know whether they will rise or fall even in the short term.

There are, however, developments in the area of tactics, technology, and training that demonstrate a far more consistent pattern and which could have a major impact on the outcome.

The Intelligence and Targeting Duel

It seems unlikely that anything like the current “FRL” threat would have developed had the US been trained, organized, and equipped to fight low intensity combat immediately after the fall of Baghdad, and to rapidly deploy linguists, area specialists, and human intelligence officers.

The US military has since made major progress, but still has only about 1/3 to 1/2 the specialists required, is badly short of Tactical Human Intelligence Teams, and is badly short of translators. As a result, it has been able to develop HUMINT structures and reliable mixes of informers in some areas, but still faces major problems.

The US Army produces a total of 350-400 Arabic speakers a year at the Defense Language Institute, and the Department now has a total of some 5,000 Arabic speakers with some level of qualification, but language skills and training do not make an area or HUMINT expert or train someone to converse colloquially in Iraqi Arabic or deal with ethnic dialects. There is no clear correlation between language training, area training, and training in low intensity combat, military police, and civil military affairs. These tend to be treated as stovepiped specialties, and only the combat specialty produces anything approaching a fast track career.

These problems will be compounded by the fact that most of the qualified people now present in Iraq will rotate out, with their entire units over the next few months, and be replaced by new troops with no in-country expertise. Even if there were a pool of experts to replace them, the new personnel will lack in-country experience and be forced to recreate all of the personal contacts critical to HUMINT, civil-military affairs, and military police/security operations. This, and the simultaneous rotation of experienced combat teams, could hinder much of the US capability.

Similar rotations often proved crippling in Vietnam, and they could push the US to an even higher degree of dependence on Iraqi security forces and sympathizers for virtually all HUMINT. This will not be a problem if the US appears to be winning and they are not heavily penetrated by "FRL" agents. Both are serious risks.

The US is making steadily better use of HUMINT, UAVs, and other targeting aids -- although most units still do not have UAVs or adequate targeting and intelligence aids at the battalion level, and the 4th ID is the only unit with blue force tracker and digital display technology. Targeting is improving, but many strikes still hit targets that have been vacated and abandoned and targeting quality remains uncertain.

The "FRL" intelligence system and targeting capability has steadily improved in recent months. It seems likely that US, Coalition, NGO, and Governing Council/Iraqi civil activity is heavily penetrated, and some elements of the Iraqi police and security forces as well. US counterintelligence only detected above 25% of the hostile agents in Vietnam, and this experience may well be repeated.

The Raid and Counter-raid Duel

The US has been able to steadily step up its raid activity. The figures in September, October, and November had all shown a major rise in each month's activity. The US has simultaneously been able to improve its HUMINT to have far more focus and success. The US has also retrained and reorganized to exploit its major advantages in training, experience, firepower, and tactical intelligence assets.

The US must, however, succeed by hitting a series of highly dispersed and mobile targets, and often must launch multiple raids to catch one serious "FRL" activist, and it is

not clear whether the US is killing or seizing "FRL" forces faster than new volunteers and paid agents can be recruited.

US success is also critically dependent on Iraqi HUMINT to target the raids, and the "FRL" opposition is doing a better job of using propaganda and misinformation to accuse the US of striking at innocent targets, hitting sensitive targets, etc.

The Ambush Duel

The pattern in US casualties as of December 4th, included 98 dead by land accident, 324 killed in action, 2 killed in the Camp Pennsylvania incident, 11 from friendly fire, 36 killed in helicopter accidents or combat related crashes, 8 from illness, and 43 non-combat. These totals do not reflect high levels of FRL success and the US has been able to reduce the number of ambushes, and inflict serious casualties on "FRL" attackers in defending against recent attacks. The deployment of unarmored Humvees, better body armor using the small arms protective inserts (ceramic plates) in Kevlar vests, better escort protection and use of helicopters and UAVs, and a variety of other techniques have helped protect US forces in convoy missions, protection missions, and raids.

At the same time, the "FRLs" have been able to organize large attacks for the first time. The "FRL" fighters have sometimes worn Fedayeen-like dress, and some of the fighters have been dedicated and persistent in ways that demonstrate a high motivation. The US has major advantages in terms of mobility, protection, and firepower, but no force can move without making itself vulnerable, and the "FRLs" are improving in capability.

