

**INNOVATION IN THE CRUCIBLE OF WAR:**

**THE UNITED STATES COUNTERINSURGENCY CAMPAIGN IN**

**IRAQ, 2005-2007**

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## ABSTRACT

This dissertation critically examines the conduct of counterinsurgency operations in Iraq by a series of U.S. Army and Marine Corps units operating in Anbar and Ninewa provinces in Iraq from late 2005 through early 2007. The popular narrative of the American counterinsurgency campaign in Iraq is that military success followed the ‘surge’ of American troops in the spring 2007 and the appointment of General David Petraeus as the ground commander committed to counterinsurgency operations. While both factors were undoubtedly important in America’s counterinsurgency campaign in Iraq, the research in this book demonstrates that this narrative is somewhat misleading. I argue that by the time Petraeus took over command to “rescue” the counterinsurgency campaign in early 2007, American military units had already built successful counterinsurgency competencies and were experiencing battlefield success – most dramatically in the battle for Ramadi in the fall of 2006. The process of successful adaptation in the field began in late 2005 in Anbar and Ninewa provinces and did so with little direction from higher military and civilian authorities. I argue that that the collective momentum of tactical adaptation within the units studied here can be characterized as organizational innovation. I define innovation as the widespread development of new organizational capacities not initially present in these units when they arrived in Iraq and which had only tangential grounding in previous military doctrine. The new capacities built iteratively over time changed the way these units fought the counterinsurgency. This dissertation’s case studies detail a process of wartime innovation that featured a series of organic, bottom-up tactics and techniques developed within the battalions and brigades fighting the insurgents.

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## CHAPTER I

### INTRODUCTION

The United States stormed into Iraq in March 2003 boasting the world's best trained and equipped military. Using a host of technologies and new weapons that had been integrated into its force structure over the preceding decade, the invasion force made quick work of its adversary in a march on Baghdad that took only three weeks.<sup>1</sup> The invasion unveiled a 'Shock and Awe'<sup>2</sup> campaign of rapid dominance packaged under the ostensibly new paradigm of 'effects based operations.'<sup>3</sup> The invasion framed the impressive application of combined arms conventional military power that routed Saddam's armies and quickly delivered American forces into downtown Baghdad. The invasion force applied a new generation of sensors, standoff munitions and digitized command and control systems to great effect during the invasion against a marginally competent enemy.<sup>4</sup> The invasion seemed to confirm the primacy of American global military power.

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<sup>1</sup> As detailed in Michael R. Gordon and Bernard E. Trainor, *Cobra II: The Inside Story of the Invasion and Occupation of Iraq* (New York: Pantheon Books, 2006).

<sup>2</sup> First introduced into the lexicon of public discourse by Harlan K. Ullman and James P. Wade, *Shock and Awe: Achieving Rapid Dominance* (Washington: National Defense University Press, 1996). Then Chairman of the Joint Chiefs of Staff General Richard Myers told reporters in March 2003: 'The best way to do that [end the conflict] would be to have such a shock on the system that the Iraqi regime would have to assume early on the end was inevitable.' As quoted in Eric Schmitt and Elisabeth Buhmiller, 'Threats and Responses; Attack Strategy; Top General Sees Plan to Shock Iraq Into Surrendering', *New York Times*, March 5, 2005.

<sup>3</sup> Paul Davis, *Effects Based Operations: A Grand Challenge for the Analytical Community* (Santa Monica: Rand, 2001), 7. He defines the term as: '...operations conceived and planned in a systems framework that considers the full range of direct, indirect and cascading effects – which may, with different degrees of probability – be achieved with the application of military, diplomatic psychological, and economic instruments.'

<sup>4</sup> The role of advanced 'transformational' capabilities in the invasion is interestingly addressed by Steve Biddle, 'Speed Kills: Reevaluating the Role of Speed, Precision, and Situation Awareness in the Fall of Saddam', *Journal of Strategic Studies* 30, No. 1 (February 2007), pp. 3-46. Biddle argues that

As is widely known, however, the actual invasion of Iraq only represented the opening phase of the war. Unfolding events gradually drained away the initial sense of optimism over the removal of Saddam and the defeat of his army as the security environment inside Iraq deteriorated over the summer of 2003. By the winter of 2003-4 it became clear that, while Saddam's army had been defeated, armed resistance to the invading and occupying force had only just begun. While the United States political leadership tried to discount and marginalize the initial appearance of Iraqi resistance groups in the summer and fall of 2003,<sup>5</sup> the American military gradually became aware it was immersed in a full-blown insurgency – a kind of warfare for which it had failed to prepare.<sup>6</sup> The American military slowly came to the inescapable conclusion that the methods and equipment for defeating Saddam's Army wouldn't work against increasingly well organized and adaptive insurgent groups. The United States military either had to adjust or face defeat.

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the role of these advanced capabilities has been overstated and that the incompetence of the Iraqis played a significant role in the speed of the American march into Baghdad.

<sup>5</sup> As an example, in June 2003 Secretary of Defense Donald Rumsfeld referred to the Iraqi resistance as 'pockets of dead ender' and Deputy Secretary of Defense Paul Wolfowitz referred to them as 'the last remnants of a dying cause.' As quoted in *USA Today*, 'Rumsfeld Blames Iraq Problems on 'Pockets of Dead Enders'', *Associated Press*, filed June 18, 2003. Rumsfeld used this formulation again in August 25, 2003, when he stated in a speech to the Veterans of Foreign Wars that 'the dead enders are still with us'. Transcript at <http://www.defenselink.mil/speeches/speech.aspx?speechid=513>, accessed November 5, 2007. Bush Administration officials refused to describe the resistance as an 'insurgency' until November 2003, when the Central Command's Gen. John Abizaid started using the term to describe the Iraqi resistance.

<sup>6</sup> Early developments in the Iraq insurgency are summarized in Anthony Cordesman, 'The Developing Iraqi Insurgency: Status at the end of 2004', Center for Strategic and International Studies, Washington DC, December 22, 2004; Ahmed S. Hashim, *Insurgency and Counter-Insurgency in Iraq* (Ithaca: Cornell University Press, 2006); Ahmed S. Hashim, 'Iraq's Chaos: Why the Insurgency Won't Go Away', *Boston Review* (October/November 2004); Steven Metz, 'Insurgency and Counterinsurgency in Iraq', *Washington Quarterly* 27 (Winter 2004), pp. 25-36; James A. Russell, 'Strategic Implications of the Iraq Insurgency', *Middle East Review of International Affairs* 8 (June 2004), pp. 48-55; Michael Knights and Jeffrey White, 'Iraqi Resistance Proves Resilient', *Jane's Intelligence Review* (November 2003). The lack of preparation for the insurgency is also referenced in Lt. Gen David H. Petraeus, 'Learning Counterinsurgency: Observations from Soldiering in Iraq', *Military Review* 4 (January-February 2006), pp. 2-12; David Hendrickson and Robert W. Tucker, *Revisions in Need of Revising: What Went Wrong in the Iraq War*, Strategic Studies Institute, U.S. Army War College, Carlisle, PA, December 2005; Alistair Finlan, 'Trapped in the Dead Ground: U.S. Counterinsurgency Strategy in Iraq', *Small Wars & Insurgencies* 16, No. 1 (March 2005), pp. 1-21.

This dissertation tells part of the story of how American military organizations searched for solutions to the tactical problems presented by the insurgency inside Iraq in 2005 and 2006. It seeks to answer two key questions: how did the United States military adapt to the growth of the insurgency; and what were the sources of tactical adaptation and change in combating the enemy? To answer these questions, this dissertation examines tactical operations by a number of American units fighting in Anbar and Ninewa provinces during the period from 2005-2006. The dissertation argues that these units successfully innovated in the war time environment as a result of processes within the units – not as a result of top-down direction from higher civilian or military leadership.

The research for this dissertation dispels several popular narratives of America's counterinsurgency campaign in Iraq. The first of these is that military success magically materialized after President Bush sent an additional 20,000 troops to Iraq (the so-called 'surge') in the spring of 2007. The second is that military success came after General David Petraeus decisively reoriented American battlefield tactics towards counterinsurgency, or COIN, once he took over overall command of U.S. forces in Iraq during the same period. The third is that improved battlefield performance directly followed the promulgation of new counterinsurgency doctrine in December of 2006.<sup>7</sup> None of these narratives is fully borne out in the research for this dissertation. I find that by the time President Bush announced the surge and Petraeus was named to 'rescue' the COIN campaign in the spring of 2007, American military units had already built successful COIN competencies and were experiencing battlefield successes – most dramatically in the battle for Ramadi in the fall of 2006

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<sup>7</sup> All summarized in Thomas Ricks, *The Gamble: General David Petraeus and the American Military Adventure in Iraq, 2006-2008* (New York: The Penguin Press, 2009)

and in COIN operations conducted in Mosul during 2005 and 2006. The case studies examined here chronicle a process of successful adaptation and innovation in the field that actually began in late 2005 with little direction from higher military and civilian authorities. It is clear that the commitment of additional troops in 2007 proved instrumental in improving the security situation particularly in Baghdad just as it is clear that the appointment of Petraeus – a leader committed to COIN – represented an important signal of America’s commitment to the new methods of fighting the insurgents. While the promulgation of new joint COIN doctrine in December 2006 may have been important to better train and prepare incoming units, it does not explain the improved battlefield performance of units in the 18 preceding months. It is thus mistaken to assert that the new doctrine suddenly and systematically enhanced battlefield performance. This dissertation does not argue that these three factors did not contribute to American military success, it is only to emphasize that ‘success’ flowing from these factors must be seen in the context of momentum that had been built in the field over the previous 18 months.

Prior to the appointment of General Petraeus as military commander in February 2007, American military commanders in Iraq, Tampa, and Washington had not systematically re-examined nation’s approach to fighting the war. Within Multi-National Forces Iraq (MNF-I), there was debate in late 2006 over the desirability of increasing the number of America’s troops on the ground but little discussion over the overall approach.<sup>8</sup> In early 2006, however, a team headed by General Petraeus

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<sup>8</sup> Thomas Ricks, ‘The Dissenter Who Changed the War’, *Washington Post*, February 8, 2009, p. A1. Ricks documents a disagreement between the two senior MNF-I military leaders, General George Casey and General Ray Odierno over this point. Odierno advocated an increase in troops, while Casey opposed it, according to Ricks. The article is an extract from Thomas Ricks, *The Gamble*.

working at Fort Leavenworth feverishly prepared a new counterinsurgency manual – an effort that in itself implicitly recognized the need for a new institutional approach to the war.<sup>9</sup> That these efforts were disconnected is perhaps unsurprising given the widespread confusion surrounding American strategic objectives in Iraq and the accompanying dysfunction at virtually all levels of the interagency process in Washington in the aftermath of the invasion. In Iraq, it is clear that the improved battlefield performance of American troops during 2005-2006 occurred in the absence of, and not because of, competent top-down direction from the highest reaches of the civilian and military hierarchy. As recounted in several well-known summaries of the period, the White House, State Department, Defense Department, Joint Staff, the Central Command and MNF-I appeared incapable of jointly formulating and directing the execution of a unified strategic plan in Iraq that linked the application of military force to broadly defined political objectives.<sup>10</sup>

During congressional testimony in October 2005, then Secretary of State Condoleezza Rice described the U.S. military strategy in Iraq as ‘clear, hold, and build.’ Whatever these terms meant, they had never been communicated in any operational form to the military prosecuting the counterinsurgency, and senior military commanders had no idea what she was talking about.<sup>11</sup> Rice’s approach seemed to draw upon an article in the journal *Foreign Affairs* by Andrew Krepinevich in which he called for an ‘ink spot’ strategy which recommended that U.S. military forces stop focusing on killing insurgents and instead shift to providing local security for the Iraqi population.<sup>12</sup> On

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<sup>9</sup> As detailed in Ricks, *The Gamble*.

<sup>10</sup> An inescapable conclusion that emerges from Bob Woodward, *The War Within: A Secret White House History 2006-2008* (New York: Simon & Schuster, 2008); Also see Ricks, *The Gamble*.

<sup>11</sup> Woodward, *The War Within*, pp. 31-33.

<sup>12</sup> Andrew Krepinevich, Jr., ‘How to Win in Iraq’, *Foreign Affairs* 84, No. 5 (September/October 2005), pp. 87-104, <http://www.foreignaffairs.org/20050901faessay84508/andrew-f-krepinevich-jr/how-to-win-in-iraq.html>, accessed November 1, 2005. Another account suggests that Rice used the term in

the military side, ideas had surfaced independently in the summer of 2005 that units should structure their operations along a number of simultaneous Logical Lines of Operations, or LOOs, to apply their capabilities across the full spectrum of the combat environment.<sup>13</sup> President Bush echoed Rice's words in October 2005 without input from those prosecuting the war. In November 2005, The White House released a *National Strategy for Victory in Iraq* that repeated the 'clear, hold, and build' approach, though there is no evidence that this document provided the basis for a military strategy that was communicated to forces fighting the insurgents.<sup>14</sup> If anything, the White House gave conflicting messages on military strategy throughout the period. In a speech at the Naval Academy on November 30, 2005, President Bush described the U.S. approach somewhat differently from clear, hold and build, telling cheering midshipmen that: 'We will continue to shift from providing security and conducting operations against the enemy nationwide to conducting more specialized operations targeted at the most dangerous terrorists. We will increasingly move out of Iraqi cities, reduce the number of bases from which we operate, and conduct fewer patrols and convoys.'<sup>15</sup> In December 2005, Bush repeated the mantra coming from

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reference to the 3<sup>rd</sup> Armored Cavalry Regiment's COIN campaign in Tal Afar in 2005-2005 commanded by Colonel H.R. McMaster. See Ricks, *The Gamble*, p. 51.

<sup>13</sup> Major General Peter W. Chiarelli, U.S. Army, and Major Patrick Michaelis, U.S. Army, 'Winning the Peace: The Requirements for Full Spectrum Operations', *Military Review* (July/August 2005), pp. 4-17. In this piece Chiarelli and Michaelis describe the LOOs used by the 1<sup>st</sup> Cavalry Division in operations in Baghdad in 2004. These LOOs eventually would form the basis for most unit operations during the period of this study: combat operations, train and employ security forces, essential services, promote governance, and economic pluralism (p. 7). For other early articles suggesting a change in military tactics, see Elliott Cohen, Conrad Crane, Jan Horvath, and John Nagl, 'Principles, Imperatives, and Paradoxes of Counterinsurgency', *Military Review* 86, No. 2 (March/April 2006), pp. 49-53; David J. Kilcullen, 'Twenty-Eight Articles: Fundamentals of Company-Level Counterinsurgency', *Military Review* 86, No. 3 (May/June 2006), pp. 103-108.

<sup>14</sup> Accessed online at [http://www.whitehouse.gov/infocus/iraq/iraq\\_national\\_strategy\\_20051130.pdf](http://www.whitehouse.gov/infocus/iraq/iraq_national_strategy_20051130.pdf)., accessed November 5, 2006.

<sup>15</sup> As quoted in David E. Sanger, Michael R. Gordon and John F. Burns, 'Chaos Overran Iraq Plan in '06, Bush Team Says', *New York Times*, January 2, 2007.

MNF-I Commander General George Casey, telling an audience at the Woodrow Wilson Center in Washington DC: ‘As Iraqis stand up, we will stand down.’<sup>16</sup>

While political leaders appeared confused over military strategy, senior American military commanders with responsibility for Iraq operations articulated a relatively consistent set of objectives. MNF-I commander General George Casey and the Central Command’s General John Abizaid pursued an approach throughout 2005 and 2006 that sought to turn over responsibility for local security to the Iraqis as quickly as possible. Casey clearly recognized the importance of COIN competences. His establishment of the COIN Academy in Taji, Iraq in late 2005 demonstrated his awareness that incoming units needed a primer on COIN. The academy conducted 5-day courses to familiarize American commanders with the tenets of COIN.<sup>17</sup> Once the Iraqis became capable of independent operations, both Abizaid and Casey sought to withdraw U.S. forces to several major operating bases and then withdraw them from the country altogether – as quickly as possible. Neither Casey nor Abizaid ever promulgated a nationwide campaign plan to counter the emerging insurgency as it gathered strength and momentum in late 2003 and 2004.<sup>18</sup> Many officers in the field felt a disconnect between Casey’s plan and the realities of standing up a new Iraqi Security Force, or ISF, in places like Anbar province. Some within the MNF-W staff, felt pressure to generate indicators showing unrealistic progress in the development of the Iraqi Security Forces so that Casey could realize his objective of extricating the

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<sup>16</sup> Text of speech on December 14, 2005, <http://www.whitehouse.gov/news/releases/2005/12/20051214-1.html>, accessed November 1, 2006.

<sup>17</sup> Details in Thomas Ricks, ‘U.S. Counterinsurgency Academy Giving Officers a New Mindset’, *Washington Post*, February 21, 2006, p. A10. The academy played to mixed reviews; with many officers reluctant attend the academy due to the time away from their units. Others interviewed in this study found the course superficial.

<sup>18</sup> Carter Malkasian, ‘Counterinsurgency in Iraq’, in *Counterinsurgency in Modern Warfare*, Carter Malkasian and Daniel Marston, eds. (Oxford, England: Osprey Publishing, 2008) pp. 241-259.



U.S. from Iraq as quickly as possible.<sup>19</sup> Casey's June 2006 campaign plan for the war reflected little if any of the approach articulated by Rice and President Bush. A PowerPoint briefing slide describing Casey's campaign dated June 12, 2006 did not refer to local security, the insurgents, or the need for the U.S. to adopt a new approach to COIN.<sup>20</sup> During the summer of 2006, Casey unsuccessfully pushed a plan in the interagency in Washington to draw down U.S. forces in Iraq from 14 brigades to five or six by the end of 2007.<sup>21</sup> Growing increasingly skeptical of Casey's approach, the White House formed an ad-hoc group to review U.S. strategy in the fall of 2006 that provided three options for a revised Iraq strategy. In January 2007, President Bush chose the group's option to increase troop strength.<sup>22</sup> In the spring of 2007 as General Petraeus took over command the focus on building up the ISF had not changed substantially. In a briefing prepared for Petraeus by MNF-I number 2 General Ray Odierno dated February 8, 2007, the emphasis remained on setting the conditions '...for the ISF to emerge as the dominant security force...'<sup>23</sup>

The profound disconnect between battlefield commanders and the confused national level leadership further reinforces the argument in this dissertation that battlefield success flowed from military innovation that occurred in field. All the cases covered in this work show that the search for tactical solutions proceeded for the most part without interference from higher headquarters at MNF-I or any other headquarters

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<sup>19</sup> Author interview with USMC Colonel (ret) Tom Greenwood, December 30, 2008, who worked in Multi-National Force West staff in Anbar during the period. Staff officers in the field were not the only skeptics. According to accounts provided in Bob Woodward's *The War Within*, the estimates produced by MNF-I showing dramatic increases in the numbers of ISF were widely regarded as a joke in the interagency – most particularly by Secretary of State Colin Powell (p. 22).