The patterns in total casualties are also serious. The US alone had 2,150 wounded in action as of December 4, and 354 non-hostile wounded. The total killed broke down as follows:

	Total	Since 1 May 2003
Hostile	304	189
Non-hostile	137	114
Total	441	303

As less official breakout, developed by Brian Hartman of ABC News, summarizes the total patterns in casualties reaching 530 killed, with the following breakout by country:

Status	Total	U.S.	Britain	Other
Dead	522	441	52	29
Freed POW	8	8	0	0

The Artillery Duel

The Iraqis have slowly made better use of mortars and artillery, but largely in the form of relative inaccurate attacks using light weapons which have little more than a symbolic and harassment impact.

The US has responded with UAVs, counter-mortar radars, mapping of threat areas in field of fire, and on-call air and helicopter attacks. These have had some effectiveness, but FRL ability to “shoot and scoot” or use remotely triggered rockets has limited US effectiveness in return.

The situation could become much more serious if the FRLs learn how to use artillery weapons effectively at ranges over 1 kilometer, and how to aim and register such weapons. Large numbers of artillery weapons, MRLs, and heavy rockets/rocket launchers are still unaccounted for.

The IED, Car Bomb and Explosive Duel

IEDs remain a major threat. Reporting by Luis Martinez of ABC, current as of 21 November, indicated that the 3 helicopter crashes in November dramatically boosted the American casualty count, and 39 of the 69 fatalities in November resulted from those crashes. However, 22 of the remaining 30 fatalities, as of 21 November, resulted from Improvised Explosive Devices (IED's). This IED number was twice what it was at this same time period in October month, which had previously been the worst month for IED casualties....there were 17 overall in October.

Martinez provided a breakdown of IED deaths since May.

Month	IED Deaths
November	22
October	17
September	7
August	6
July	5
June	1
May	0

TOTAL	59

As a result, the IED threat may be the biggest continuing danger facing American soldiers in Iraq. In comparison, hostile fire has resulted in 4 KIA's in November.
Martinez

The US claims to detect and prevent approximately 40% of IED attacks. This still leaves 60%, and the Hezbollah showed in Lebanon that they could develop sophisticated devices and attack techniques that the Israeli's could never effectively counter.

US protection/detection efforts to deal with vehicle and suicide bombers have improved, but the FRLs can also hit at Iraqi civilians, contractors, Coalition, and NGO targets. They have shown from the start they can identify targets with high political and media profiles, and they certainly are aware of far more sophisticated ways to deploy and trigger explosives than they have used to date.

The Surface-to-Air and Anti-Aircraft Duel

The US is steadily improving counter-MANPAD tactics and countermeasures, but helicopters become vulnerable the moment they must fly predictable paths at low altitudes, and fixed wing aircraft has somewhat similar problems. The risks are limited because of the short range of MANPADs and light AA guns, but some FRL attacks will succeed as long as they are mounted in significant numbers.

Moreover, even the continued existence of a minimal threat will deter commercial airline traffic and raise the risk premium for even the most aggressive civil cargo carrier and charter.

The Force Protection vs. Isolation and Penetration Duel

The use of Iraqi security forces, moving out of key cities and populated areas, and improved US force protection measures have all helped increase security for the US. They have, however, not done so for the Iraqis and many others.

The US has been able to step up its civil-military activities and local engagement programs in many areas, but the CPA position in Baghdad remains a force protection nightmare, and the location in downtown Baghdad not only is a major irritant to Iraqis, but isolates the CPA while requiring a major force protection effort.

The Broadening the Scope of the War Duel

There are no reliable figures on “FRL” attack patterns, because the US does not provide data on attempts, and its breakouts of actual attacks by “region” are too broadly categorized to be useful. It is clear, however, that “FRL” forces can operate in Mosul and the north and do conduct attacks in the south and center. The attacks may be concentrated in the “Sunni triangle” and greater Baghdad area, but “FRL” efforts to broaden the war in geographic terms have had some success.

The “Sunni Triangle” includes the area from Baquba, Baghdad, Falluja and Ramadi - to Samarra in the west and Jalawla in the east. However, the number of towns and US facilities and airfields in this area have been “secure to the point where there have not been significant “FRL” operations.