<sup>20</sup> Woodward, *The War Within*, p. 11.

<sup>21</sup> 'Casey Iraq Plan Just One Option: White House', *Reuters*, June 26, 2006.

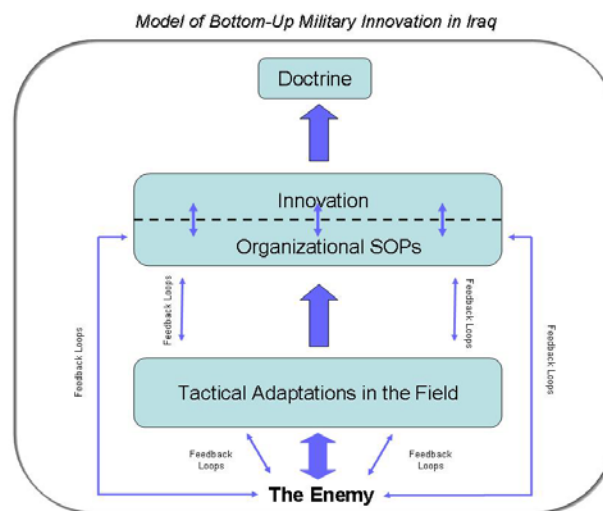
<sup>22</sup> Robin Wright and Peter Baker, 'Iraq Strategy Focusing on Three Main Options', *Washington Post*, December 9, 2006, p. A1.

<sup>23</sup> *MNC-I In Brief GEN Petraeus*, 8 February 2007, PowerPoint Briefing posted on Washington Post website at [http://www.washingtonpost.com/wp-srv/nation/thegamble/documents/Odierno\\_Briefing\\_Petraeus\\_February\\_2007.pdf](http://www.washingtonpost.com/wp-srv/nation/thegamble/documents/Odierno_Briefing_Petraeus_February_2007.pdf), accessed June 2, 2008.

elements that might have imposed solutions that dictated battlefield tactics, such as the Central Command in Tampa, FL or the Joint Staff in Washington, DC. Moreover, there is no evidence that the political leadership in the Defense Department or other executive branch agencies sought to impose solutions at the tactical level – although General Casey clearly faced political pressure from Secretary Rumsfeld to avoid ‘Americanizing’ the war. Despite the pressure on Casey, however, no ‘school solution’ materialized a la Vietnam that allowed systemic biases at senior levels to impose themselves on commanders leading engaged forces. Ironically, the lack of a school solution can be explained partly by the lack of a doctrinally approved joint approach to fighting an insurgency before December 2006, when the Army and Marine Corps jointly released a draft of *FM 3-24 Counterinsurgency*. Unconstrained by doctrine, and impelled by desperation to find anything that worked, brigade commanders and their subordinates received wide flexibility to structure their operations to fight the insurgency. As a result, commanders and their supporting organizations freely cycled through a series of actions that gradually helped reduce the effectiveness of insurgent operations directed at U.S. forces.

The dissertation’s case studies chronicle an iterative process of organically-driven change that unfolded over time in a distinctive progression. The process began in what could be described as tactical, ad hoc adaptation in which individual company and battalion commanders reacted to local circumstance by cycling through different ways of employing their units and equipment on the battlefield. Some of these adaptations succeeded and others failed. As leaders identified successful adaptations, the process gathered momentum and new organizational standard operating procedures emerged that became more widely adopted throughout units fighting the insurgents. Organizational innovation then manifested itself through the emergence of

a series of new standard operating procedures that collectively resulted in fundamental changes to the ways in which units fought the insurgents. As these innovations produced success on the battlefield, they fed into more formalized military doctrine.<sup>24</sup> While the execution of the innovation process happened in the field, it is clear that the process involved many actors throughout the military chain of command. Individuals, units, and headquarters elements stretching from Al Anbar to Baghdad, Fort Leavenworth, the Pentagon, and beyond searched for solutions to the problems being encountered on the battlefields of Iraq.



**Figure 1-1: Hypothesized Dynamic and Interactive Process of Bottom-Up Military Innovation in Iraq**

The argument in this dissertation is that this process was largely led from the field. The hypothesized series of relationships between and among the enemy, tactical

<sup>24</sup> Distinctions between these processes are drawn from a combination of works and will be further developed in Chapter II. See Michael D. Doubler, *Closing with the Enemy: How GIs Fought the War in Europe, 1944-1945* (Lawrence, Kansas: University of Kansas Press, 1994), 8; Stephen Peter Rosen, *Winning the Next War: Innovation and the Modern Military* (Ithaca: Cornell University Press, 1991), pp. 1-53; Barry Posen, *Sources of Military Doctrine: France Britain, and Germany Between the Wars* (Ithaca: Cornell University Press, 1984), pp. 34-80; Peter Dombrowski and Eugene Gholz, *Buying Military Transformation: Technological Innovation and the Defense Industry* (New York: Columbia University Press, 2006).

adaptation, organizational innovation and military doctrine on the battlefields in Iraq is illustrated above in Figure 1-1.

### **Battlefield Innovation and Counterinsurgency American Style**

In this dissertation, I argue that that the collective momentum of tactical adaptation documented in a series of case studies studied here can be characterized as organizational innovation. I define innovation as the development of new organizational capacities not initially present in these units when they arrived in Iraq and which had only tangential grounding in previous doctrine. The new capacities built iteratively over time changed the way these units conducted COIN operations. This dissertation's case studies detail a process of wartime innovation that featured a series of organic, bottom-up procedures developed within the battalions and brigades fighting the insurgents. The innovation produced new organizational capacities that shaped successful military operations across the spectrum of kinetic and non-kinetic operations that reduced the effectiveness of insurgent operations. Wartime innovation flowed from agile, flexible, decentralized organizations that featured flattened and informal hierarchical structures. Throughout their deployments, each of the units covered in the case studies demonstrated significant learning capacities that proved central to the innovation process. The case study narratives built on primary source data present a picture of military organizations acting in ways that are contrary to the popularly accepted view that military organizations function as bureaucratically inclined, hierarchically structured organizations slow to respond to changes in the external environment. In the cases studied here, the exigencies of wartime produced much different organizational behavior.

The American wartime experience chronicled in this dissertation are historically significant given America's previous and disastrous experiences in fighting irregular war in the post World War II era. At first blush, the comparisons between Vietnam and Iraq seem attractive. The American military fought both wars in the context of strategic confusion, in which the relationships between military operations and strategic objectives appeared unclear. As shown by the case studies in this dissertation, however, the American military experience in Iraq bears little relationship to the historical experiences of the Vietnam War – at least insofar as the adaptive and innovative capacities of America's military institutions are concerned. Moreover, unlike Vietnam, the Army and Marine Corps *did* institutionally embrace COIN competencies and eventually produced doctrine as evidence of that institutional commitment. Evidence presented here demonstrates that America's ground forces in Iraq evolved into flexible, adaptive organizations taking advantage of 21<sup>st</sup> century human and technological capacities. The American ground force in Iraq proved to be a technologically advanced, complex organization with a highly educated and trained work force that embraced environmental complexity and searched for optimal solutions to operational problems. The organizations covered in this study did not satisfice – or take the path of least resistance – in their search for solutions to the tactical problems posed by the insurgency in Iraq.

I argue that by 2005 various American brigade and battalion commanders began to independently change their approach on the battlefield, embracing requirements for a COIN campaign tailored to the Iraq environment. That change was required is not in question – many observers have cogently chronicled the American ground force's

initial stumbling attempts to adapt to the insurgency in 2003 and 2004.<sup>25</sup> The units covered in this dissertation built new innovative core competencies within their organizations, drawing upon such factors as: (1) digitally-based communications and data systems that seamlessly passed information on a continuous basis between units preparing for their deployments; (2) imaginative battlefield leadership that delegated authority, welcomed the concept of distributed operations, encouraged the free-flow of information throughout the organizational hierarchy, and freely changed their organizational structures in the field in order to apply their capacities across the spectrum of kinetic and non-kinetic operations; (3) the use of advanced technologies and analytical methods to combat insurgent networks; and, (4) a continuous education process in which units continuously sought information and expertise about their operating environment from many different sources to aid in their tactical decision-making processes and improve organizational performance.

The emergence of American COIN competencies in the field adds an interesting twist to another of the popular narratives of the period. Prior to the Iraq war, the Bush Administration initiated a process called ‘transformation’ to reform the Defense Department’s sprawling military and civilian bureaucracies. This process overwhelmingly featured top-down direction from the Defense Department’s civilian leadership to executing organizational elements. Then Secretary of Defense Donald Rumsfeld’s now well-known micromanagement of the Central Command’s war plan reflected an attitude that civilian management could and should wrench hidebound

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<sup>25</sup> Trenchant and searing critique of the early U.S. approach to COIN in Iraq is contained in Brigadier Nigel Aylwin-Foster, ‘Changing the Army for Counterinsurgency Operations’, *Military Review* (November-December 2005), pp. 2-15. Also see Warren Chin, ‘Examining the Application of British Counterinsurgency Doctrine by the American Army in Iraq’, *Small Wars & Insurgencies* 18, No. 1, (March 2007) pp. 1-26. Chin argues in this piece that the reorientation of the U.S. approach to COIN in Iraq started in 2004 and drew heavily upon British expertise at MNF-I; Also see Chin’s treatment of the British stumbles in southern Iraq in ‘Why Did It All Go Wrong? Reassessing British Counterinsurgency in Iraq’, *Strategic Studies Quarterly* 2, No. 4, (Winter 2008), pp. 119-135.

military bureaucracies around to a new way of fighting. Rumsfeld's new way of war, however, had little to do with counterinsurgency and activities he derisively referred to as 'nation-building.' Rumsfeld insisted on fewer troops than initially wanted by military commanders and sought to make the invasion an advertisement for a new American way of war featuring precision guided munitions, speed of movement, and effects-based operations.<sup>26</sup> The irony of the argument in this dissertation is that the United States military indeed 'transformed' itself during the Iraq war though not in the ways envisioned by Rumsfeld. The most important part of the transformation process occurred not in the invasion but in the counterinsurgency campaign afterwards, and not through top-down direction but through ground-up, organic processes in which American military institutions eventually embraced and mastered the very 'nation building' skills that Rumsfeld sought to avoid in the Iraq campaign.

### **Military Doctrine and Organizational Innovation**

The process of bottom-up military innovation described here diverges from generally accepted wisdom on the role that doctrine plays in structuring the battlefield operations of military forces. The argument presented here is that formalized doctrine played only a tangential role in structuring the conduct of the counterinsurgency campaign in Iraq during the period covered by this analysis (2005 through early 2007). The Department of Defense defines doctrine as: 'Fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgment in application.'<sup>27</sup> To be sure, definitions of this concept have evolved throughout the 20<sup>th</sup> century for American

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<sup>26</sup> As chronicled by Ricks, *Fiasco*; Gordon and Trainor, *Cobra II*, and Bob Woodard, *Plan of Attack* (New York: Simon & Schuster, 2004).

<sup>27</sup> US Department of Defense, Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms*, April 12, 2001 (as Amended through 17 October 2007), p. 169.

military institutions. The current definition followed a healthy debate over the degree to which doctrine represented concrete rules and techniques to be applied on the battlefield versus a view that doctrine represented only a guide for action with significant leeway delegated to unit commanders in structuring combat operations while in contact with the enemy.<sup>28</sup> Some argue that doctrine can take various forms. In his analysis of relationships between the formation of doctrine and the organizational experiences in the Marine Corps in the early 20<sup>th</sup> century, Keith Bickel pointed to the existence of ‘formal versus informal’ doctrine. Formal doctrine represented formalized institutional knowledge promulgated in doctrinal manuals used for training forces. Informal doctrine, by contrast, exists in parallel to formalized doctrine the form of professional journal articles, personal letters recounting battlefield lessons and experiences, and field orders that come to represent a body of knowledge that, Bickel argues, finds its way into formalized form.<sup>29</sup> It is clear that in Iraq units drew extensively on an informal, digitally based information in preparing for their deployments that did not constitute formal, institutionally-blessed products.

Scholars typically examine and analyze changes in military doctrine, viewing these changes as an important indicator in assessing the degree of innovation in military organizations.<sup>30</sup> This is understandable. Changes in military doctrine are easy to identify since, first and foremost, these changes must be written down. Doctrine’s explicit character does not, of course, guarantee its institutional effect. Not all doctrinal changes succeed in changing real-world military behavior. Those that do manifest themselves as a host of observables that provide evidence of a new outlook

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<sup>28</sup> Comprehensive treatment of the evolving definitions in the United States military is covered by Keith Bickel, *Mars Learning: The Marine Corps Development of Small Wars Doctrine, 1915-1940* (Boulder: Westview Press, 2001), pp. 1-26.

<sup>29</sup> *Ibid.*, pp. 4-7.

<sup>30</sup> An approach taken in Posen, *The Sources of Military Doctrine*.



and new practices in the areas of training, unit organization, and tables of equipment – all of which can be observed and analyzed directly.

In the case of the United States and most other advanced militaries, 20<sup>th</sup> century military doctrine demonstrates a reasonably logical progression of an approach to warfare that has sought to apply firepower against the enemy in successively more complicated ways at successively greater distances.<sup>31</sup> The U.S. Army's Airland Battle doctrine, introduced in 1986, reflects this progression.<sup>32</sup> Indeed, the application of combined arms on 20<sup>th</sup> century battlefields reveals an iterative and evolutionary process as successful modern militaries slowly mastered the capabilities offered to them by the integration of advances in indirect fire and precision-guided munitions, communications, intelligence, and the ability of units to effectively fire and maneuver in coordination with other combat arms.<sup>33</sup>

In Iraq, however, analysis of Army and Marine Corps doctrine as it existed before 2003 provides little indication of how these organizations would fight an insurgency. Indeed, pre-war military doctrine emphasizing traditional conventional military operations that focused on fire and maneuver proved to be of little use in fighting the insurgents in Iraq. Over the period studied in this dissertation, battlefield commanders cast aside established pre-war doctrine as they cycled through a process of tactical adaptation that produced organizational innovation.

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<sup>31</sup> Daniel J. Moran, 'A Theory of Strike Warfare', unpublished paper presented at the Monterey Strategy Seminar, Naval Postgraduate School, Monterey, CA, September 21, 2002. Cited with author's permission.

<sup>32</sup> For some examples of writing on the Army's doctrine, see John L. Romjue, 'The Evolution of the Airland Battle Concept', *Air University Review* (May/June 1984), <http://www.airpower.maxwell.af.mil/airchronicles/aureview/1984/may-jun/romjue.html>, accessed September 8, 2007; LTC John Doerful, 'Operational Art of the Airland Battle', *Field Artillery Journal* (September/October 1982).

<sup>33</sup> Steve Biddle, *Military Power: Explaining Victory and Defeat in Modern Battle* (Princeton: Princeton University Press, 2004).

I argue that in Iraq, the process of ‘bottom-up’ battlefield tactical adaptation over time produced fundamental changes to the way American military organizations applied their capabilities on the battlefield. This was not a top-down process featuring the articulation of a new military doctrine, whether created by forceful civilian intervention from above, or by dynamic senior military leadership at the headquarters level in the United States. Instead, I argue that the iterative evolution of battlefield tactics in Iraq occurred as a result of organic change almost literally from the ground up; change that eventually ‘pulled’ tactical practice, institutional innovation and (finally) authoritative doctrinal pronouncements along behind it. Instead of being hampered by rigid bureaucratic organizations bound up in red tape,<sup>34</sup> wartime experiences in Iraq show that networked, informal, and cross-functional organizations sprang up over the course of military operations, which fused disparate organizational elements, both military and civilian, into a synergistic whole applied to great effect against the enemy. In many respects, the organizations responsible for combating the insurgency proved to be very un-bureaucratic in their behavior. These organizations produced the tactical flexibility *and* innovation that fundamentally changed the way that American forces fought the insurgents. These changes, which encompassed a wide array of kinetic and non-kinetic activities, dramatically reduced the military effectiveness of insurgent operations in the cases examined in this work.<sup>35</sup>

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<sup>34</sup> Patrick G. Scott and Sanjay K. Pandey, ‘The Influence of Red Tape on Bureaucratic Behavior: An Experimental Simulation’, *Journal of Policy Analysis and Management* 19, No. 4 (Autumn 2000), pp. 615-633. The authors offer the following definition on page 616: ‘Red tape is commonly invoked to describe organizational procedures that are viewed as wasteful, unnecessary, self-serving, and vexing; in fact, it connotes the very worst of bureaucracy.’ Also see: Barry Bozeman, ‘A Theory of Government ‘Red Tape’’, *Journal of Public Administration Research and Theory: J Part 3*, No. 3 (July 1993), pp. 272-303; Herbert Kaufman, *Red Tape: Its Origins, Uses and Abuses* (Washington D.C.; Brookings, 1977).

<sup>35</sup> Thomas Ricks and Karen De Young, ‘Al Qaeda Reported Crippled’, *Washington Post*, October 15, 2007, p. A1. The article notes: ‘There is widespread agreement that AQI has suffered major blows over the past three months. Among the indicators cited is a sharp drop in suicide bombings, the group’s signature attack, from more than 60 in January to around 30 a month since July. Captures and

## Innovation in Military Organizations

The hypothesized process of bottom up military innovation in Iraq suggests that that doctrine was not a critical factor (or dependent variable) driving the innovation process. I will argue in Chapter II that the literature on military innovation does not adequately explain the process of military innovation in Iraq.<sup>36</sup> I argue that the distinctions and treatments in the literature between tactical adaptation, institutional and organizational innovation, and military doctrine need to be recast to acknowledge a more complex series of relationships between the concepts. The literature in security studies is partially responsible for this intellectual rigidity – treating innovation and tactical adaptation as different though related concepts. Innovation is generally

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interrogations of AQI leaders over the summer had what a senior military intelligence official called a ‘cascade effect’, leading to other killings and captures. The flow of foreign fighters through Syria into Iraq has also diminished, although officials are unsure of the reason and are concerned that the broader Al Qaeda network may be diverting new recruits to Afghanistan and elsewhere.’ Much of the press reporting starting in August and September 2007 mirrors this assessment.

<sup>36</sup> Stephen Peter Rosen, *Winning the Next War*; Barry Posen, *The Sources of Military Doctrine*; Elizabeth Kier, *Imagining War: French and British Military Doctrine Between the Wars* (Princeton: Princeton University Press, 1999); Deborah Avant, *Political Institutions and Military Change: Lessons from Peripheral Wars* (Ithaca: Cornell University Press, 1994); Colin Gray, ‘Irregular Enemies and the Essence of Strategy: Can the American Way of War Adapt?’ Strategic Studies Institute, US Army War College, Carlisle, PA, March 2006; Kimberly Martin Zisk, *Engaging the Enemy: Organization Theory and Soviet Military Innovation, 1955-1991* (Princeton: Princeton University Press 1993); Theo Farrell and Terry Teriff, eds., *The Sources of Military Change: Culture, Politics and Technology* (Boulder, Colorado: Lynne Rienner 2002); Theo Farrell, ‘Figuring Out Fighting Organizations: The New Organizational Analysis in Strategic Studies’, *Journal of Strategic Studies* 19 (1996), pp. 122-135; Theo Farrell, ‘Culture and Military Power’, *Review of International Studies* 24 (1998), pp. 407-416; Jack L. Snyder, *The Ideology of the Offensive: Military Decision Making in the Disasters of 1914* (Ithaca: Cornell University Press, 1984); Jeffrey W. Legro, ‘Culture and Cooperation in the International Cooperation Two-Step’, *American Political Science Review* 90 (1996), pp.118-137; Allen R. Millett, Williamson Murray, and Kenneth H. Watman, ‘The Effectiveness of Military Organizations’, *International Security* 11 (1986), pp. 37-71; Colin S. Gray, ‘National Style in Strategy: The American Example’, *International Security* 6 (1981), pp. 21-47; Dan Reiter and Allan C. Stamm III, ‘Democracy and Battlefield Military Effectiveness’, *Journal of Conflict Resolution* 42 (1988), pp. 259-277; David R. Segal and Mady Wechsler Segal, ‘Change in Military Organization’, *Annual Review of Sociology* 9 (1983), pp. 151-170; Deborah Avant, ‘The Institutional Sources of Military Doctrine: Hegemons in Peripheral Wars’, *International Studies Quarterly* 37 (1993), pp. 409-430; David Jablonsky, ‘U.S. Military Doctrine and the Revolution in Military Affairs’, *Parameters* 24 (1994), pp. 18-36; Williamson Murray and R. Allen Millett, *Military Innovation in the Interwar Period* (Cambridge: Cambridge University Press, 1996); Jeffrey A. Isaacson, Christopher Layne and John Arquila, *Predicting Military Innovation* (Santa Monica: Rand, 1999); John Nagl, *Learning to Eat Soup with a Knife* (Chicago: University of Chicago Press, 2005); Jeremy Black, ‘Military Organisations and Military Change in Historical Perspective’, *Journal of Military History* 62 (October 1988), pp. 871-893; Richard Downie, *Learning from Conflict: The U.S. Military in Vietnam, El Salvador, and the Drug War* (Westport, Connecticut: Praeger, 1998).

regarded as a higher-order concept than adaptation, which is more tactical in nature. Doctrine operates above both these levels, though it is thought to infuse the conduct of military organizations at the operational and tactical levels. Stephen Peter Rosen is skeptical that military doctrine provides a good indicator of innovation in military organizations. Rosen makes no mention of doctrine in his definition military innovation, which he defines as:

A change that forces one of the primary combat arms of service to change its concepts of operation and its relation to other combat arms, and to abandon or downgrade traditional missions. Such innovations involve a new way of war, with new ideas of how the components of the organization relate to each other and to the enemy, and new operational procedures conforming to those ideas. They involve changes in critical tasks, the tasks around which warplans revolve.<sup>37</sup>

Rosen argues that innovation happens mostly in peacetime. He emphasizes the role played by intra-bureaucratic forces within military organizations that pit professional communities against each other in the battle for limited resources. The internal friction between these communities generates a kind of creative and healthy ideological and intellectual struggle. Organizational leaders emerge from this process that protect their respective communities and provide the intellectual and political space to pursue new ideas on how best to secure military victory. Rosen believes that these senior military leaders play a predominant role in directing the process of peacetime organizational innovation. He places less emphasis on the role of outside civilian intervention.<sup>38</sup>

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<sup>37</sup> Stephen Peter Rosen, 'New Ways of War: Understanding Military Innovation', *International Security* 13 (1988), p. 134.

<sup>38</sup> Rosen, *Winning the Next War*, pp. 1-53.

Uncertainty surrounding the impact of doctrine on military innovation is shared by others. Theo Farrell offers a definition of military innovation that tries to capture not just changes in doctrine but changes in other aspects of military organizations, such as ‘...changes in the goals, actual strategies, and/or the structure of a military organization.’<sup>39</sup> Jeffrey Isaacson, Christopher Layne and John Arquila also tie military innovation to something other than doctrine, offering that military innovation ‘...is manifested by the development of new warfighting concepts and/or new means of integrating technology. New means of integrating technology might include revised doctrine, tactics, training or support.’<sup>40</sup>

Alan Beyerchen draws upon complexity theory<sup>41</sup> in developing a sequence in which innovation happens as the end result of a process that starts as invention, which is followed by research and then development – and includes complex feedback loops at all stages of the process.<sup>42</sup> Beyerchen argues that military innovation can be divided into three overlapping phases: technical change that can result from new equipment that is used at the tactical level; operational change in which a series of new procedures are developed to field new equipment; and broadly-based technological change that provides a new set of parameters, or context, for military operations at the strategic level. Beyerchen suggests that innovation occurs as a cascading series of best

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<sup>39</sup> Theo Farrell, ‘Innovation in Military Organizations Without Enemies’, unpublished paper presented at the International Studies Association Annual Convention, San Diego, Calif., April 16-20, 1996, as cited in Farrell and Terriff, *The Sources of Military Change*, p. 5.

<sup>40</sup> Isaacson, et. al., *Predicting Military Innovation*, p. 8.

<sup>41</sup> For a good summary of the application of complexity theory to organizations, see Philip Anderson, ‘Complexity Theory and Organizational Science’, *Organization Science* 10, No. 3 (May-June 1999), pp. 216-232; Heinz Otto-Peitgen, Hartmut Jurgens, and Dietmar Saupe, *Chaos and Fractals: New Frontiers of Science*, 2<sup>nd</sup> Ed. (New York: Springer, 2004); David Byrne, *Complexity Theory and the Social Science*. (London: Routledge, 1998); Todd R. LaPorte, ed., *Organized Social Complexity* (Princeton: Princeton University Press, 1975); John Steinbruner, *The Cybernetic Theory of Decision* (Princeton: Princeton University Press, 1974).

<sup>42</sup> Alan Beyerchen, ‘From Radio to Radar: Interwar Military Adaptation to Technological Change in Germany, the United Kingdom, and the United States’, in Murray and Millet, *Military Innovation in the Interwar Period*, pp. 266-269. Beyerchen cites Thomas P. Hughes, ‘The Development Phase of Technological Change’, *Technology and Culture* 17, No. 3 (July 1976), pp. 423-431 on these points.

practices that can lead to something called ‘diffusion.’ He states that: ‘Adaptation is primarily associated with the innovation phase, while the introduction of new military doctrine is in general closely associated with the diffusion phase.’<sup>43</sup>

Williamson Murray frankly doubts whether the sources and processes of military innovation can be described with any confidence. Murray argues: ‘The process of innovation within military institutions and cultures, which involves numerous actors, complex technologies, the uncertainties of conflict and human relations, forms part of this world and is no more open to reductionist solutions than any other aspects of human affairs.’<sup>44</sup> Murray believes that military innovations which have the ‘...greatest influence are those that change the context within which war takes place.’<sup>45</sup> Murray believes there are two types of innovation: evolutionary and revolutionary. As suggested by the term, evolutionary innovation happens slowly over time but can cumulatively lead to dramatically different results in battle. Revolutionary change, he argues, happens mostly as a result of top-down leadership. He argues that Britain’s creation of an integrated system of air defense that broke with previous doctrine governing the envisioned use of uses of airpower represented an example of revolutionary innovation.<sup>46</sup>

None of these definitions by themselves seems satisfactory, although all in a sense are right. All these definitions of military innovation involve common elements: changed standard operating procedures; different relationships between and among combat arms; the blending of combat and noncombat capabilities to achieve battlefield ‘effect’; and, the eventual development of different missions for military units not

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<sup>43</sup> Ibid., p.267.

<sup>44</sup> Williamson Murray, ‘Innovation: Past and Future’, in Murray and Millet, *Military Innovation in the Interwar Period*, p. 303.

<sup>45</sup> Ibid., p. 305.

<sup>46</sup> Ibid., pp. 304-312.

previously envisioned in doctrine. These phenomena interact with each other in complex and unpredictable ways to produce innovation.

The literature on organizational behavior offers contributions that can disentangle some of these definitional uncertainties. Returning to first order principles in theories of organizational behavior, March and Simon suggest organizational innovation starts off with individuals as a problem-solving activity, which, under certain conditions, can then generate new organizational procedures.<sup>47</sup> March and Simon offer the straightforward proposition that ‘The rate of innovation is likely to increase when changes in the environment make the existing organizational procedures unsatisfactory.’<sup>48</sup> The clarity of this statement seems entirely appropriate to describing the process of military innovation and change while in contact with the enemy.

My definition of organizational innovation in war seeks to balance these competing concerns by emphasizing the overlapping relationships between the concepts and the observable process that organizations move through as tactical adaptations collectively produce new procedures that fundamentally change the conduct of military operations. I agree with those arguing that military doctrine per se presents a weak dependent variable in identifying sources of military innovation. By breaking down the processes of adaptation and innovation into their constituent components, it is possible to describe a series of observables integrated together in a process that in Iraq produced innovation by military units in war.

## **Innovation in War**

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<sup>47</sup> James G. March and Herbert A. Simon, *Organizations* (New York: John Wiley & Sons Inc., 1985), pp. 177-186.

<sup>48</sup> *Ibid.*, p. 183.

Much of the literature on military innovation focuses on actions of military organizations in peacetime. Part of the purpose of this work is to address the paucity of work on military innovation in wartime<sup>49</sup> in the contemporary period and to provide scholars with new analytical avenues and hypotheses to assess the sources of wartime innovation. The prevailing view is that organizational innovation in war is extremely difficult. The German strategist Carl von Clausewitz believed that the circumstances of conflict made it difficult for militaries to develop a coherent situational awareness on which to base rational decisions, noting: ‘The difficulty of accurate recognition constitutes one of the most serious sources of friction in war, by making things appear entirely different from what one had expected.’<sup>50</sup> Clausewitz believed that the friction of war made simple problems complex and ‘...the apparently easy so difficult.’<sup>51</sup> The lack of reliable and accurate information during war hence made it difficult to subject wartime decisions to a structured, rational decision-making process. As emphasized by Clausewitz, the wartime environment was thus characterized by a structural uncertainty that has been described by many as the so-called fog of war. Clausewitz famously stated: ‘War is the realm of uncertainty; three quarters of the factors on which action in war is based are wrapped in a fog of greater or lesser uncertainty.’<sup>52</sup>

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<sup>49</sup> Several of the best empirical works addressing wartime innovation are Bruce I. Gudmundsson, *Stormtroop Tactics: Innovation in the German Army, 1914-1918* (Westport, CT: Praeger, 1989); Timothy T. Lupfer, *The Dynamics of Doctrine: The Change in German Tactical Doctrine During the First World War* (Leavenworth, KS: U.S. Army Combat Studies Institute 1981); Thomas Alexander Hughes, *Overlord: General Pete Quesada and the Triumph of Tactical Air Power in World War II* (New York: The Free Press, 1995).

<sup>50</sup> Carl von Clausewitz, *On War*, ed. and trans. by Michael Howard and Peter Paret (Princeton: Princeton University Press, 1976), p. 117.

<sup>51</sup> *Ibid.*, p. 121.

<sup>52</sup> Howard and Paret, *On War*, p. 101; for an excellent critique of the uses and misuses of this famous metaphor in popular culture, see Michael J. Shapiro, ‘The Fog of War’, *Security Dialogue* 36, No. 2 (June 2005), pp. 233-246; Alan Beyerchen interestingly argues that Clausewitz’s metaphor suggested an embrace of modern theories of complexity and the non-linear nature of warfare. See Alan Beyerchen, ‘Clausewitz, Nonlinearity, and the Unpredictability of War’, *International Security* 17, No. 3 (Winter 1992/1993), pp. 59-90.



Stephen Peter Rosen usefully addressed the tension between peacetime and wartime innovation and change. He drew a clear distinction between improved mission performance that flows from organizational learning, based on feedback and use of intelligence, and organizational innovation in response to enemy action on the battlefield. Rosen argued that there is a prevalent and mistaken belief that innovation happens more easily in war than in peacetime. He believed that that genuine battlefield innovation was extremely rare and happened only in certain circumstances. Rosen acknowledged that organizational learning is possible in wartime, but is usually limited to improvements in the ability of military units to conduct established missions. Rosen argued that innovation in wartime was related to how military organizations measured their effectiveness. He noted that ‘...the definition of the strategic goal, the relationship of military operations to that goal, and indicators of how well operations are proceeding can be thought of as *strategic measures of effectiveness* for the military organization.’<sup>53</sup> In other words, wartime innovation won’t happen unless and until military organizations perceive themselves as being ineffective, which involves reaching judgments about the degree to which military operations are achieving the desired strategic effect. Rosen argued that innovation in war won’t happen unless the institutions are provided with indicators showing that they are failing on the battlefield. ‘When military innovation is required in wartime, however, *it is because an inappropriate strategic goal is being pursued, or because the relationship between military operations and that goal has been misunderstood.* [emphasis original]’<sup>54</sup> Rosen believed that wartime innovation is symbiotically tied to measures of organizational effectiveness.

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<sup>53</sup> Rosen, *Winning the Next War*, p. 35.

<sup>54</sup> Ibid.

The finding from this analysis is that scholars must note more closely the forms and sources of military adaptation and innovation that occur in wartime, compared to those that occur in peacetime.<sup>55</sup> In peacetime, change is more likely to be stimulated by the senior civilian and military leadership under a process which authority is delegated down through the chain of command, from the President to his Secretary of Defense, who in turn delegates implementing authority to his military departments.<sup>56</sup> Those departments then produce top-level military guidance, which provides an explicitly structured roadmap through which units can pursue their tactics, techniques and procedures. It is on this basis that doctrine is promulgated, equipment bought, and training structured so that, in theory, military units arrive in the field ready to pursue their mission in ways that are consistent with the requirements and the wishes of their political masters. I argue here that the wartime environment in Iraq tilted the organizational balance of military institutions towards internal, organically-driven change and innovation. The nature of this process necessarily reverses, or at least challenges, the peacetime process. In wartime, established peacetime relationships may change, in practice if not on paper, as authority is decentralized down to the tactical level – where authority to act and make decisions on immediate courses of action happens in the field.

The American military experience in Iraq has not proven to be a replay of the military experience in the Vietnam War. During Vietnam, the United States Army refused to adapt itself institutionally to the combat environment created by its enemies, despite

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<sup>55</sup> Rosen, *Winning the Next War*, pp. 1-76; David R Segal and Mady Wechsler Segal, 'Change in Military Organization', *Annual Review of Sociology* 9 (1983), pp. 151-170; Joseph Harris, 'Wartime Currents and Peacetime Trends', *The American Political Science Review* 40 (December 1946), pp. 1137-1154; Chris Demchak, *Military Organizations, Complex Machines: Modernization in the U.S. Armed Forces* (Ithaca: Cornell University Press, 1991).

<sup>56</sup> Posen, *The Sources of Military Doctrine*; Kier, *Imagining War*; Avant, *Political Institutions and Military Change*.

being directed to do so by President Kennedy, and despite undeniable evidence that its operations were not defeating the Viet Cong insurgency.<sup>57</sup> While certain organizational components like the Marines (Combined Action Platoons in I Corps) and Special Forces (Civilian Irregular Defense Group in the Central Highlands) explored innovative approaches to fighting the counterinsurgency in Vietnam, these changes never received institutional support at what would now be called the 'joint' level, and slowly withered away as the Army doggedly pursued more conventionally-oriented military operations.<sup>58</sup> As John Nagl chronicles in his book *Eating Soup With a Knife*, the Army could not or would not learn from its mistakes and refused to change course to defeat the enemy until it was too late.<sup>59</sup>

As of this writing the war in Iraq is still underway. As a consequence, it is not possible to assess the degree of progress by the American armed forces up the learning curve of counterinsurgency tactics and whether this progress will yield the strategic results desired by America's political leaders. This dissertation does not argue that the American use of force in Iraq will produce a stable, peaceful, and democratic government or society there. History may judge that American military adaptation and innovation did not happen fast enough to keep pace with evolving political circumstances within both Iraq and the United States. One of the wider implications of this study is that leaders need to consider the adaptive and innovative abilities of their military organizations in the decision-making process used to decide when to apply force in pursuit of strategic objectives. As much as political and military leaders want to believe their military organizations can accomplish national

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<sup>57</sup> Nagl, *Eating Soup With a Knife*; Andrew Krepinevich, *The Army and Vietnam* (Baltimore: Johns Hopkins University Press, 1986).

<sup>58</sup> As discussed in Robert Komer, *Bureaucracy at War: U.S. Performance in the Vietnam Conflict* (Boulder, CO: Westview Press, 1986), pp. 111-129.

<sup>59</sup> Nagl, *Eating Soup With a Knife*.

objectives in a variety of different operational environments, the reality is that these institutions cannot seamlessly and effortlessly transition between dramatically different scenarios and demonstrate immediate effectiveness across all spectrums of combat. When the sequences of organizational adaptation and innovation become desynchronized from overarching political realities governing the war, the state applying force can face problems in achieving its objectives no matter how adaptive and innovative their military institutions may be. Whatever the strategic and political outcome in Iraq, it should not obscure the organizational flexibility that eventually unfolded at the tactical level. This organizational flexibility produced wartime innovation that fundamentally changed the conduct of the war against the insurgents in the years preceding the promulgation of formal, joint doctrine.

### **Military Innovation and Grand Strategy**

Why weren't America's armed forces ready to fight an irregular war when they arrived in Iraq? There certainly was no shortage of national-level guidance suggesting – even directing – the advisability of developing competencies to fight a counterinsurgency. In the five years following the September 2001 attacks, the Bush Administration promulgated an enormous variety of documents intended to provide strategic guidance to the nation's civilian and military organizations. Indeed, no U.S. administration in history has ever released such a flood of paper explaining different aspects of the nation's grand strategy.<sup>60</sup> In addition to explaining the nation's global

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<sup>60</sup> *The National Security Strategy of the United States of America*, The White House, Washington, DC, February 2006 and 2001; *The National Strategy to Combat Weapons of Mass Destruction*, The White House, Washington, DC, December 2002; *The National Strategy for Homeland Security*, The White House, Washington, DC, July 2002; *The National Strategy for Combating Terrorism*, The White House, Washington, DC, February 2003; *National Military Strategy*, Joint Chiefs of Staff, Washington, DC 2004; *National Defense Strategy*, Department of Defense, Washington, DC, March 2005; *The National Strategy for Maritime Security*, The White House, Washington, DC, September 2005. This list is by no means exhaustive but provides a flavor of the unprecedented attention paid by the Bush

interests and objectives to the public, this collection of documents effectively provided the ‘commander-in-chief’s intent’ to military organizations for their use in tailoring their resources, plans and programs to achieve the nation’s objectives. These organizations were expected to translate political and strategic guidance into military actions, or outputs, that addressed the objectives articulated at the strategic level. This collection of documents arguably subjected United States military institutions and their associated civilian bureaucracies to their most far-reaching changes since the end of World War II.<sup>61</sup> Then Secretary of Defense Donald Rumsfeld characterized these changes as ‘transformation,’ a process that was meant to fundamentally alter the management and operational activities of all elements of the Defense Department’s sprawling civilian and military bureaucracies.