The US has not provided official reporting on the expansion of “FRL” operations, but sources like Debka indicated that the area of “FRL” operations has expanded along the eastern bank of the Tigris from Samarra to the town of Khazimyah, south of the refinery town of Baiji. There is some FRL presence in the area from Khazimyah to the southern approaches of Baiji and Kirkuk, where Iraq’s northern oil fields, pipelines and production facilities make tempting targets.

They have also expanded into the area to the north from Jalawla toward Kifri and the Turkmen city of Tuzkhurmatu, are in the area up to Tawuq and up to the eastern approaches to Kirkuk and between the southern entrance to Tuzkhurmatu and Kirkuk.

This expansion, however, is as much the result of improved US raids and operations as anything else. If US sources are right, the actual strength of FRL forces has been cut significantly.

Triangle is shrunk by one third

The Border Penetration and Infiltration Duel

The US has strengthened US, Coalition, and Iraqi coverage of the Syrian and Iranian borders; and Kuwait, Saudi Arabia, and Turkey have improved some aspects of their border security. The fact is, however, that such activity can at most hope to stop major movements of equipment. The movement of individuals is impossible to halt; the borders are simply too long and too porous.

The deployment of surveillance aircraft, UAVs, unattended ground sensors, and ground radars can (and is) helping up to a point. So is the deployment of Iraqi Border Guards. There is no way, however, to tell a foreign volunteer from any other foreigner crossing the border, and most "FRL" activists are not known well enough to be recognized. While some arms and explosives are coming in from outside, there are so many weapons caches and depots – and the "FRL" has had so much time in which to exploit them – that many US officers feel a major effort to secure them all would simply be a waster of US and Iraqi troops.

At the same time, the "FRL" does not seem to have inspired large numbers of postwar volunteers and any well-trained terrorist or Islamic extremist cadres so far seem to be small.

The Iraqi Security Forces vs. Iraqi "FRLs," Islamists, and Foreign Volunteers Duel

The Iraqi security forces total 147,200 as of November 27, 2003. This compared to 123,000 US forces, and 23,900 other Coalition forces. The police had 68,800 out of a goal of 71,000 men, the civil defense corps had 12,700 out of 40,000, the new Iraqi army had 900 actives (plus 600 more trainees) out of 35,000, the Border Police Service had 12,400 out of 25,700, and the Facility Protection Service had 52,700 out of a goal of 50,000.

These Iraqi forces seem more loyal and effective than many feared, and often well motivated.

They are, however, poorly trained, armed, and equipped and are often very vulnerable in hostile areas. Moreover, the growing reliance on such forces makes their loyalty and

effectiveness more and more critical, and will inevitably create paramilitary forces that will develop their own political agendas.

This will be particularly true as the US moves forward in an effort to train elements of the various militias support the leaders of the Governing Council into battalions trained for active counterinsurgency operations. The US has stated that implementation of the recruitment" for the first such battalion, and any other battalions that follow, will be based on the principle that any individual that is recruited must serve as an individual, under a unified Iraq security service and cannot be serving to represent a political party or a particular militia. This is much easier to say, however, than enforce.

Nevertheless, these developments help explain why the "FRLs" have shifted to Iraqi and non-US targets when the US is active and alert and this seems likely to continue. The Iraqi security forces became a major "FRL" target during November. There were 21 killed and 62 wounded. Some 40 friendly Iraqi civilians were killed and 108 were wounded. A total of seven Iraqi civilians were killed, with 14 additional attempts. The figures have risen steadily since July and August, although October was the worst month in terms of Iraqi civilian casualties.

The number of sleepers, active "FRL" agents, and dual agents in the Iraqi security forces is impossible to determine.

So far, the Iraqi "FRLs" seem to have been able to recruit Iraqi low-level personnel and create new leadership cells as quickly as the US can locate and destroy them. It has not lost more "deck of cards" personnel in recent months, and it has a pool of thousands of senior Ba'ath, military, and security force personnel to draw upon. There are no meaningful numerical counts of "FRL" forces, either as totals, as numbers of cells and cadres, or in terms of senior leadership, but US experts are not claiming that they have been able to confirm any decline in "FRL" numbers.

The Information Warfare Duel

Iraqi and Arab media support for the FRLs is often limited, but there is little serious support for the US, and problems relating to Israel and the war on terrorism are having a major impact. The US information campaign seems to remain faltering and ineffective, and reporters on the scene have an almost uniformly negative impression.