The 2001 and 2006 *Quadrennial Defense Reviews* particularly emphasized the need to reorient these diverse organizations away from ‘traditional’ Cold War state threats to meet the challenge of coping with irregular warfare, disruptive attacks by adversaries wielding dangerous new technologies, and catastrophic attacks by sub- and non-state actors wielding mass-destructive weapons. These challenges were represented as four discrete ‘quadrants’ in a graph purporting to show the range, and mutual inter-relationship, of future threats that the United States could expect to confront in the future. (See Figure 1-2 on page 30).

Other Defense Department internal studies echoed the call to build irregular warfare competencies during same period. As the Marine Corps and Army blasted their way into Fallujah in December 2004, the Defense Science Board released a report titled *Transition To and From Hostilities* that called for the Defense Department to build

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administration to the release of public documents dealing with various aspects of strategy and strategic priorities.

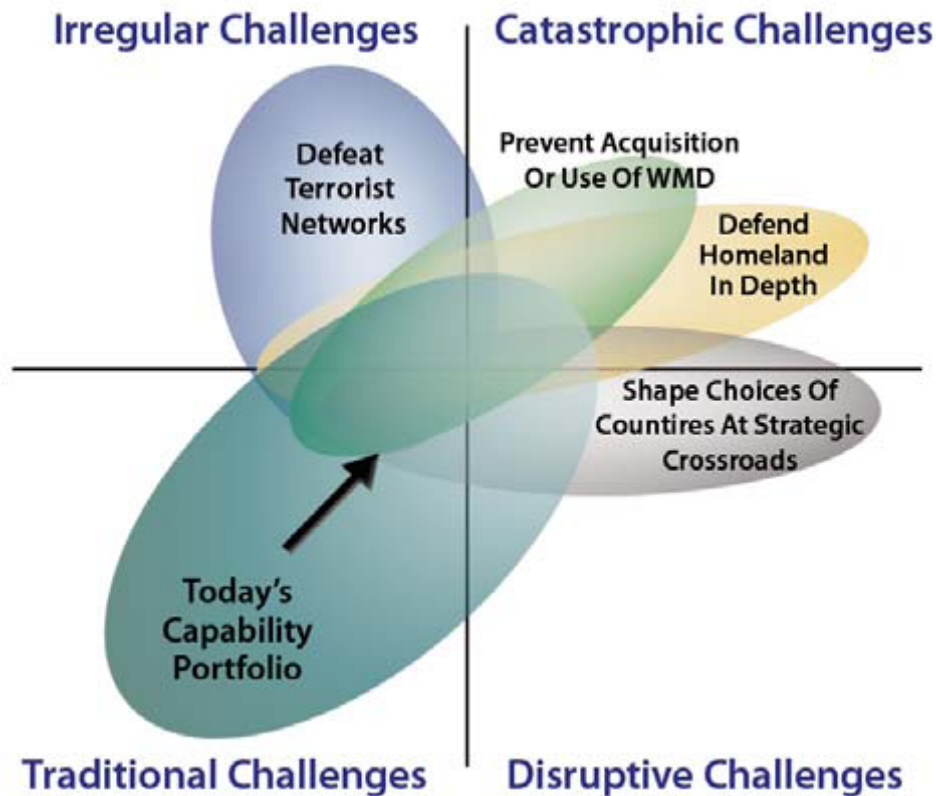
<sup>61</sup> John Lewis Gaddis, ‘A Grand Strategy of Transformation’, *Foreign Policy* 33 (2002), pp. 50-57.

new organizational competencies to manage stabilization and post-conflict reconstruction activities following the conclusion of conventional military operations.<sup>62</sup> As the Army and Marines swept through the towns on the Iran-Syrian border in November 2005, the Defense Department published DoD Directive 3000.05, *Military Support for Stability, Security, Transition, and Reconstruction (SSTR) Operations*, that formalized acceptance of the Defense Department's portion of the post-conflict mission. The new directive operationalized National Security Presidential Directive 44, *Management of Interagency Efforts Concerning Reconstruction and Stabilization Operations* that gave the State Department primary responsibility for coordinating government-wide efforts to mount reconstruction activities in war-torn countries like Iraq.<sup>63</sup>

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<sup>62</sup> *Transition to and From Hostilities*, Defense Science Board 2004 Summer Study, Department of Defense, Washington, DC, December 2004; [http://www.acq.osd.mil/dsb/reports/2004-12-DSB\\_SS\\_Report\\_Final.pdf](http://www.acq.osd.mil/dsb/reports/2004-12-DSB_SS_Report_Final.pdf), accessed January 6, 2007.

<sup>63</sup> Text of the directive can be accessed online at the Federation of American Scientists website at <http://www.fas.org/irp/offdocs/nspd/nspd-44.html>, accessed November 15, 2008.



**Figure 1-2:**

Quadrennial Defense Review Threats to US Interests

*Source: Quadrennial Defense Review 2006, p. 19*

It seemed reasonable to expect that military organizations would respond vigorously to such Presidentially-directed change, particularly when supported by explicit follow-on implementing instructions from the secretary of defense to his military departments.<sup>64</sup> But as has been chronicled elsewhere, it is clear that the United States military remained unprepared for the kind of warfare it encountered in Iraq – despite

<sup>64</sup> Richard Neustadt, *Presidential Power: The Politics of Leadership* (New York: John Wiley, 1970); Louis Fisher, *Presidential War Power* (Lawrence, Kansas: University of Kansas Press, 2004); William G. Howell, *Power Without Persuasion: The Politics of Direct Presidential Action* (Princeton: Princeton University Press 2003); Michael Sherry, *In the Shadow of War: The United States Since the 1930s* (New Haven: Yale University Press 1994); John Lewis Gaddis, *The United States and the Origins of the Cold War* (New York: Columbia University Press, 2000); Arthur Schlesinger, *The Imperial Presidency* (New York: First Mariner Books, 2004).

ample official warning for two years prior to the invasion.<sup>65</sup> When the Iraq War began, U.S. Army Field Manual (FM) 3-0, *Operations*, provided the doctrinal principles guiding the application of force by the main American ground component.<sup>66</sup> The manual's core concepts remained rooted in maneuver warfare and the associated theoretical elements of applying 'combat power' to defeat an enemy. Only two out of the 12 chapters (Stability Operations and Support Operations) focused upon non-maneuver warfare issues, and only one and half pages of the entire document even mentioned the term 'asymmetry.'<sup>67</sup> Prior to September 11, 2001 irregular warfare, terrorism, and insurgency were of scant concern to the United States Army. And despite the putatively galvanizing effects of al-Qaeda's attacks on that day, President Bush proved no more successful than President Kennedy, 40 years before, in generating the institutional change called for by new strategy documents oriented toward the conduct of irregular warfare.

There is a prevailing belief that the conflict environment in Iraq represents the kind of combat environments the American military can expect to confront elsewhere. Many believe that 'traditional' sustained, large-scale conventional warfare between developed states is becoming increasingly less likely, and that irregular warfare in its many and varied forms will be the major form of conflict practiced by developed states in the new century. This outlook is apparent in the Bush Administration's September 2002 *National Security Strategy* report, which declared that:

Today, the international community has the best chance since the rise of the nation-state in the seventeenth century to build a world where great powers compete in peace instead of

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<sup>65</sup> Thomas Ricks, *Fiasco*.

<sup>66</sup> U.S. Army Field Manual (FM) 3-0, *Operations*, Department of the Army, Washington DC, June 14, 2001.

<sup>67</sup> *Ibid.*, pp. 4-31, 4-32.



continually prepare for war. Today, the world's great powers find ourselves on the same side – united by common dangers of terrorist violence and chaos.<sup>68</sup>

This formulation embraces the record of the recent past, which suggests that the incentives for great power conflict are decreasing and that the direct employment of force is becoming steadily less useful as a political instrument for resolving disputes among developed states.<sup>69</sup> While the world's affluent states are generally enjoying a 'long peace,' however, the same cannot be said for poorer countries, which today statistically account for a disproportionate share of global warfare.<sup>70</sup> Warfare and violence continue around the globe – violence that is increasingly focused on the less developed world in areas characterized by failed or failing states. The 2006 Failed State Index estimated that as many as 100 states are exhibiting signs of collapse, with 28 states judged to be severe risks.<sup>71</sup> Warfare in many of these environments is increasingly the purview not of formal state-based military organizations but of less structured groups – violent non-state actors using the time-honored tactics and techniques of the terrorist or the insurgent.<sup>72</sup> These are the same groups confronted by the U.S. military in Iraq. The Bush Administration's 2005 *National Defense Strategy* noted:

Increasingly sophisticated *irregular* methods – e.g., terrorism and insurgency – challenge U.S. security interests. Adversaries employing irregular methods aim to erode U.S.

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<sup>68</sup> The *National Security Strategy of the United States of America*, The White House, Washington DC, September 2002, p. ii.

<sup>69</sup> John Mueller, 'The Obsolescence of Major War', *Security Dialogue* 21 (1990): 321-328; Bruce Russett and John O'Neal, *Triangulating Peace: Democracy, Interdependence and International Organizations* (New York: Norton, 2001).

<sup>70</sup> *Global Conflict Trends*, Center for Systemic Peace, University of Maryland. The figures show that the poorest 20 percent of the world's states engage in most violence today, whereas the world's most affluent states for the most part have had an extended period of peace. Also see Paul Collier, *The Bottom Billion* (Oxford: Oxford University Press, 2007); Paul Collier, *Breaking the Conflict Trap: Civil War and Development Policy* (Oxford: Oxford University Press and the World Bank, 2003).

<sup>71</sup> Failed State Index 2006, posted at the Fund For Peace Website at <http://www.fundforpeace.org/programs/fsi/fsindex2006.php>, accessed September 10, 2007.

<sup>72</sup> Troy A. Thomas, Stephen Kiser, and William D. Casebeer, *Warlords Rising: Confronting Violent Non-State Actors* (Lanham, MD; Lexington Books, 2005).

influence, patience and political will.... Two factors have intensified the danger of *irregular* challenges: the rise of extremist ideologies and the absence of effective governance.... The absence of effective governance in many parts of the world creates sanctuaries for terrorists, criminals and insurgents. Many states are unable, and in some cases unwilling, to exercise effective control over their territory or frontiers, thus leaving areas open to hostile exploitation. Our experience in the war on terrorism points to the need to reorient our military capabilities to contend with such irregular challenges more effectively.<sup>73</sup>

The belief that non-state actors using irregular warfare tactics will continue to confront the United States and the developed world is not limited to the now-departed Bush Administration. In its long-range projection out to 2025, the National Intelligence Council predicted in November 2008 that ‘...advances by others in science and technology, expanded adoption of irregular warfare tactics by both state and nonstate actors, proliferation of long-range precision weapons, and growing use of cyber warfare attacks increasingly will constrict US freedom of action.’<sup>74</sup>

The United States confronted these elements on the battlefields of Iraq: non-state actors using the tactics and techniques of irregular warfare; tribal and confessional militias that represent challenges to basic governance and local security; and, entrenched criminal organizations engaged in a wide range of activities to generate revenue. Iraq, in effect, represented a test case for the kinds of operational environments that the United States military expects to confront in the future.<sup>75</sup> The

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<sup>73</sup> *The National Defense Strategy of the United States of America*, Department of Defense, Washington, DC, March 2005, p. 3.

<sup>74</sup> *Global Trends 2025: A Transformed World*, The National Intelligence Council, Washington DC, November 2008, xi. Further verbiage in the report reiterates this view: ‘The adoption of irregular warfare tactics by both state and nonstate actors as a primary warfighting approach in countering advanced militaries will be a key characteristic of conflict in 2025. The spread of light weaponry, including precision tactical and man-portable systems, and information and communications technologies will significantly increase the threat posted by irregular forms of warfare over the next 15-20 years. (p. 71)

<sup>75</sup> Rupert Smith, *The Utility of Force: The Art of War in the Modern World* (New York: Knopf, 2007); John Arquila and David Ronfeldt, eds., *In Athena’s Camp: Preparing for Conflict in the Information*

success or failure of U.S. military organizations in Iraq has implications for the ability of the United States to employ force as an instrument of national power in similar kinds of environments. The results of the Iraq experience invariably will play a role in the decisions of future political leaders about venturing into ‘irregular’ combat environments. It will shape the attitudes of senior military leadership and of the nature of the advice and support that provide to political leaders when such circumstances arise.<sup>76</sup>

The Iraq experience may also be viewed as a test-bed to examine the degree to which the United State military is moving along the path identified in the *Joint Vision 2010* and *Joint Vision 2020* documents, which provide the template for the process of transformation as conceived at the highest levels of the Department of Defense. As described by the Defense Department, transformation is ‘...a process that shapes the changing nature of military competition and cooperation through new combinations of concepts, capabilities, people and organizations that exploit our nation’s advantages and protect against our asymmetric vulnerabilities to sustain our strategic position,

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Age (Santa Monica: Rand, 1997); Robert Scales, *Future Warfare* (Carlisle, Pa.: U.S. Army War College, 1999); William S. Lind et. al., ‘The Changing Face of War Into the Fourth Generation’, *Marine Corps Gazette* (October 1989), pp. 22-26; Robert Scales and Paul van Ripper, ‘Preparing for War in the 21<sup>st</sup> Century’, *Parameters* (Summer 1997), pp. 4-14; Vincent Goulding, ‘Back to the Future with Asymmetric Warfare’, *Parameters* 30 (Winter 2000-2001), pp. 21-30; Anthony Cordesman, *Terrorism, Asymmetric Warfare and Weapons of Mass Destruction: Defending the Homeland* (New York: Praeger, 2001); Thomas X. Hammes, *The Sling and the Stone: On War in the 21<sup>st</sup> Century* (St. Paul, Minn.: Zenith Press, 2004); Thomas X. Hammes, ‘Fourth Generation of Warfare Evolves, Fifth Emerges’, *Military Review* (May-June 2007), pp. 14-23; David S. Sorenson, ‘The Mythology of 4<sup>th</sup> Generation Warfare: A Response to Hammes’, *Contemporary Security Policy* 26, No. 2 (August 2005), pp. 264-269; Steven Metz, *Armed Conflict in the 21<sup>st</sup> Century: The Information Revolution and Post-Modern Warfare* (Carlisle, PA.: U.S. Army War College, 2000); Bard O’Neil, *Insurgency & Terrorism: Inside Modern Revolutionary Warfare* (Herndon, VA.: Brassey’s Inc., 1990); Mary Kaldor, *New and Old Wars*, 2<sup>nd</sup> ed., (Cambridge, MA: Polity Press, 2006); Mark Duffield, *Global Governance and the New Wars* (London: Zed Books, 2001); Lawrence Freedman, ‘War’, *Foreign Policy* 137 (July-Aug. 2003), pp. 16-18, 20, 22, and 24; Frank G. Hoffman, ‘Small Wars Revisited: The United States and Nontraditional Wars’, *Journal of Strategic Studies* 28, No. 6 (December 2005), pp. 913-940; Rod Thornton, ‘Fourth Generation: A ‘New’ Form of ‘Warfare’?’ *Contemporary Security Policy* 26, No. 2 (August 2005), pp. 270-278.

<sup>76</sup> An irony of the Bush era is that it saw a dramatic decline in civil-military relations, which proved to be just the opposite of expectations. See Michael Desch, ‘Bush and His Generals’, *Foreign Affairs* 86, No. 3 (May/June 2007), pp. 97-108.

which helps underpin peace and stability in the world.’<sup>77</sup> The final objective of these processes is for U.S. forces to achieve something called ‘full spectrum dominance.’ *Joint Vision 2020* states: ‘The overall goal of the transformation described in this document is the creation of a force that is dominant across the full spectrum of military operations – persuasive in peace, decisive in war, preeminent in any form of conflict.’<sup>78</sup>

In Iraq, U.S. forces went to war under an overarching concept of establishing full spectrum dominance (See Figure 1-3 next page). The American experience there provides the first protracted operational sequence in which the benefits of the digital age, so often conceptualized as a ‘Revolution in Military Affairs’ (RMA), were systematically applied across the force structure.<sup>79</sup> The results are often called ‘network-centric’ or ‘net-centric’ operations. Such warfare is described as: ‘...the combination of strategies, emerging tactics, techniques, and procedures, and organizations that a fully or even a partially networked force can employ to create a decisive warfighting advantage.’<sup>80</sup>

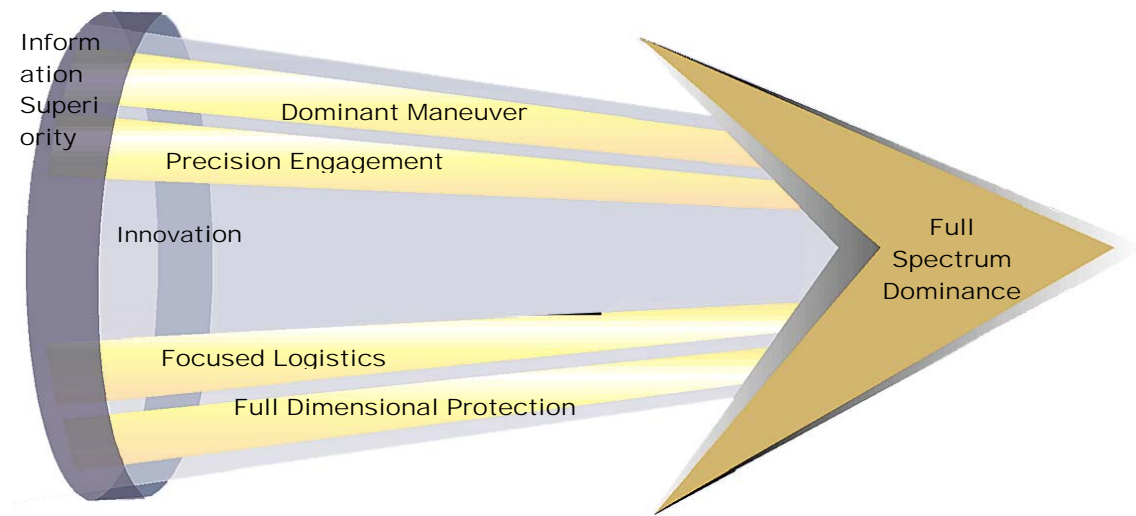
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<sup>77</sup> *Transformation Planning Guidance*, Department of Defense, Washington DC 2003, p. 3.

<sup>78</sup> *Joint Vision 2020*, p. 1.

<sup>79</sup> For some of the early writing on this issue, see Martin van Creveld, *The Transformation of War* (New York: Free Press, 1991); Andrew Krepinevich, ‘Cavalry to Computer: The Pattern of Military Revolutions’, *The National Interest* (Fall 1994), pp. 30-43; Steven Metz and James Kievit, ‘Strategy and the Revolution in Military Affairs’, Strategic Studies Institute, United States Army War College, June 27, 1995; Williamson Murray, ‘Thinking About Revolutions in Military Affairs’, *Joint Forces Quarterly* (Summer 1997); Jeffrey McKittrick et. al., ‘The Revolution in Military Affairs’, in Barry R. Schnieder, Ed., *Battlefields of the Future: 21<sup>st</sup> Century Warfare Issues* (Maxwell AFB, Alabama: Air War College, 1995), <http://www.airpower.maxwell.af.mil/airchronicles/battle/bftoc.html>, accessed December 1, 2008

<sup>80</sup> The U.S. Office of Force Transformation, *The Implementation of Network-Centric Warfare*, no date, p. 3.