Most of the polling to date has been limited and impressionistic, and the lack of adequate polling is, in itself, an important indictment of the problems in the US and coalition warfare effort. Oxford Research International poll did release a poll on December 1, however, based on 3,244 interviews started in mid-October ("around Oct. 15") and completed the first week in November.

The results are a warning. Public confidence was *lowest* in the "US and UK occupation forces," with just 21 percent confident, out of 11 groups or institutions tested. "Political parties" were about the same, 22 percent; and the CPA had 27 percent.

Confidence in “Iraq’s religious leaders” was highest, by far at 70 percent, followed by 54% for local community leaders, 50% for the police, and 48-49% for the Governing Council, Iraqi Media Network, and Ministries in Baghdad, the figure for the UN was only 35%.

The figures also reflected the lack of any clear support for a new political system. When Iraqis were asked what Iraq “needs at this time,” the top choices were “an Iraqi democracy” (cited by 90 percent) *and* “a (single) strong Iraqi leader” (cited by 71 percent). Next was “a government made up mainly of experts and/or managers.” A government of experts had 70%, the Governing Council had 62%, religious leaders had 60%, and a group of strong Iraqi leaders had 46%, as did a UN transition government. The CPA was second to last on the list, cited by 36 percent. The last was “a government made up mainly of Iraqi military leaders,” 26 percent.

When Iraqis were asked to think in the longer term -- “in 12 months time” and in five years, the answers were virtually the same. “An Iraqi democracy” and then “a (single) strong Iraqi leader,” were at the top of the list, and then “a government made up mainly of religious leaders.” The CPA and Iraqi military were at the bottom.

Other insights were that 42 percent said the demise of the Saddam regime was “the best thing which happened to you” in the last 12 months – by a large margin the top choice. Some 35 percent said the “war, bombings and defeat” were “the worst thing,” again a top choice by a large margin. Some 67% said that “regaining public security in the country” was a top priority.

The good news for the US is that these data shows considerable support for the kind of government the US advocates – although for a strong man as well – and indicate a well-managed information campaign could have been far more effective. The bad news is that US so far has been incapable of developing and effectively communicating the messages necessary to win hearts and minds. Instead of “information dominance,” it has achieved information incompetence.

The Nation Building and Aid vs. the Attack, Crime, and Sabotage Duel

The US-led aid effort has made real progress in many areas. Secretary Rumsfeld cited the following key milestones in a press conference on November 26:

- To date, the coalition has helped in the reopening of all 240 Iraqi hospitals and 95 percent of the country's 1,200 medical clinics;
- By October 6, electric power production reached 4,518 megawatts, surpassing prewar levels;
- Iraq is producing 2.1 million barrels of oil a day for its own use and for world markets;
- Some 400 Iraqi courts are back in operation;
- By October 16, the new Iraqi dinar currency began circulation;

- Some 170 newspapers are being published across the country;
- 5.1 million Iraqi students are back in schools, and 51 million new textbooks have been issued; and
- 97,000 Iraqis applied to attend college for the 2003 fall semester.

However, the reality is that unemployment is still in the 50-60% level among young men and progress is so slow and faltering that much of the impact on hearts and minds has been one of increasing Iraqi frustration. Electric generation, for example, dropped during October from 3,948 MW to 3,582 MW vs. an October 1st goal of 4,400 MW. Oil production is averaging 2.0 MBPD, and exports 1.5 MBPD, but the system is very fragile. The Iraqi consumer also sees a very different picture. Diesel supply is at 53% of the CPA goal, kerosene at 56%, Propane is at 34%, and gasoline/Benzine is at only 52% of goal – with winter approaching.

Education and healthcare numbers are improving strikingly, but quality and consumer satisfaction remain major issues. Water output is improving but only 50% of Iraqis have access to potable water. Landline telecommunications are at 77% of prewar level and wireless phone service is still not active. Internet access is very limited but nearly 9% above the prewar level. Railway service is improving but 12 of the 20 trains per day are military and two carry fuel.

The US military operated CERP program, however, has funded many short-term projects, with money going directly to Iraqis for urgent projects in the field. It has often been highly effective. CERP is, indeed, a model of how to win hearts and minds in near real time, but focusing on the most critical tasks with the most political and military impact, providing money only to Iraqis, and then monitoring progress and success on a real-time basis in the field.

As for the US civilian administered aid program, it is far too soon to judge an aid program that had to be improvised nearly from scratch will no serious prior planning, and then be implement by US officials and contractors with limited or no experience in Iraq and in dealing with violence or the problems of a command kleptocracy. The eventual flow of billions of dollars worth of aid should have a cumulative impact. The fact the US is not attempting to dominate the future of Iraq's oil industry should also build credibility.

The CPA, however, is badly over-centralized, the CPA staff in Baghdad is too isolated, and the US contracting procedure is a time consuming nightmare. Contractor and USAID personnel spend too little time in the field and focus too much on project deadlines and too little on Iraqi short-term needs and perceptions.

The US ability to carry out armed nation building in the face of Iraqi FRL theft, attacks, and sabotage also is uncertain. The critical oil and gas industry are particularly vulnerable, and the problem is compounded by what may be serious reservoir damage and overproduction problems stemming from Saddam's regime.

This duel is still too close to call.

The New Governance vs. Anti-Political Change Duel

The “FRL” and the Islamic factions that support them do not seem to have broad support, but neither does the Governing Council or CPA. The recent changes in the US approach have not eased distrust or won popular support, in part because of the feuding in the Governing Council, lack of support from key Shi’ite leaders, and continuing distrust of US motives and its willingness to leave.

Neither side has particularly attractive tactics, or a particularly attractive position at this point. The US may have the edge over time, however, because its position is to transfer sovereignty and depart. The more convincing this position is the more support the US will gain.

The FRLs have no political or governance positions that can win nation-wide, particularly Shi’ite and Kurd support, and have nowhere to go.

The Coalition and Ally vs. Anti-NGO, UN, and Ally Duel

The FRLs have so far been the winners. They have largely driven out the UN and most NGOs, and have found that even token attacks can seriously undermine allied popular support for the US.

The lack of broad international and popular support for the US before and after the war has made the US highly vulnerable to this tactic, and it is extremely difficult – if not impossible – to avoid having each target be vulnerable in some way. The world simply is not equipped for armed nation building.

It is not clear how the US can reverse this situation. Some 32 countries have been willing to actively support the coalition, including Britain and Australia, the two countries that actively fought the war as allies of the US. The US also continues to seek aid and or troops from some 14 additional countries, but it is unclear that it can hope to do more than maintain the present level of some 24,000 allied forces, and many prior aid commitments are proving uncertain,

This situation might, however, reverse itself if (a) the Coalition and Iraq security forces could establish a much higher degree of security, (b) Iraq succeeded in developing a more convincing leadership and transition to an Iraqi government that could do a better job of attracting outside support, and (c) the Iraqi economy gathered momentum and reform became advance and stable enough to attract foreign investment.

Table 1
Daily Trends in US Casualties

Date	Dead	Captured	Missing	Freed
Unknown Date	4	0	0	0
12/4/2003	0	0	0	0
12/3/2003	0	0	0	0
12/2/2003	1	0	0	0
12/1/2003	1	0	0	0
11/30/2003	0	0	0	0
11/29/2003	9	0	0	0
11/28/2003	1	0	0	0
11/27/2003	1	0	0	0
11/26/2003	1	0	0	0
11/25/2003	0	0	0	0
11/24/2003	0	0	0	0
11/23/2003	5	0	0	0
11/22/2003	2	0	0	0
11/21/2003	1	0	0	0
11/20/2003	2	0	0	0
11/19/2003	0	0	0	0
11/18/2003	0	0	0	0
11/17/2003	4	0	0	0
11/16/2003	0	0	0	0
11/15/2003	18	0	0	0
11/14/2003	2	0	0	0
11/13/2003	2	0	0	0
11/12/2003	19	0	0	0
11/11/2003	2	0	0	0
11/10/2003	0	0	0	0
11/9/2003	1	0	0	0
11/8/2003	3	0	0	0
11/7/2003	7	0	0	0
11/6/2003	4	0	0	0
11/5/2003	1	0	0	0
11/4/2003	2	0	0	0
11/3/2003	1	0	0	0
11/2/2003	16	0	0	0
11/1/2003	3	0	0	0
10/31/2003	2	0	0	0
10/30/2003	0	0	0	0
10/29/2003	0	0	0	0
10/28/2003	3	0	0	0
10/27/2003	2	0	0	0
10/26/2003	5	0	0	0
10/25/2003	0	0	0	0
10/24/2003	3	0	0	0
10/23/2003	1	0	0	0
10/22/2003	2	0	0	0
10/21/2003	1	0	0	0
10/20/2003	1	0	0	0
10/19/2003	0	0	0	0
10/18/2003	2	0	0	0
10/17/2003	1	0	0	0
10/16/2003	3	0	0	0
10/15/2003	0	0	0	0
10/14/2003	0	0	0	0
10/13/2003	5	0	0	0
10/12/2003	1	0	0	0
10/11/2003	0	0	0	0
10/10/2003	0	0	0	0
10/9/2003	4	0	0	0
10/8/2003	0	0	0	0
10/7/2003	0	0	0	0
10/6/2003	3	0	0	0