**Figure 1-3:**

*Source: Joint Vision 2020, p. 2*

Counterinsurgency in Iraq also provided a test of the integration achieved among the U.S. military services since the passage of the Goldwater-Nichols Act of 1986. It mandated, among other things, that the services develop joint core competencies. Most major military operations conducted since then have been commanded by a joint task force, which combines all service elements in one staff.<sup>81</sup> In Iraq, the process of service integration extended for the first time down to tactical units in which Army and Marine Corps units effectively functioned as an integrated land force. Command relationships during the war meant that Army units worked under senior Marine officers and vice versa. The evolution of the joint task force in some respects reflects a widespread adoption of a ‘systems’ perspective that embraces the complexity in the

<sup>81</sup> Roger A. Beaumont, *Joint Military Operations: A Short History* (Westport, Conn.: Greenwood Press, 1993); Admiral Bill Owens with Ed Offley, *Lifting the Fog of War* (Baltimore: Johns Hopkins University Press, 2001); Wesley Clark, *Waging Modern War* (New York: Public Affairs Books, 2002).

operational environment.<sup>82</sup> The case studies in this dissertation will, among other things, demonstrate the continued evolution of the joint task force headquarters and the growing ability of the U.S. military services to operate as a joint force with a unified operational outlook.<sup>83</sup>

### **Case Studies: Three Innovation Campaigns in Iraq**

The research presented here employs a case study methodology that examines a range of different unit types conducting COIN operations in Iraq over the period from July 2005 through March 2007: three active duty Marine Corps battalions; an Army brigade consisting mostly of National Guard units; an Army armored brigade comprised mostly of active duty units; an active duty Army armored battalion; an active duty Army cavalry group; and an active duty Army brigade that had just fielded its new Stryker wheeled vehicles. The cases in this research are qualitative comparisons between disparate organizational structures. Indeed, it would be virtually impossible to conduct case study research of the kind presented here between identical organizations. This is because each of these units functioned as joint task forces that included many disparate organizational (both military and civilian) elements, so it is perhaps a misnomer to even identify each unit by military department. But for purposes of the analysis, this dissertation identifies each unit according to the service that constituted the bulk of the unit's combat manpower. In

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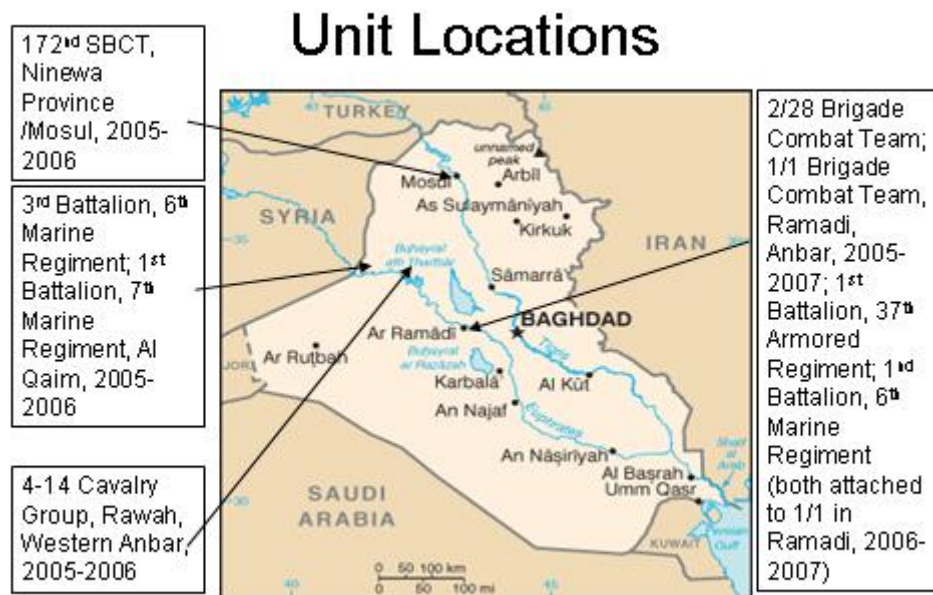
<sup>82</sup> For Systems Theory, see: J.G. Miller, *Living Systems* (New York: McGraw-Hill, 1978); Ludwig von Bertalanffy, *General System Theory* (London: Allen Lane, 1968); Kenneth Boulding, 'General System Theory—The Skeleton of Science', *General Systems* (Yearbook of the Society for the Advancement of General Systems Theory, 1956). For an introduction to general systems in the social sciences, see: Walter Buckley, *Sociology and Modern Systems Theory* (Englewood Cliffs, N.J.: Prentice-Hall, 1967). For systems theory applied specifically to international relations see: K. W. Deutsch, *The Nerves of Government: Models of Communication and Control* (New York: Free Press, 1963); Charles A. McClelland, *Theory and the International System* (New York, Macmillan, 1966); Kenneth Boulding, *Conflict and Defense: A General Theory* (New York: Harper, 1962); Morton A. Kaplan, *System and Process in International Politics* (New York: J. Wiley, 1957).

<sup>83</sup> Gary Luck, *Insights on Joint Operations: the Art and Science*, Joint Warfighting Center, U.S. Joint Forces Command, Suffolk, VA, September 2006.

addition to different services, the cases cover units with different operational background and training. The Marine Corps infantry battalions, for example, greatly differed in their organizational structure and training than an Army armored battalion. Moreover, the Army light infantry units covered here – the Stryker-equipped units, differed significantly from their Army armored brethren and the Marine Corps light infantry. The cases are also comparative studies of units at different stages of the force modernization process taking place under the rubric of ‘transformation.’ Both of the Army light infantry units were in the midst of the transformation process, fielding an array of new equipment intended to allow them to fight differently on the battlefield. The rest of the units could be considered as ‘legacy’ force structure units with organizational structure, equipment, and training had not changed significantly since the end of the Cold War if not before. There are other differences in cases. The units had different types of equipment, different manning and organizational structures and, most importantly, each unit faced different wartime environments. Despite these differences, however, the case study methodology remains a useful instrument to document the process of wartime innovation.

Each of the case studies demonstrates significant variation in its innovation processes. The across-the-board variations in the innovation process – even between similarly structured units – reinforce the argument that the innovation process resulted not from top-down direction but came instead from organic, internally generated sources within the units themselves. The cases are also taken from units operating in different locations, different time periods and different combat environments. This variation further strengthens the test of the argument that the innovation processes happened independently within the units. The search for COIN competencies led to some striking similarities in the development of these competencies, but the processes for

competency development differed widely in the cases. The locations of the units are identified on the map in Figure 1-4.



**Figure 1-4**

The selected cases will illustrate the complexity of the issues being addressed in this dissertation’s research questions.<sup>84</sup> Each case study will highlight different aspects of the organic, bottom-up learning process by U.S. military units in Iraq. The cases are thus bounded by time period and geographic area, and all focus on the actual conduct of counterinsurgency operations, albeit in different locations and in different circumstances. The case studies are intended to capture the interaction between and among the environment, the enemy, individual decision-making, and organizational processes that produced actions on the battlefield. The cases draw upon multiple

<sup>84</sup> Robert E. Stake, *The Art of Case Study Research* (New York: Sage Publications, 1995); Robert Yin, *Applications of Case Study Research*, 3rd ed. (New York: Sage Publications, 2003); Kathleen M. Eisenhardt, ‘Building Theory from Case Study Research’, *The Academy of Management Review* 14, No. 4 (Oct. 1989), pp. 532-550.



sources of data that are intended to build a chain of evidence surrounding the research questions and the hypothesis describing the process of organic change and innovation in Iraq. The cases studies will be presented as narratives, drawing upon evidence gathered from interviews, press reporting, military unit after action reports, internal government documents, and scholarly articles. Evidence presented in the cases then will be inductively evaluated to determine if there are generalizable inferences that can be drawn about the processes of battlefield innovation. The cases and unit types are summarized in Figure 1-5 (next page).

Organized insurgent resistance to the United States occupation first emerged in Al Anbar in what became known as the ‘Sunni Triangle,’ an area in western Iraq bounded by Al Qaim on the Iraq-Syrian border, and the cities of Ramadi, Fallujah, and Baghdad. The security environment in al Anbar steadily deteriorated throughout the summer and fall of 2003.<sup>85</sup> A toxic mix of unemployed Iraqi army personnel, former Baathist leaders, an entrenched and independent tribal structure, and mostly foreign Sunni Islamic extremists produced a variety of insurgent groups that, while having different political, social, and religious orientations, were at least initially unified in their opposition to the American occupation.<sup>86</sup>

By the spring of 2004, Fallujah and Ramadi had effectively become hostile enemy territory for U.S. forces. Following the brutal killing of American contractors in Fallujah in April 2004, Marine Corps units assaulted the city. After objections by Iraqi leadership, the assault was terminated and the insurgents returned.<sup>87</sup>

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<sup>85</sup> Hashim, *Insurgency and Counterinsurgency*, pp. 1-59.

<sup>86</sup> Carter Malkasian, ‘Did the Coalition Need for Forces in Iraq? Evidence from Al Anbar’, *Joint Forces Quarterly* 46 (3<sup>rd</sup> Quarter, 2007), pp. 120-126.

<sup>87</sup> Carter Malkasian, ‘Signaling Resolve, Democratization and the First Battle of Fallujah’, *Journal of Strategic Studies* 29, No. 3 (June 2006), pp. 423-452; also see Malkasian’s additional excellent analysis

<b>Unit</b>	<b>Location</b>	<b>Type</b>
3 <sup>rd</sup> Battalion, 6 <sup>th</sup> Marine Regiment	Al Qaim (Anbar Province), western Iraq, September 2005-March 2006	Marine Corps, active duty infantry; legacy force
1 <sup>st</sup> Battalion, 7 <sup>th</sup> Marine Regiment	Al Qaim, western Iraq, March 2006-July 2006	Marine Corps, active duty infantry; legacy
4-14 Stryker Cavalry Group	Rawah (Anbar Province) to Syrian border Western Iraq, August 2005-July 2006	Army, active duty, light infantry with wheeled vehicles (with additional SOF, Marine Corps elements); transformation brigade
2/28 Brigade Combat Team	Ramadi, Anbar Province, July 2005-July 2006	Mixed Army/Marine Corps, mostly national guard with some active duty -- armored and infantry units; legacy force
1/1 Brigade Combat Team	Ramadi, Anbar Province, July 2006- March 2007	Mixed Army and Marine Corps active duty units; legacy force
1 <sup>st</sup> Battalion 37 <sup>th</sup> Armored Regiment (part of 1/1)	south central Ramadi, July 2006-March 2007	Army active duty armored battalion, legacy force
1 <sup>st</sup> Battalion, 6 <sup>th</sup> Marine Regiment (attached to 1/1)	central Ramadi, September 2006-March 2007	Marine Corps, active duty infantry, legacy force
172 <sup>nd</sup> Stryker Brigade Combat Team	Mosul, Ninewa Province,	Army active duty, light infantry with wheeled vehicles; transformation unit.

**Figure 1-5**

The city was assaulted again in November in what amounted to a repeat of the April operation – except this time the city was conquered and occupied.<sup>88</sup> The Fallujah

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on other aspects of the U.S. counterinsurgency campaign in Al Anbar: ‘A Thin Blue Line in the Sand’, *Democracy Journal* (Summer 2007), pp. 48-58; ‘The Role of Perceptions and Political Reform: The Case of Western Iraq, 2004-2005’, *Small Wars and Insurgencies* 17, No. 3 (September 2006), pp. 367-394.

<sup>88</sup> Bing West, *No True Glory: A Frontline Account of the Battle for Fallujah* (New York: Bantam Books, 2005).

attacks, however, had little impact on the strength of the insurgency elsewhere in Anbar, except that fighters that fled before the attack ended up in other parts of the province. Some of the fighters also reportedly migrated to Mosul to continue their operations.

The first innovation campaign describes military operations by two Marine Corps battalions and an Army cavalry group operating on the Iraq-Syrian border in 2005 and 2006. I argue that these units independently built a series of COIN competencies during their deployments that dramatically improved local security throughout their area of operations. The innovation process featured: a move to distributed operations and decentralized authority; adaptation of the combined action platoon concept to local circumstances; application of law enforcement procedures to combat insurgent networks and the innovative use of technologies and software as part of that effort; and, organizational flexibility in responding to the to the increased flow of intelligence information that flowed from a variety of collection sources. The collective force of these innovations completely re-oriented the operations of these units during their deployment towards COIN operations that included a variety of task functions that, at the time, had not been tried in the field.

The second innovation campaign addresses military operations in and around Ramadi from July 2005 through March 2007. By the time the 2<sup>nd</sup> Brigade Combat Team of the 28<sup>th</sup> Infantry Division (2/28) arrived in Ramadi in July 2005, the province was fully in the grip of a variety of insurgent groups.<sup>89</sup> This case will cover operations in Ramadi, focusing on the operations of 2/28 during July 2005-August 2006 and the transition to 1<sup>st</sup> Division, 1<sup>st</sup> Armored Brigade (1/1), which conducted operations from August

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<sup>89</sup> Author interview with Brigadier General John Gronski [commanding officer 2/28], October 5, 2007.

2006 through early-2007. The summer of 2006 saw 1/1 change battlefield tactics in Ramadi from those pursued by 2/28. In addition, 1/1 integrated a host of new initiatives in Ramadi that blended kinetic and non-kinetic capabilities on the battlefield.<sup>90</sup> The change in tactics in the fall of 2006 coincided with the so-called tribal awakening in which the Sunni tribal sheiks in Ramadi rose up against Al-Qaeda in Iraq, or AQI. Cooperation between 1/1 and the tribal sheiks gathered momentum throughout the fall of 2006 and winter of 2007.<sup>91</sup> By early 2007, the security environment had dramatically improved in Ramadi. Improvements in Ramadi gradually cascaded throughout the rest of the province through the spring of 2007. By the time of 1/1's departure in March 2007, attacks mounted by Sunni extremist groups had declined dramatically and Anbar was being cited by many as a 'success' story.<sup>92</sup>

The process of organizational innovation in Al Anbar involved a definite progression of iterative tactical adaptation between 2/28 and 1/1. During the summer of 2006, 2/28 had begun the process trying to isolate insurgent areas in Ramadi through greater controls over ingress and egress routes in to the city. Under 1/1's tactical scheme, unit personnel were slowly dispersed throughout Ramadi in combat outposts (COPs) that provided local bases from which to conduct foot patrols, which improved local security and built relationships with city residents on a block-by-block basis.<sup>93</sup> As the

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<sup>90</sup> Interview conducted by the author with Colonel Sean MacFarland, USA, [Former brigade commander of 1/1], October 15, 2007, in the Pentagon, Washington DC.

<sup>91</sup> David Kilcullen, 'Anatomy of a Tribal Revolt', *Small Wars Journal*, August 29, 2007, <http://www.smallwarsjournal.com/blog/2007/08/anatomy-of-a-tribal-revolt/>, accessed March 1, 2008; Michael Eisenstadt, 'Tribal Engagement Lessons Learned', *Military Review* (September/October 2007), pp. 16-31; Marie Colvin, 'Sunni Sheiks Turn Their Sights from U.S. Forces to Al Qaeda', *The Sunday Times*, September 9, 2007, <http://www.timesonline.co.uk/tol/news/world/iraq/article2414588.ece>.

<sup>92</sup> For an example, see Max Boot, 'An Iraq Success Story', *Los Angeles Times*, accessed April 24, 2007, <http://www.latimes.com/news/opinion/la-oe-boot24apr24,0,6844465.column?coll=la-news-columns>, accessed April 28, 2007. Also see Michael O'Hanlon and Kenneth Pollack, 'A War We Might Just Win', *New York Times*, July 30, 2007, <http://www.nytimes.com/2007/07/30/opinion/30pollack.html>, accessed August 1, 2007.

<sup>93</sup> Interview with Colonel MacFarland.

COPs increased in number through late 2006 and early 2007, 1/1 simultaneously re-energized efforts to stand up the local police force, convincing local tribal leaders that their members would not be sent to other parts of Iraq. Each of these iterative steps reinforced the other and built momentum over time that marginalized the insurgents.

The third innovation case examines prosecution of the COIN campaign in Mosul, a city of 1.7 million people in Ninewa province in northern Iraq.<sup>94</sup> Experiences in Mosul did not resemble the cataclysmic events in Al Anbar that resulted in the Fallujah operations, but the environment was nonetheless very difficult for U.S. forces. In the fall of 2004, 3<sup>rd</sup> Brigade, 2<sup>nd</sup> Infantry Division (3/2) deployed into northern Iraq in relief of the 101<sup>st</sup> Airborne Division. The transition saw a decrease in combat troops from nearly 20,000 to 5,000. Insurgents took advantage of the reduced combat presence, and attacks dramatically increased throughout 2004-2005.<sup>95</sup> In November 2004, Mosul had to be effectively reoccupied by U.S. forces. In August 2005, the 172<sup>nd</sup> Stryker Brigade Combat Team (SBCT) arrived in Ninewa, inheriting a vibrant and lethal insurgency, limited local participation in police forces, and a ‘train-and-equip’ program for the Iraqi Security Force that had stalled.<sup>96</sup> Over the next 12 months the 172<sup>nd</sup> SBCT conducted counterinsurgency operations that reduced insurgent violence and improved security throughout Ninewa province.<sup>97</sup> The story of the 172<sup>nd</sup> SBCT shares some of the elements of the Al Anbar case: development of nuanced situational awareness through extensive outreach to the local tribes; gradual

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<sup>94</sup> For early reporting on the background of the U.S. counterinsurgency campaign in Mosul, see Robert D. Kaplan, ‘The Coming Normalcy’, *The Atlantic* (April 2006), pp. 72-81.

<sup>95</sup> See, for example, Anthony Shadid, ‘Troops Move to Quell Insurgency in Mosul’, *Washington Post*, November 17, 2004, p. A1.

<sup>96</sup> Interview conducted by the author with Colonel Michael Shields, USA, [former brigade commander, 172<sup>nd</sup> SBCT], October 15, 2007, in the Pentagon, Washington DC.

<sup>97</sup> For examples, see Steve Fainaru, ‘In Mosul, A Battle “Beyond Ruthless”’, *Washington Post*, April 13, 2005, p. A1; Nelson Hernandez, ‘Mosul Makes Gains Against Chaos’, *Washington Post*, February 2, 2006, p. A14.

standup of indigenous police forces; and the slow but steady increase in ISF capabilities.

The Mosul case features major differences that flowed from the use of the Stryker brigades, which were some of the first ‘transformed’ units in the Army. The Stryker units featured an integrated command and control system that was supposed to improve situational awareness. This system, called ‘blue force’ tracking, linked all deployed vehicles into a single network. Personnel in the Stryker could communicate with other vehicles and headquarters elements via classified e-mail, which was linked to intelligence and sensor feeds. These capabilities were fused together in what amounted to an ad-hoc network, integrating intelligence, command and control nodes at higher headquarters with the tactical units conducting counterinsurgency operations.<sup>98</sup> The network involved participants from wide variety of civilian and military organizations.

The structure of the innovation process in the Mosul case is similar to Anbar in that it began as a series of small, iterative steps that built momentum over time. In Mosul, however, the process unfolded differently in part due to the different characteristics of the Stryker brigades and the capabilities they brought to the battlefield. These capabilities bounded the process of tactical adaptation in interesting ways that emphasized the transformational technologies used by the brigades. These technologies were harnessed to great effect – aided by informal social networks within the Stryker brigades and the myriad outside organizations involved in the counterinsurgency campaign. The role of these informal networks in the process of innovation will be highlighted in the case study.

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<sup>98</sup> Early details of the SBCT performance in Mosul is Ren Angeles, ‘Examining The SBCT Concept and Insurgency in Mosul, Iraq’, *Infantry Magazine* (August 2005).

## **Chapter Organization**

The next chapters will discuss the following:

- Chapter Two will provide the theoretical framework surrounding the issue of change and adaptation in military organizations. It will also survey relevant literature in the organizational behavior literature that I believe is particularly germane to the research question and hypothesis.
- Chapters Three, Four and Five will present the case studies. Each chapter will present the empirical data assembled from which inferences will be drawn.
- Chapter Six will conclude this dissertation, drawing inferences from the case studies using inductive analysis. It also will determine the relevance the inferences to prevailing theories that describe the sources of wartime military innovation. It will then analyze the implications of the findings for strategy and policy.

## CHAPTER II

### THEORIES OF MILITARY INNOVATION

What are the explanations for successful wartime military innovation in Iraq? This chapter will start out by examining the explanatory power of three arguments that emphasize top-down processes of military innovation relative to the experience of the United States military in Iraq from 2005-2007. After reviewing the relevance of these frameworks, the remainder of the chapter will review alternative explanations for military innovation that focus on organically-generated, bottom-up change. This literature will be used to frame the processes of bottom-up innovation and change in Iraq as proposed in chapter I. This chapter does not seek to propose a new theory of military innovation in wartime, but rather to explore existing literature that can help to draw inferences on the dynamics of wartime innovation evidenced by the case studies.

This chapter begins with an examination of three frameworks for top-down military innovation in the literature as offered by Barry Posen, Deborah Avant, and Stephen Peter Rosen. Each of these authors offers variations on the top-down process of military innovation.<sup>1</sup> Posen and Avant suggest the importance of forces external to military organizations, while Rosen focuses on intra-organizational sources of military innovation. These explanations emphasize the importance of processes that flow down hierarchically structured organizations – all assume that authority to generate innovation flows from points of leadership in the organizational and governmental hierarchy down to the organization's executing elements. Many of the

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<sup>1</sup> Posen, *Sources of Military Doctrine*, Avant, *Political Institutions*, and Rosen, *Winning the Next War*.



points describing Rosen's argument on the sources of military innovation were initially addressed in chapter I.

### **Innovation and Military Organizations**

The idea that militaries adapt to changing battlefield conditions is neither startling nor new, being in many respects implicit in the idea of strategic interaction itself and in the universal ambition of military organizations to outdo each other in combat. A rich literature exists that seeks to explain how and why militaries fight the way that they do, and what causes them to change that behavior on the battlefield.<sup>2</sup> It is not surprising that much of this literature views military innovation as the result of a process that flows from the top of the organizational structure down to its executing elements – although the arguments covered in the next section emphasize different dependent variables as affecting this fundamental process. Military institutions are, after all, arms of the state and are charged with its protection. These institutions are also undeniably hierarchically structured organizations – structures that have existed since the dawn of organized warfare. In mature democracies, authority to protect the state is delegated from the state's political leaders to its military institutions.<sup>3</sup> Within these institutions, the military leadership uses the delegated authority to operationalize the political leadership's objectives through a series of plans, policies and programs that are in turn delegated down the organizational hierarchy for implementation. Authority logically flows from the top down in this system, a process that involves two closely related elements: (1) the military objectives and priorities of the state as

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<sup>2</sup> See citations in chapter I, footnote 15.

<sup>3</sup> Samuel Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations* (Cambridge, MA: Belknap Press of Harvard University Press, 1957).

defined by its political leaders based on their perception of threats to the state; and (2) the internal organizational steps taken by military institutions to execute the wishes of the political leadership. These two steps in part explain why scholars addressing innovation in military organizations assign causality for that innovation either to factors external to the state or factors internal to the state. A similar divide is also reflected in much of the theoretical literature in international relations and security studies.

International relations theorists in the 'realist' tradition argue that states respond rationally to threats to their security, carefully weighing the costs and benefits of various courses of action to protect the state. Under this argument, the behavior of organizations charged with protecting the state generally is consistent with this overarching priority.<sup>4</sup> As the realists see it, threats to state security invariably stem from factors external to the state, such as rivals in the anarchical international system seeking power and influence. In response to external threats, states arm themselves and build military organizations to protect the state and to serve as instruments to exercise influence over friends and rivals in their own quest for power. In this argument, the actions of military institutions flow more or less logically. As leaders of the state perceive threats to state security, they direct military institutions to act in ways that address the threat and protect the state; and when they perceive those threats

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<sup>4</sup> For statements on realist thought see, Hans Morgenthau, *Politics Among Nations* (New York: Knopf, 1966); E.H. Carr, *Twenty Years' Crisis: 1919-1939* (New York: Perennial Press, April 1964); George Kennan, *American Diplomacy, 1900-1950* (New York: New American Library, 1951); and George Kennan, *Realities of American Foreign Policy* (Princeton NJ: Princeton University Press, 1954). For more recent treatments of realism and neorealism see the scholarship of Kenneth Waltz, *Theory of International Politics* (New York: McGraw Hill, 1979); Also see Waltz, *Man, the State and War* (New York: Columbia University Press, 2001); John J. Mearsheimer, *The Tragedy of Great Power Politics* (New York: W.W. Norton, 2003); Stephen M. Walt, *The Origins of Alliances* (Ithaca: Cornell University Press, 1990); and Alexander Wendt, *Social Theory of International Politics* (Cambridge University Press, 1979).

to state security to be undergoing change, they consequently direct military institutions to take steps to address the new threats. These steps, in turn, produce innovation by military organizations.

A variant of this approach accepts that military institutions act in ways to protect the state, but assigns a more pronounced role to inter- and intra-organizational processes in explaining the ways in which these institutions execute the wishes of their political masters. This approach argues that a state's pursuit of security cannot be fully understood without grasping the role that its own internal organizations play in shaping its behavior, as well as the impact that organizational characteristics can have on the process of delivering outputs that respond to external threats.<sup>5</sup> Military innovation is thus seen as being affected by the important intervening variable of organizational and bureaucratic behavior. This latter explanation is linked to the 'bureaucratic politics' approach of understanding state behavior pioneered by Graham Allison, Morton Halperin, and others.<sup>6</sup>

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<sup>5</sup> Graham Allison and Philip Zelikow, *Essence of Decision: Explaining the Cuban Missile Crisis*, 2nd Ed. (New York: Longman, 1999); Graham Allison and Morton Halperin, 'Bureaucratic Politics: A Paradigm and Some Policy Implications', *World Politics* 24 (1972), pp. 40-79; Francis E. Rourke, *Bureaucracy and Foreign Policy* (Baltimore: Johns Hopkins University Press, 1972); Jerel A. Rosati, 'Developing a Systematic Decision-Making Framework: Bureaucratic Politics in Perspective', *World Politics* 33 (1981), pp. 234-252; Jack Levy, 'Organizational Routines and the Causes of War', *International Studies Quarterly* 30 (1986), pp. 193-222; Roger Hilsman, *The Politics of Policy Making in Defense and Foreign Affairs*, 3rd Ed. (Englewood Cliffs, NJ: Prentice Hall 1993). A negative critique of the Allison-Halperin argument is provided in Robert Art, 'Bureaucratic Politics and American Foreign Policy: A Critique', *Policy Sciences* 4 (1973), pp. 467-490; Stephen D. Krasner, 'Are Bureaucracies Important? Or Allison Wonderland', *Foreign Policy* 7 (1972), pp. 159-179. More recent treatment of these issues are in David A. Welch, 'The Organizational Process and Bureaucratic Politics Paradigms: Retrospect and Prospect', *International Security* 17 (1992), pp. 112-146; Paul T. Hart and Uriel Rosenthal, 'Reappraising Bureaucratic Politics', *Mershon International Studies Review* 42 (1998), pp. 233-240; J. Garry Clifford, 'Bureaucratic Politics', *The Journal of American History* 77 (1990), pp. 161-168; Edward Rhodes, 'Do Bureaucratic Politics Matter? Some Disconfirming Findings from the Case of the U.S. Navy', *World Politics* 47, No. 1 (Oct. 1994), pp. 1-41; Daniel Drezner, 'Ideas, Bureaucratic Politics, and the Crafting of Foreign Policy', *American Journal of Political Science* 44 (2000), pp. 733-749.

<sup>6</sup> Allison and Zelikow, *Essence of Decision*. See cites above in note 5.

This dissertation aims to neither resolve the differences between these rival explanations of state behavior and the actions of its military organizations, nor to determine whether internal or external explanations are superior. However, it does recognize that the actual application of state military power on the battlefield undeniably happens through military organizations structured as complex, hierarchical bureaucracies. As a consequence, altering organizational performance on the battlefield undeniably means changing the behavior of large complex organizations. As emphasized by Stephen Peter Rosen, ‘...no one has yet explained how nations can wage war under modern conditions without operating with and through the huge bureaucracy that is the American military. The problem of military innovation is necessarily a problem of bureaucratic innovation.’<sup>7</sup>

Prevailing wisdom in the literature on bureaucracy and organizational behavior argues that military organizations – like most entrenched bureaucracies – are change-averse. This is to some extent a function of the institutional maturity of most, and certainly of the best, military organizations, which over time develop established behaviors and habits of thought that inhibit innovation in the name of preserving traditional values and practices that have proven their worth in the past. The military departments in the United States (Army, Navy, Air Force, and Marine Corps<sup>8</sup>) provide the quintessential example of this phenomenon. These military departments are all mature, entrenched bureaucracies<sup>9</sup> that consume over half a trillion dollars annually by some estimates – more than the military spending of most of the rest of the world combined. Some

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<sup>7</sup> Rosen, *Winning the Next War*, p. 2.

<sup>8</sup> The Marine Corps is technically part of the Navy – not its own military department. Most observers would agree, however, that the Marine Corps effectively constitutes its own distinct organizational entity not unlike its sister military departments.

<sup>9</sup> As an example of the evolution of bureaucratic behavior in the United States Air Force, see Walter J. Boyne, *Beyond the Wild Blue: A History of the U.S. Air Force* (New York: St. Martins Press, 1997).

argue that these organizations are motivated primarily by the need to preserve their budgets, organizational identity or ‘essence,’ traditional missions, weapons programs, and the institutional values that are central to their respective identities.<sup>10</sup> These core values effectively constitute a series of bureaucratic imperatives that drive risk-averse and change-resistant behavior and, in parallel, a thirst for money that seems forever unquenched.<sup>11</sup> It’s fair to say that the U.S. military departments all exhibit this sort of behavior – particularly when it comes to their cherished weapons programs. The Air Force, for example, has successfully convinced its political patrons in the Executive Branch and the Congress to pay hundreds of billions of dollars for the F-22 fighter despite the fact most advanced states have given up on the idea of building advanced combat aircraft. In other words, it’s difficult for the Air Force to argue that the new capabilities represented by the F-22 are necessary as a response to a tangible external threat. Alas, the Air Force is not alone. For its part the Navy continues to spend billions of dollars on huge new aircraft carriers while simultaneously emphasizing the central doctrinal importance of maritime security – a mission wholly unsuited for these large platforms. In both cases (the F-22 and aircraft carriers), these platforms are believed central to institutional identity and values – despite their questionable relevance to the security environments in which they will operate.<sup>12</sup> These are just two obvious examples of the powerful role played by organizational imperatives in

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<sup>10</sup> Morton Halperin, *Bureaucratic Politics and Foreign Policy* (Washington DC: Brookings 1974), pp. 26-63; David C. Kozak and James M. Keagle, Eds., *Bureaucratic Politics and National Security: Theory and Practice* (Boulder: Lynne Rienner 1988). The same principles are believed to apply to public and private bureaucracies. See James Q. Wilson, *Bureaucracy: What Government Agencies Do and Why They Do It* (New York: Basic Books, 1989); Anthony Downs, *Inside Bureaucracy* (Boston: Little Brown, 1967); Michel Crozier, *The Bureaucratic Phenomenon* (Chicago: University of Chicago Press, 1964); and Richard Cyert and James March, *A Behavioral Theory of the Firm* (Englewood Cliffs, New Jersey: Prentice Hall, 1963).

<sup>11</sup> Kurt Lang, ‘Military Organizations’, in James G. March, *Handbook of Organizations* (Chicago: Rand McNally & Co., 1965), pp. 838-878.

<sup>12</sup> In the Air Force’s case, it has essentially given ‘early out’ to 40,000 young officers – paying them to leave the service early in order to save money to pay for the F-22. The Navy is also letting officers retire prematurely to pay for hardware. See Scott Canon, ‘Air Force, Navy Downsizing to Pay for Hardware’, *Kansas City Star*, November 14, 2007, <http://www.freerepublic.com/focus/news/1925589/posts>, accessed January 5, 2008.

shaping institutional behavior. Needless to say, instituting dramatic change and innovation of any sort in entrenched military bureaucracies is hence believed to be extremely difficult.

In the United States, the political calendar adds another intervening variable that plays an undeniable role in the process of organizational innovation. American military institutions are sophisticated domestic political actors that service a variety of stakeholders and constituencies with a diverse array of interests – not all of which are in agreement. For example, the Congress occasionally forces the Military Departments to purchase unwanted equipment due to the interest of the Congress in defense spending in their districts.<sup>13</sup> The need to service their diverse stakeholders provides an added shaping factor that militates against dramatic changes in organizational behavior and action by military institutions. The need to service these multiple constituencies promotes a ‘lowest common denominator’ approach as entrenched bureaucracies consider the prospect of change. Further, when institutional leadership confronts any unwanted ‘new’ defense strategy requiring dramatic change, it realizes that the new strategy may last only as long as the current administration remains in office.<sup>14</sup> The four-year presidential election cycle thus provides military bureaucracies with a systemic incentive to delay any unwanted organizational, programmatic, or other actions required by the execution of the new strategy. Simply

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<sup>13</sup> The V-22 tilt rotor aircraft used by the Marine Corps is a classic example of this phenomenon, which exists to this day only because Congress forced it down the Marine Corps’ and Defense Department’s throat over the opposition of both organizations.

<sup>14</sup> Frederick M. Downy and Steven Metz, ‘The American Political Culture and Strategic Planning’, *Parameters* 18 (1988), pp. 34-42; Steven Casey, ‘Selling NSC-68: The Truman Administration, Public Opinion, and the Politics of Mobilization’, *Diplomatic History* 29 (2005), pp. 655-690; Allan C. Stamm III, *Win Lose or Draw: Domestic Politics and the Crucible of War* (Ann Arbor: University of Michigan Press, 1999).

put, military bureaucracies in the United States are skilled at waiting out their political masters in order to preserve cherished programs and budgets.<sup>15</sup>

The debate over the relative importance of external and internal determinants of state behavior, the impact of these determinants on organizational behavior, and the subsequent sources of battlefield innovation is germane to this dissertation. In assigning causality to the process of innovation within military organizations, scholars typically look at military doctrine as a vital indicator in judging whether internal or external factors are shaping their battlefield performance. As noted in Chapter I, military doctrine reflects formalized institutional knowledge often gained from historical experience that sets important parameters for preparing military organizations to fight. Doctrine represents the institutional operationalization (or not) of the wishes of its political and organizational leadership for its executing arms on the battlefield. Doctrine is hence believed by some to be an important indicator of institutional learning and military innovation. One school of thought emphasizes the importance of the security environment and the subsequent calculations that political leaders make to protect the state and further its influence and power over rivals.<sup>16</sup> A second school emphasizes processes and variables that are internal to the state itself, which produce institutions and supporting military doctrine that shape the way

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<sup>15</sup> Michael E. Brown, *Flying Blind: The Politics of the U.S. Strategic Bomber Program* (Ithaca, NY: Cornell University Press, 1992); Daniel Wirls, *Buildup: The Politics of Defense in the Reagan Era* (Ithaca, NY: Cornell University Press, 1992); Thomas McNaugher, *New Weapons, Old Politics: America's Military Procurement Muddle* (Washington DC: Brookings, 1989), pp. 123-150; Thomas McNaugher, 'Weapons Procurement: The Futility of Reform', *International Security* 12 (1987), pp. 63-104; Morton Halperin and Arnold Kanter, Eds., *Readings in American Foreign Policy: A Bureaucratic Perspective* (Boston: Little and Brown, 1973); James H. Lebovic, 'Riding Waves or Making Waves: The Services and the U.S. Defense Budget, 1981-1993', *American Political Science Review* 88 (1994), pp. 839-852; Philip A. Odeen, 'Organizing for National Security', *International Security* 5, (1980), pp. 111-129.

<sup>16</sup> As argued by Posen, *The Sources of Military Doctrine*.

military organizations fight.<sup>17</sup> While these contending approaches may point to the impact of different independent variables on the character of military doctrine, both essentially agree that institutional performance and innovation is strongly influenced by factors that start at the top of the organizational hierarchy and work their way down to the executing elements. ‘Top,’ in this context means senior leadership of military organizations, as well as organizations that can lie outside the military chain of command, but which exercise influence over institutional behavior.

### **Top-Down Explanations of Military Innovation**

In his landmark work, *The Sources of Military Doctrine*, Barry Posen made one of the first systematic attempts to explain the relationships between grand strategy, military doctrine, and the behavior of military organizations in combat.<sup>18</sup> Using battles fought at the outset of World War II as case studies, Posen sought to explain variations in the military doctrine and the resultant ways of fighting between the militaries from France, Great Britain and Germany. Nesting his explanatory framework in realist and neorealist international relations theory, Posen argued that military innovation stems from intervention by civilian political leadership that forcefully wrenched military institutions into activities that address the new threat. In his case studies, Posen showed that each of these states perceived its strategic circumstance somewhat differently, which, in turn, led to different military doctrines and defense postures.

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<sup>17</sup> Kier, *Imagining War*, Zisk, *Engaging the Enemy*, and Avant, *Political Institutions*, all emphasize the role of internal factors in shaping the character of the state’s military institutions and the resultant military doctrine that structures how these institutions fight. Zisk forcefully argues that military institutions *are* attuned to the external environment and the doctrine-methods of fighting of adversaries. She argues that the case of the Soviet military suggests that military institutions will explore changes to doctrine internally when the institution believes it necessary to counter changes in the doctrine of its adversaries. See Zisk, pp. 1-10. Kier emphasizes the role that organizational culture can play in shaping military doctrine in *Imagining War*, pp. 21-37.