10/5/2003	0	0	0	0
10/4/2003	1	0	0	0
10/3/2003	1	0	0	0
10/2/2003	0	0	0	0
10/1/2003	3	0	0	0
9/30/2003	2	0	0	0
9/29/2003	4	0	0	0
9/28/2003	0	0	0	0
9/27/2003	0	0	0	0
9/26/2003	0	0	0	0
9/25/2003	3	0	0	0
9/24/2003	1	0	0	0
9/23/2003	1	0	0	0
9/22/2003	1	0	0	0
9/21/2003	0	0	0	0
9/20/2003	3	0	0	0
9/19/2003	0	0	0	0
9/18/2003	4	0	0	0
9/17/2003	0	0	0	0
9/16/2003	0	0	0	0
9/15/2003	2	0	0	0
9/14/2003	1	0	0	0
9/13/2003	0	0	0	0
9/12/2003	2	0	0	0
9/11/2003	1	0	0	0
9/10/2003	1	0	0	0
9/9/2003	1	0	0	0
9/8/2003	0	0	0	0
9/7/2003	0	0	0	0
9/6/2003	0	0	0	0
9/5/2003	0	0	0	0
9/4/2003	1	0	0	0
9/3/2003	0	0	0	0
9/2/2003	1	0	0	0
9/1/2003	3	0	0	0
8/31/2003	0	0	0	0
8/30/2003	2	0	0	0
8/29/2003	1	0	0	0
8/28/2003	0	0	0	0
8/27/2003	0	4	0	0
8/26/2003	1	0	0	0
8/25/2003	2	0	0	0
8/24/2003	0	0	0	0
8/23/2003	5	0	0	0
8/22/2003	0	0	0	0
8/21/2003	2	0	0	0
8/20/2003	2	0	0	0
8/19/2003	0	0	0	0
8/18/2003	2	0	0	0
8/17/2003	0	0	0	0
8/16/2003	1	0	0	0
8/15/2003	0	0	0	0
8/14/2003	1	0	0	0
8/13/2003	2	0	0	0
8/12/2003	5	0	0	0
8/11/2003	0	0	0	0
8/10/2003	1	0	0	0
8/9/2003	2	0	0	0
8/8/2003	3	0	0	0
8/7/2003	1	0	0	0
8/6/2003	3	0	0	0
8/5/2003	2	0	0	0
8/4/2003	1	0	0	0
8/3/2003	0	0	0	0
8/2/2003	0	0	0	0
8/1/2003	1	0	0	0
7/31/2003	2	0	0	0
7/30/2003	1	0	0	0
7/29/2003	0	0	0	0
7/28/2003	2	0	0	0