<sup>18</sup> Posen, *The Sources of Military Doctrine*.



France's military posture, for example, was essentially defensive in nature – a product of the country's strategic circumstance and the desire of its leadership to forestall another German invasion of its territory. On the other hand, Germany's military posture and supporting doctrine emphasized an offensive, aggressive scheme of operations that reflected its leadership's appreciation that the country was bordered by two powerful hostile states. In the interwar period, Germany built an Army and scheme of operations designed to quickly defeat one of those adversaries before turning to the other. Posen argued that the process of innovation in these states was assisted, or facilitated, by the emergence of dynamic 'maverick' senior military officers. These officers provided civilians with the technical knowledge and substantive expertise needed to help flesh out and implement the ideas of the civilian leadership. Posen found little evidence in his case studies of internally generated doctrinal and organizational innovation within the military institutions themselves. This led him to conclude that:

...military organizations will seldom innovate autonomously, particularly in matters of doctrine. This should be true because organizations abhor uncertainty, and changes in traditional patterns always involve uncertainty. It should also be true because military organizations are very hierarchical, restricting the flow of ideas from the lower levels to the higher levels. Additionally, those at the top of the hierarchy, who have achieved their rank and position by mastering the old doctrine, have no interest in encouraging their own obsolescence by bringing in a new doctrine. Thus innovation should occur mainly when the organization registers a large failure, or when civilians with legitimate authority intervene to promote innovation.<sup>19</sup>

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<sup>19</sup> Posen, *The Sources of Military Doctrine*, p. 224.

His findings fit within balance-of-power realist and neorealist international relations theory, which argues that states exist within an anarchical, self-help system in which they all seek to maximize their influence and power over rivals.<sup>20</sup> Consistent with realist theory, Posen argued that civilian leaders are constantly evaluating threats to state power – as opposed to entrenched military leaders who are generally risk averse and oriented towards maintenance of the institutional status quo, even at the risk of failing to adapt to external change. When the civilian leadership perceived that the strategic environment had produced new threats that changed the states’ strategic circumstance, those leaders directed change in the states’ military institutions – for the most part successfully in the end. One of Posen’s strongest case studies illustrating this point is his analysis of the role played by senior civilians in forcing the Royal Air Force (RAF) to place more emphasis on fighter defenses in England during the interwar period. Posen’s military maverick, Air Marshall Sir Hugh Dowding, emerged to work with the civilian leadership in spearheading efforts within the RAF to build the capacities of Fighter Command during the 1930s. With the support of the civilian leadership, Dowding overcame internal opposition within the RAF that wanted instead to focus upon strategic bombing. Dowding’s efforts proved crucial to building an integrated system of air defense that positioned the RAF to defeat the Luftwaffe in the Battle of Britain in the summer and fall of 1940 – a turning point in the war.<sup>21</sup>

Deborah Avant offers a variation on Posen’s argument for top-down battlefield innovation, placing more emphasis on inter-governmental organizational relationships as sources of both resistance and support for military innovation. While agreeing with Posen that political leaders play important roles defining threats to the state, she

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<sup>20</sup> See footnote 2 in this chapter for some of the foundational works in realism.

<sup>21</sup> Posen, *The Sources of Military Doctrine*, pp. 171-176.

emphasizes the role that factors internal to state institutions play in shaping military doctrine and battlefield performance.<sup>22</sup> Avant employs institutional theory to explain how militaries are likely to respond to different operational environments. Institutional theory posits that governments act in ways that reflect the priorities of their system of internal organizational incentives.<sup>23</sup> Institutions seek mainly to preserve their influence and prestige, according to the theory. Avant's approach draws upon the principal-agent literature to build her argument,<sup>24</sup> which focuses on the delegation of authority between organizations to take advantage of the task specialization and knowledge asymmetry provided by specific communities in a contractual relationship.<sup>25</sup> Just as a patient contracts with a doctor, and a client with a lawyer, based on expectations of knowledge and expertise, Avant suggests that military organizations similarly act as agents for their political masters (principals). These principals in turn establish a reward system to induce desired behavioral norms and competencies and, if necessary, behavioral changes in their military agents.

Under this theory, military institutions respond to their principals' needs by taking steps to ensure that they can meet the needs specified by the principal. They do this by

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<sup>22</sup> Avant, *Political Institutions*, pp. 1-20.

<sup>23</sup> James G. March and Johan P. Olsen summarize the field comprehensively in 'The New Institutionalism: Organizational Factors in Political Life', *The American Political Science Review* 78 (1984), pp. 734-749; Terry M. Moe and Scott A. Wilson, 'Presidents and the Politics of Structure', *Law and Contemporary Problems* 57 (1994), pp. 1-44; Terry M. Moe, 'Politics and the Theory of Organization', *Journal of Law, Economics & Organization* 17 (1991), pp. 106-129; Terry M. Moe, 'The New Economics of Organization', *American Journal of Political Science* 28 (1984), pp. 739-777.

<sup>24</sup> Stephen A. Ross, 'The Economic Theory of Agency: The Principal's Problem', *American Economic Review* 63 (1973), pp. 134-139; William Rogerson, 'The First Order Approach to Principal-Agent Problems', *Econometrica* 53 (1985), pp. 1357-1367; Kathleen M. Eisenhardt, 'Agency Theory: An Assessment and Review', *The Academy of Management Review* 14 (1989), pp. 57-74; David Sappington, 'Incentives in Principal Agent Relationships', *Journal of Economic Perspectives* 5 (1991), pp. 45-66; Richard M. Watterman and Kenneth J. Meier, 'Principal Agent Models: An Expansion?' *Journal of Public Administration Research and Theory* 8 (1998), pp. 173-202; V. Nilakant and Hayagreeva Rao, 'Agency Theory and Organizations: An Evaluation', *Organization Studies* 15 (1994), pp. 649-672.

<sup>25</sup> See for example Mancur Olson, *The Logic of Collective Action* (Cambridge: Harvard University Press 1971).

establishing an internal system of incentives in the form of promotion policies that reward performance in the competencies desired by the principal. This ensures that the organization as a whole continues to receive the patronage and rewards of the political leadership, which, in the American case, is provided in the form of money (and lots of it). If the reward system becomes mismatched with demands of the operational environment, organizational performance will inevitably suffer. Avant argues that the United States Army failed in Vietnam because its internal reward system remained focused on fighting the great conventional battle in Europe against the Soviet Union. Counterinsurgency competencies needed to succeed in Vietnam were not deemed important to institutional survival and hence were not developed.<sup>26</sup> As noted by Avant, promotions within the Army during the period came not through demonstrating skills fighting the Viet Cong. Instead the institutional incentive system remained structured to reward competence in what was deemed the more important mission of preventing the Soviet Army from overrunning Europe. According to her argument, the Army could have succeeded in Vietnam if its internal incentive system had been reoriented to reward competency in counterinsurgency. She concludes that the institutional leadership in the Army decided against this course of action due to its institutional preferences for fighting conventional war – competencies for which it was assured of receiving the continued patronage of an important principal (the U.S. Congress).

Despite their differences, however, both Avant and Posen implicitly assume that the outputs of military organizational structures reflect the choices of leaders exercising authority in a process that is essentially top down, and which functions rationally in

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<sup>26</sup> Avant, 49-75.

accordance with the nature of the hierarchy. They subscribe to Kurt Lang's straightforward proposition that 'The hierarchical structure exemplified by the military chain of command postulates a downward flow of directive.'<sup>27</sup> For example, Posen suggests that military institutions will inevitably reflect the wishes of their political masters. While he acknowledges that military institutions are by nature conservative and resist change, he proposes that forceful civilian leadership will ultimately reorient military doctrine and organizational capabilities in the ways sought by the civilian leadership. Avant's main difference with Posen is that she recasts the nature of the relationship between the military and the civilian leadership. Avant also adds Congress to the mix, due to the instrumental role it plays in maintaining the military's external reward system. With ultimate control over money, Congress exerts a powerful additional influence on the principal-agent delegation by effectively introducing an additional layer of principal influence over the agent's actions. Avant agrees with Posen that military institutions are change-averse but, using principal-agent theory, suggests that military institutions invariably will act to protect their institutional survival by keeping their external benefactors happy. When the benefactors decide to alter and/or change the nature of the principal-agent relationships, she argues that this incentive system guarantees that the institutions will change to ensure continued access to money and patronage. Avant operationalizes the institutional behavior by looking at internal promotion policies, which are meant to build core competencies to ensure that the institution's role in the contractual arrangement can be fulfilled.

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<sup>27</sup> Lang, p. 852.

Stephen Peter Rosen takes a different approach in explaining the behavior of military organizations. He emphasizes the peacetime role of intra-bureaucratic dynamics within military institutions in shaping the development of new organizational capabilities for the battlefield. He agrees with Avant that the internal system for managing promotions within the military service can be an important determining factor in shaping the direction of military change. While Posen and Avant argue that civilian intervention is critical in the process of military innovation, Rosen believes that military institutions will innovate on their own and need not depend on outside intervention to stimulate the process.<sup>28</sup> As previously addressed in chapter I, Rosen points to the emergence of internal leaders within military institutions that attract resources and talent in the development of new ways of fighting. Rosen argues that the internal winners of the intra-organizational process, in turn, direct the process of organizational innovation.

Each of these arguments emphasizes different factors as being critical to the process of military innovation. Importantly, however, all three assume that authority flows down the governmental hierarchy in a reasonably predictable process and that organizational output will be characterized by a degree of consistency with the wishes of senior authority – whether that authority stems from within the organization or some other related institution.

### **Iraq and Top-Down Explanations of Military Innovation**

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<sup>28</sup> As also argued by Zisk, *Engaging the Enemy*.

What would these arguments predict about the U.S. military performance in Iraq after Saddam was toppled and the insurgency gathered momentum in 2004 and 2005? In some respects, the Iraq war appears tailor-made to test Posen's argument about the role that the civilian leadership's perceptions of the strategic environment play in shaping the doctrine and force structure of its military organizations. President Bush and his senior civilian leadership clearly judged that the 9/11 attacks represented a broad change in the security environment that constituted a fundamental and dramatically new threat to the state. Reflecting this belief, the Bush administration released a bevy of strategy documents describing the new threats and called upon military institutions to realign their capabilities to address them. As part of its case, the Bush administration continually asserted after 9/11 that United States was in fact engaged in a war 'that is irregular in nature' – the so-called 'long war.'<sup>29</sup> Parrotting the verbiage of the 2001 *Quadrennial Defense Review (QDR)*, the 2006 *QDR* emphasized that the adversaries in the conflict 'are not traditional conventional military forces, but rather dispersed, global terrorist networks that exploit Islam to advance radical political aims.'<sup>30</sup> These adversaries also allegedly seek unconventional weapons to affect mass casualty attacks. Adapting the entire Defense Department organizational structure to conduct irregular warfare constitutes one of the main 'fundamental challenges' facing the entire defense and interagency establishment, according to the *QDR*.<sup>31</sup>

Posen's argument initially appears to closely fit the situation in the United States between the 9/11 attacks and the invasion of Iraq. Civilians believed that threats to the

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<sup>29</sup> *Quadrennial Defense Review Report*, Department of Defense, Washington DC, February 6, 2006, p.

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<sup>30</sup> *Ibid.*

<sup>31</sup> *Ibid.*, pp. 63-73.

state had changed dramatically, which necessitated that military institutions change their doctrine and way of fighting.<sup>32</sup> Virtually all the Bush administration strategy documents called for the nation's military to prepare for terrorism, irregular warfare, and counterinsurgency – exactly the kind of environment that would emerge in Iraq after Saddam's overthrow.<sup>33</sup> Other circumstances of this period also seem to strongly support Posen's argument. During preparations for the Iraq invasion it seemed clear that strong, aggressive civilian leadership had exercised exactly the kind of strong control over military institutions suggested by Posen's model. The civilian leadership clearly forced the military into a war for which it lacked enthusiasm and then forced it to substantially alter the invasion plan by reducing the number and types of troops for the operation.<sup>34</sup> As has been chronicled elsewhere, Defense Secretary Donald Rumsfeld sought to unveil a new American way of war in the invasion that emphasized speed, maneuver, and long-range precision-guided munitions – all capabilities applied under a systems-based scheme of warfare known as 'effects-based operations.' After initially opposing Rumsfeld's ideas, the military eventually produced an invasion plan that met Rumsfeld's demands. The invasion force's quick advance into Baghdad seemed to confirm Rumsfeld's vision of a new American way of war by a 'transformed' American military. As chronicled in this dissertation, however, the critical part of the 'transformation' process came not during the invasion but afterwards in the chaos that ensued after Saddam's armies had been defeated.

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<sup>32</sup> James J. Wirtz and James A. Russell, 'U.S. Policy on Preventive War and Preemption', *Nonproliferation Review* 10, No. 1 (Spring 2003), pp. 113-123.

<sup>33</sup> Defined as '... a form of warfare that has as its objective the credibility and/or legitimacy of the relevant political authority with the goal of undermining or supporting that authority. Irregular warfare favors indirect approaches, though it may employ the full range of military and other capabilities to seek asymmetric advantages, in order to erode an adversary's power, influence and will.' The definition comes from *The Quadrennial Defense Review Irregular Warfare Roadmap* cited in Statement by Brigadier General Otis G. Mannon, USAF, Deputy Director J-3., Joint Staff, Testimony before the 109th Congress, Committee on Armed Services Subcommittee on Terrorism, Unconventional Threats and Capabilities, United States House of Representatives, September 27, 2006, p. 4.

<sup>34</sup> As covered in Bob Woodward, *Plan of Attack*.



Posen's argument would suggest that the military should have produced a new doctrine and/or directives to align its capabilities with the threat environment as defined by the civilian leadership. Interestingly, this actually happened in 2004 and 2005 when the Defense Department produced a *DoD Directive 3000.05, Military Support for Stability, Security, Transition, and Reconstruction (SSTR) Operations* that assigned specific responsibilities to the Military Departments on the battlefield after the conclusion of conventional military operations. I argue that these directives had little if any direct impact in the field. This is perhaps unsurprising, since the promulgation of the directives happened as forces were engaged with the enemy. Predictably, none of the military officers interviewed for the case studies linked their actions on the battlefield to the directive. The irony of *DoD Directive 3000.05* is that despite the fact that the State Department received ultimate responsibility for post-conflict reconstruction activities, in Iraq the post-conflict reconstruction mission inevitably fell to battalion and brigade military commanders that executed the mission reasonably well -- as chronicled in this dissertation's case studies. In Iraq, at least, the real intent of the directive -- to transfer post-conflict responsibilities to the State Department -- went unrealized at least in the period studied in this work.

Despite what could be characterized as 'headquarters-level activity' that called for the development of COIN competencies in a veritable flood of strategy documents and directives, the United States conventional military nevertheless remained woefully unprepared to conduct irregular warfare when it invaded Iraq in March 2003.<sup>35</sup>

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<sup>35</sup> Ricks, *Fiasco*, Gordon and Trainor, *Cobra II*; Rajiv Chandrasekaran, *Imperial Life in the Emerald City: Inside Iraq's Green Zone* (New York: Knopf, 2006); Larry Diamond, *Squandered Victory: The American Occupation and the Bungled Effort to Bring Democracy to Iraq* (New York: Owl Books, 2005).

Indeed, no new joint military doctrine on fighting irregular warfare and counterinsurgency emerged until five years after the 9/11 attacks. By the time this new doctrine emerged, it served only to codify the emerging best practices already in use by battlefield commanders in Iraq.

It is difficult to apply Rosen's framework to the Iraq situation because the United States has ostensibly been 'at war' continuously since the 9/11 attacks and the invasion of Afghanistan a month later. To the extent that claims about a perpetual 'war on terror' are taken seriously, Rosen's argument about the peacetime sources of military change don't technically apply to the period covered in this dissertation. While Rosen is reluctant to point to doctrine as a source of innovation, he generally believes that militaries will employ their combat arms on the battlefield in ways that reflect past practice – unless there has been peacetime innovation. Rosen believes that innovation in war won't happen until the institutions charged with prosecuting the war are presented with evidence that their approach is not achieving the desired strategic objective. Rosen argues that this 'evidence' takes the form of indicators of military effectiveness which demonstrate battlefield failure. Innovation will happen in war when new strategic measures of effectiveness are developed to better match military operations and strategic objectives, according to Rosen. Applying this argument to the American military experience in Iraq is problematic. As previously noted, the United States had no operative doctrine around which to structure counterinsurgency operations in Iraq, and thus had no established metrics through which to judge the strategic effectiveness of military operations. In fact, there was widespread confusion

about the other strategic objectives associated with the Iraq invasion and the role that military forces were supposed to play once Saddam was gone.<sup>36</sup>

Confusion on this critical point emerged in the contentious hearings during the September 2007 congressional testimony of General David Petraeus, commander of the Multi-National Forces-Iraq, and Ambassador Ryan Crocker, U.S. Ambassador to Iraq.<sup>37</sup> The Petraeus testimony drew upon a series of quantitative metrics meant to represent organizational ‘effects’ which were supposed to demonstrate the positive impact that had resulted from increased troop levels in Iraq. His testimony centered on the presentation of data that measured weekly attack trends, trends in ethnic and sectarian violence, arms caches found, employment of improvised explosive devices (IEDs) against U.S. forces, and attacks against U.S. forces. The data all demonstrated decreasing trend lines in each category and suggested a causal link between organizational outputs and the operational environment in Iraq. Critics of the testimony suggested that the data, while interesting, had nothing to do with real ‘strategic effect.’ They argued that the only meaningful strategic measure of effectiveness centered upon the process of political reconciliation in Baghdad, by which a unified and inclusive national government capable of administering the country must be created. Unsurprisingly, neither Crocker nor Petraeus could offer any metrics to measure this effect and satisfy their critics. The logic of Rosen’s argument suggests that, absent an agreed set of new metrics of effectiveness, the military would

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<sup>36</sup> James A. Russell, ‘Strategy, Security, and the War in Iraq: The United States and the Gulf in the 21st Century’, *Cambridge Review of International Affairs* 18, No. 2 (July 2005), pp. 283-301.

<sup>37</sup> Statement of Ambassador Ryan Crocker, United States Ambassador to Iraq before a Joint Hearing of the Committee on Foreign Affairs and the Committee on Armed Services, September 10, 2007; Report to Congress on the Situation in Iraq, General David H. Petraeus Commander, Multi-National Force-Iraq September 10-11, 2007. Petraeus presented a briefing during his testimony titled ‘Multinational-Force Iraq: Charts to Accompany the Testimony of General David H. Petraeus.’ The flavor of the debate over measures of effectiveness is captured in Karen De Young and Thomas Ricks, ‘The General’s Long View Could Cut Debate Short’, *Washington Post*, September 11, 2007, p. A01.

adapt tactically to its environment, but would produce no lasting institutional innovation, and no fundamental departures from the ways in which combat arms were habitually applied on the battlefield. I argue that this prediction was not borne out in the units examined during the period of this study.