7/27/2003	1	0	0	0
7/26/2003	4	0	0	0
7/25/2003	0	0	0	0
7/24/2003	4	0	0	0
7/23/2003	2	0	0	0
7/22/2003	1	0	0	0
7/21/2003	1	0	0	0
7/20/2003	3	0	0	0
7/19/2003	1	0	0	0
7/18/2003	2	0	0	0
7/17/2003	2	0	0	0
7/16/2003	1	0	0	0
7/15/2003	1	0	0	0
7/14/2003	1	0	0	0
7/13/2003	2	0	0	0
7/12/2003	0	0	0	0
7/11/2003	1	0	0	0
7/10/2003	0	0	0	0
7/9/2003	4	0	0	0
7/8/2003	1	0	0	0
7/7/2003	2	0	0	0
7/6/2003	2	0	0	0
7/5/2003	0	0	0	0
7/4/2003	0	0	0	0
7/3/2003	2	0	0	0
7/2/2003	1	0	0	0
7/1/2003	1	0	0	0
6/30/2003	0	0	0	0
6/29/2003	0	0	0	0
6/28/2003	0	0	0	0
6/27/2003	1	0	0	0
6/26/2003	3	0	0	0
6/25/2003	5	0	0	0
6/24/2003	7	0	0	0
6/23/2003	0	0	0	0
6/22/2003	1	0	0	0
6/21/2003	0	0	0	0
6/20/2003	0	0	0	0
6/19/2003	1	0	0	0
6/18/2003	1	0	0	0
6/17/2003	2	0	0	0
6/16/2003	2	0	0	0
6/15/2003	1	0	0	0
6/14/2003	0	0	0	0
6/13/2003	1	0	0	0
6/12/2003	1	0	0	0
6/11/2003	0	0	0	0
6/10/2003	1	0	0	0
6/9/2003	0	0	0	0
6/8/2003	1	0	0	0
6/7/2003	1	0	0	0
6/6/2003	2	0	0	0
6/5/2003	1	0	0	0
6/4/2003	0	0	0	0
6/3/2003	1	0	0	0
6/2/2003	0	0	0	0
6/1/2003	0	0	0	0
5/31/2003	0	0	0	0
5/30/2003	3	0	0	0
5/29/2003	0	0	0	0
5/28/2003	2	0	0	0
5/27/2003	2	0	0	0
5/26/2003	6	0	0	0
5/25/2003	1	0	0	0
5/24/2003	0	0	0	0
5/23/2003	0	0	0	0
5/22/2003	0	0	0	0
5/21/2003	1	0	0	0
5/20/2003	0	0	0	0
5/19/2003	8	0	0	0

5/18/2003	2	0	0	0
5/17/2003	0	0	0	0
5/16/2003	1	0	0	0
5/15/2003	0	0	0	0
5/14/2003	1	0	0	0
5/13/2003	2	0	0	0
5/12/2003	2	0	0	0
5/11/2003	0	0	0	0
5/10/2003	1	0	0	0
5/9/2003	4	0	0	0
5/8/2003	1	0	0	0
5/7/2003	0	0	0	0
5/6/2003	1	0	0	0
5/5/2003	0	0	0	0
5/4/2003	1	0	0	0
5/3/2003	1	0	0	0
5/2/2003	0	0	0	0
5/1/2003	1	0	0	0
4/30/2003	1	0	0	0
4/29/2003	0	0	0	0
4/28/2003	1	0	0	0
4/27/2003	0	0	0	0
4/26/2003	0	0	0	0
4/25/2003	2	0	0	0
4/24/2003	0	0	0	0
4/23/2003	0	0	0	0
4/22/2003	4	0	0	0
4/21/2003	0	0	0	0
4/20/2003	0	0	0	0
4/19/2003	1	0	0	0
4/18/2003	0	0	0	0
4/17/2003	1	0	0	0
4/16/2003	0	0	0	0
4/15/2003	0	0	0	0
4/14/2003	6	0	0	0
4/13/2003	1	0	0	0
4/12/2003	2	0	0	0
4/11/2003	1	0	0	0
4/10/2003	2	0	0	0
4/9/2003	0	0	0	0
4/8/2003	6	0	0	0
4/7/2003	8	0	0	0
4/6/2003	5	0	0	0
4/5/2003	2	0	0	0
4/4/2003	11	0	0	0
4/3/2003	11	0	0	0
4/2/2003	10	0	0	0
4/1/2003	4	0	0	0
3/31/2003	2	0	0	0
3/30/2003	5	0	0	0
3/29/2003	7	0	0	0
3/28/2003	3	0	0	0
3/27/2003	1	0	0	0
3/26/2003	2	0	0	0
3/25/2003	7	0	0	0
3/24/2003	6	0	0	0
3/23/2003	33	0	0	8
3/22/2003	11	0	0	0
3/21/2003	10	0	0	0
3/20/2003	4	0	0	0