Avant's argument also matches up poorly against the American battlefield performance in the Iraq war. Avant's principal-agent argument predicts that battlefield performance depends on the internal incentive structure within the military – a structure that reflects the institution's contractual obligation to its civilian masters (principals). Her approach would argue that direction from the civilian authorities to prepare for irregular warfare would be insufficient to change battlefield performance unless the internal incentive structure was also aligned to reward competence in irregular warfare. It is true that neither the Army nor Marine Corps had altered or changed its internal system of promotions to reward competency in counterinsurgency, despite requests from the political leadership to develop these competencies after 2001. In fact, one could argue that the internal rewards system changed in ways to reward competence in conventional military operations that emphasized transformation-type capabilities – the opposite of irregular warfare competency. If anything, the internal reward system was altered prior to the war to reward performance in the kinds of competencies that Rumsfeld sought in the military. Rumsfeld clearly exerted unprecedented influence over senior military department promotions in an attempt to instill a new brand of leadership that embraced his concepts of modern war.<sup>38</sup> Avant's argument would correctly predict

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<sup>38</sup> Summarized by Seymour Hersh, 'Offense and Defense: The Battle Between Donald Rumsfeld and the Pentagon', *The New Yorker*, April 7, 2003, [http://www.newyorker.com/archive/2003/04/07/030407fa\\_fact1?currentPage=all](http://www.newyorker.com/archive/2003/04/07/030407fa_fact1?currentPage=all), accessed September 14, 2008.

the performance of the American military force in the invasion, but it breaks down once the Army and Marine Corps start to confront the insurgency. Absent a changed internal incentive structure, engaged institutions should resist widespread adoption of irregular warfare competencies developed through experience in Iraq; but that is not what the record shows. I have found that in Iraq, the Army and Marine Corps eventually *did* develop exactly the kinds of core competencies they needed through battlefield experience over time, and applied these competencies in ways that bore little or no relationship to the system of internal rewards in each of the institutions. In Iraq, the institutions developed exactly the opposite kinds of competencies initially called for by their civilian master. In other words, the development of these competencies had nothing to do with formal incentive structures. In this respect particularly it is worth repeating: Iraq was and is not a replay of Vietnam.

### **Explanations of Wartime Innovation**

This dissertation suggests that arguments focusing on top-down processes of military innovation show poor explanatory power relative to American battlefield performance in Iraq. If these explanations do not suffice, then how is the performance of the U.S. military to be explained? What are some alternative explanations that offer a more convincing framework than the top-down arguments? This dissertation demonstrates that a process of bottom-up innovation unfolded over an extended period in a process led from the field by units engaged with the enemy. That the prevailing top-down theories of military innovation attach little emphasis to bottom-up sources of innovation is somewhat surprising. Explaining military performance in war by pointing to the dynamic flexibility of military organizations that draw upon bottom-up

processes certainly is not unknown. Indeed, there is a literature comprised mostly of empirical studies chronicling many well-known cases of wartime innovation in military organizations.<sup>39</sup> These works suggest important insights that can help develop a more comprehensive understanding of the complex processes used in military organizations to innovate in war.

Bruce Gudmundsson's account of the gradual evolution of German infantry tactics in World War I offers a compelling portrait of a military organization constantly searching for tactical innovation to break the military stalemate on the Western Front.<sup>40</sup> By the end of the war, the German infantryman bore little resemblance to his 1914 counterpart. By 1918, German infantry formations operated as combined arms units, were armed with a more diverse array of equipment, were trained in many specialized tasks, and were capable of complex fire and maneuver coordination. Decisions on battlefield tactics were made at comparatively low levels of command – a precursor to modern day decentralized, distributed operations. Gudmundsson points to the strong role played by education in the German military system that established an officer- and non-commission officer corps well schooled in the art of military tactics, combined with the confidence to execute them on the battlefield. A similar process unfolded in the British Army in which disastrous tactics used during the first two years of the war were discarded and replaced with similar storm trooper-type tactics being developed by its German adversary. Contrary to popular perception, the British fielded a tactically proficient, skilled army by the end of the war capable of complex fire and maneuver tactics.<sup>41</sup>

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<sup>39</sup> As argued by Adam Grissom, 'The Future of Military Innovation Studies', pp. 920-921.

<sup>40</sup> Gudmundsson, *Stormtroop Tactics*.

<sup>41</sup> Paddy Griffiths, *Battle Tactics on the Western Front: The British Army's Art of Attack, 1916-1918* (New Haven, CT: Yale University Press, 1996).

The evolution of German infantry tactics during the war laid the groundwork for the development of the blitzkrieg in the interwar period in which mechanization allowed it to overcome the physical limitations of its soldiers in fighting the war of deep maneuver and encirclement with which it perpetually (and unsuccessfully) sought to break the Western Front stalemate in World War I.<sup>42</sup> While doctrinally bounded by the concept of the blitzkrieg in World War II, the German traditions of decentralized operations backed by a strong junior officer and NCO corps continued in World War II.<sup>43</sup> In the latter stages of the war, German infantry tactics continued to evolve as its army disintegrated, creating ad hoc battle groups known as *Kampfgruppen* that proved particularly adept at delaying allied armor advances with ambushes using the hand-held panzerfaust.<sup>44</sup>

The integration of Allied close air support with ground operations in Europe during World War II provides another compelling example of internally-generated wartime innovation. General Pete Quesada, who headed the Army Air Force's IX Fighter Command, pioneered the development of complex procedures and solved numerous technical problems that confronted the Army Air Corps as it sought to provide tactical battlefield support to American and allied military units during the invasion of Europe and advance into Germany. Quesada achieved success in spite of a disinterested senior Air Force leadership that wanted to use air power for long-range strategic bombardment. Quesada is credited with developing the use of microwave early

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<sup>42</sup> Ibid., pp. 171-179.

<sup>43</sup> Germany's war of mechanized maneuver in World War II is chronicled in John Erickson's masterful works *The Road to Stalingrad* (Boulder, CO: Westview Press, 1983) and its companion volume *The Road to Berlin* (Boulder, CO: Westview Press, 1983).

<sup>44</sup> As covered by Max Hastings in *Armageddon: The Battle for Germany, 1944-1945* (New York: Knopf, 2004) p. 22.

warning (MEW) radar to direct pilots in real time to their targets. He also devised a system that married the MEW with a Signal Corps radio (the SCR-584) that effectively allowed ground-based personnel to act as ordnance targeteers for single-seat fighter bombers. The close ‘column-cover’ operations between armored and air units used in the allied breakout from the Bocage country in operations around St. Lo is widely considered one of Quesada’s greatest innovations in the air-ground campaign. The IX Fighter Command built by Quesada to coordinate air operations in Europe proved in many ways to be a precursor to today’s combined air operations centers utilized by today’s Air Force. Quesada successfully fought against institutional opposition within the Army Air Corps to using aviation in direct support of ground operations as well as skeptical ground commanders in establishing tactical air power as a vital component in allied combined operations in the European theater.<sup>45</sup>

A process of organically-generated tactical adaptation and innovation is also described by Keith Bickel in the development of the Marine Corps’ *Small Wars Manual*.<sup>46</sup> Bickel argues that the Marine Corps’ experiences in the ‘small wars’ of Haiti, Dominican Republic and Nicaragua finally made its way into formalized doctrine through the efforts of an informal network of officers bent on sharing their experiences through professional journal articles, field orders and interactions in the Marine Corps school system. Bickel characterized this process as ‘informal’ doctrine, which preceded the promulgation of more formal institutional doctrine and which emerged over the opposition of senior leadership. The resulting *Small Wars Manual* enshrined the lessons learned in these early twentieth-century engagements for future

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<sup>45</sup> Hughes, *Overlord: General Pete Quesada*.

<sup>46</sup> Keith Bickel, *Mars Learning*.



generations of Marine Corps officers. The relevance of Bickel's study to this analysis is the particular emphasis placed on the role of individuals in promoting institutional change. This study challenges the view that military doctrine is an overwhelmingly important dependent variable in the process of military innovation in war. While Bickel focuses exclusively on doctrine as the important organizational output in his process of bottom-up change, his emphasis on the process of doctrinal formulation using 'informal' channels is especially relevant to this study. As the cases examined in subsequent chapters demonstrate, it is clear that informal channels assumed vital importance to military units seeking solutions to the tactical problems posed by the insurgency. The Army Knowledge Online website, personal blogs, simple e-mail, and a host of other digital-age means provided commanders with ample means through which to pass along lessons learned and shared experiences for incoming units. In Iraq, it is clear that these processes helped shape the training and battlefield tactics for incoming units that worked much more quickly than the institutional process of promulgating new doctrine.

Richard Duncan Downie and John Nagl argue that military innovation can function as a bottom-up process, provided that the military institutions are learning organizations.<sup>47</sup> Downie defines institutional learning as: 'A process by which an organization (such as the U.S. Army) uses new knowledge or understanding gained from experience or study to adjust institutional norms, doctrine, and procedures in ways designed to minimize previous gaps in performance and maximize future successes.'<sup>48</sup> Like many scholars, Downie believes that doctrine is an important indicator of military innovation which, he argues, accurately reflects institutional

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<sup>47</sup> Richard Duncan Downie, *Learning from Conflict*; Nagl, *Eating Soup With a Knife*,

<sup>48</sup> Downie, *Learning from Conflict*, p. 22.

memory that can only be altered and/or changed in certain circumstances. Downie argues that no single factor can explain military innovation and emphasizes that innovation occurs through the systemic interaction of external factors, institutional influences, and the process or organizational learning.

Using case studies that examine the performance of the American Army in Vietnam, the counterinsurgency program in El Salvador in the 1980s, and the drug war in the Andean Ridge, Downie finds that military innovation occurred only in those situations when external pressures, institutional factors, and the development of institutional learning were properly aligned to produce innovation as evidenced by new military doctrine. Drawing upon Downie's framework for institutional learning, Nagl examines the performance of the U.S. Army in Vietnam and the British Army in Malaysia. Nagl finds that the British Army succeeded in Malaysia because it was a learning organization and that the U.S. Army failed in Vietnam because it was not. The insights from Downie and Nagl are useful for this analysis. The case studies in this dissertation show that collections of structured, hierarchical organizations (called 'task forces' in military parlance) displayed remarkable abilities to quickly change and adapt in wartime circumstances – displaying all the characteristics of learning organizations identified by Downie and Nagl as critical to wartime innovation.

In his book *Closing With the Enemy*,<sup>49</sup> Michael Doubler usefully packages many of these preceding concepts and applies them in his cogent analysis of the performance

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<sup>49</sup> Doubler, *Closing With The Enemy*, Also see Doubler, 'Busting the Bocage: America's Combined Arms Operations in France 6 June – 31 July 1944', Combat Studies Institute, Fort Leavenworth, Kansas, 1988, <http://www-cgsc.army.mil/carl/resources/csi/doubler/doubler.asp>, accessed December 1, 2007. Doubler's mostly laudatory assessment of the Army's performance in Europe after D-Day is not universally shared. See Max Hastings, *Armageddon*, for an alternative view. Hastings argues throughout this excellent book that the Western armies were plagued with the interrelated and systemic

of the U.S. Army in the European theater following the Normandy invasion in June 1944. Doubler argues that the United States Army significantly improved its tactical abilities during the last nine months of the war, effectively mastering the combined arms doctrine that had been established at the outset of the conflict. Doubler emphasizes the immense impact played by the cumulative experience of fighting the Wehrmacht in North Africa and Italy in the preceding two years of the war – experiences that helped build the growing tactical competence of units as the war progressed. In one particularly illuminating case study, Doubler highlights a number of critical variables that stimulated tactical flexibility and adaptation leading to the breakout from the Bocage country in Normandy: (1) The Army institutionally encouraged the ‘free flow of ideas’ and entrepreneurial spirit that flowed from the lowest levels to the most senior; and (2) the Army instituted no centralized control over the search for battlefield solutions and instead encouraged a decentralized, collective approach to solving tactical problems.<sup>50</sup> As noted by Doubler: ‘Senior leaders expected their subordinates to develop and execute solutions for overcoming the German defense instead of waiting for the staffs of higher headquarters to devise the very best answer to a tactical problem.’<sup>51</sup> As part of this general approach, the Army gave battlefield commanders significant latitude in developing their own ideas on how to approach their particular tactical problems. Just as important, Army leadership proved receptive to innovative ideas that bubbled up from the tactical level. This receptivity led to modifications in the Sherman tank that gave it the ability to cut through the tough hedgerows of the Bocage.

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problems of poor senior leadership and mediocre battlefield performance that repeatedly let the Wehrmacht off the hook and unnecessarily prolonged the war.

<sup>50</sup> Doubler, *Closing With the Enemy*, pp. 57-62.

<sup>51</sup> *Ibid.*, p.58.

Doubler's analysis supports the hypothesis presented in this work proposing a process of bottom-up military innovation insofar as he addresses the organic sources of tactical flexibility and innovation. As argued by Doubler, the breakout from the Bocage in Normandy resulted from a series of small iterative changes that stemmed from the adaptation of existing equipment to enable tanks to break through the hedgerows. This adaptation was supported by a more imaginative tactical placement of weapons and personnel to disrupt the German defenses once the hedge had been breached.<sup>52</sup> Doubler argues that particular tactical problems were solved throughout the campaign as part of a process through which the Army progressively improved its ability to fight in the ways envisioned by doctrine.

For purposes of this analysis, the preceding works on bottom-up military innovation develop a series of explanations that focus on the process of battlefield adaptation that I argue can be defined as organizational innovation. The works highlighted in this section are very germane to the experiences of the United States in Iraq. This dissertation hypothesizes that organically-driven tactical change can accumulate over time and build a momentum all its own that can meet the standard identified by Rosen and others as innovation, and which, in turn, can stimulate the development of doctrine.

The collective observations in the preceding works are consistent with Lynn Eden's research on the role played by 'organizational frames' in structuring how organizations address problems and cycle through solutions.<sup>53</sup> While Doubler,

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<sup>52</sup>Ibid., pp. 31-62.

<sup>53</sup> Lynn Eden, *Whole World on Fire: Organizations, Knowledge, & Nuclear Weapons Devastation* (Ithaca: Cornell University Press, 2004), pp. 37-60; Some of the same ground is covered in Scott

Downie and Nagl applied their frameworks to particular examples of military organizations in wartime, their work parallels certain aspects of Eden's exhaustive analysis of the Air Force's approach to solving the methodological problem posed by calculating blast damage from nuclear weapons. Eden argued that '...during periods of organizational redefinition or upheaval, actors articulate organizational goals and draw upon existing understandings, or knowledge of the social and physical environments in which they must operate. This creates frameworks for action that structure how actors in organizations identify problems and find solutions.'<sup>54</sup> The Air Force developed knowledge-laden frames built iteratively through the generation of new knowledge. This new knowledge then, in turn, infused new organizational routines. These new organizational routines mirrored, to some extent, the complexity of the problem confronted by the Air Force in developing methodologies for predicting the destructive power of nuclear weapons. Eden's argument shows the important role played by organizational frames that developed over time, which guided the institution through this complicated methodological problem. As will be demonstrated in the case studies in the following chapters, it is clear that the military organizations fighting the insurgents in Iraq built complex, knowledge-laden organizational frames to help guide their battlefield activities. The building of these frames through the process of organizational learning provided a critical building block for the process of wartime innovation in Iraq.

Here, it seems vital to note Chris Demchak's work on the impact of complex technologies on military organizations, which, along with the preceding works, makes an important contribution to my development of hypotheses for an the process of

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Sagan, *The Limits of Safety: Organizations, Accidents and Nuclear Weapons* (Princeton: Princeton University Press, 1993), pp. 204-249.

<sup>54</sup> Eden, p. 50.

organically-driven wartime adaptation and innovation.<sup>55</sup> Demchak argues that as modern militaries like the United States Army adopt technologically complex equipment, their organizational structures face a difficult task of grasping the system's complexity. Demchak argues:

Complex systems have large knowledge requirements both initially and over time. When a system first begins to operate, it faces a universe of possible outcomes, many of these outcomes will predictably occur, and many will prove to be irrelevant. The outcomes constitute the 'knowns' about the system – over time the largest category of outcomes. The set of 'knowns' grows as the system runs, creating a learning curve that varies from system to system. For complex systems, it generally takes more time to accumulate enough knowledge to move significantly upwards on the learning curve.<sup>56</sup>

In other words, the problems posed by a system of technical complexity begets a kind of mirroring organizational complexity as the organization adjusts its structure and standard operating procedures (SOPs) to the new system. This organizational complexity takes shape iteratively as SOPs become steadily more infused by knowledge generated through working with the new system. Demchak shows how Army maintenance units responded to the introduction of the M1 main battle tank by matching its system complexity with a similarly complex organizational structure.<sup>57</sup> Demchak effectively hypothesizes a kind of trinity that is again useful for this analysis: complex problems require complex organizational structures to develop

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<sup>55</sup> Demchak, *Military Organizations*,. Also see Demchak, 'Complexity, Rogue Outcomes and Weapon Systems', *Public Administration Review* 52, No. 4 (July-August 1992), pp. 347-355; Demchak, 'Complexity and Theory of Networked Militaries', in Farrell and Terriff, *Sources of Military Change*, pp. 221-262.

<sup>56</sup> Demchak, *Military Organizations*, p. 18.

<sup>57</sup> *Ibid.*, pp. 103-131.

complex solutions, all of which take shape iteratively as knowledge and understanding are accumulated over time.

Her analysis demonstrates that Army units in the field using the M1 tank found themselves employing an extremely complex system that lacked a well-developed training and logistical infrastructure. Demchak's research showed that military units infused with the 'can do' attitude adapted in the field to the problems and opportunities presented by the M1, in a process of organically-driven change that depended on no textbooks or previously generated SOPs. As argued by Demchak, 'Rarely discussed and even more rarely seen in print is the fact that local adaptations can change the true capabilities of the force. A multitude of minor variations appear in the tactical forces as each individual unit and section makes arrangements to accomplish its own missions. There merges an interconnected web of relationships and dependencies that work as long as the coordination and resource interactions are not significantly disturbed.'<sup>58</sup> Demchak believed that this kind of organizational complexity is also extremely fragile, and she doubted its ability to function under the stresses of combat.<sup>59</sup> The analysis presented here suggests that Demchak is right to focus on the development of organizational complexity in response to the adoption of technically complex weapons platforms, but her predictions about the breakdown of these complex organizations in wartime is not borne out in Iraq. In Iraq, the organizational structures of American military organizations came to reflect not just the complexity of their own sophisticated technology but also reflected the complexities of the tactical environment.

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<sup>58</sup> Ibid., pp. 103-104.

<sup>59</sup> Ibid., pp. 132-162.

These preceding works, from admittedly disparate disciplines and with different analytical foci, nevertheless help to understand the dynamics of organically-driven organizational change in military institutions that will be described in the following case studies. Each work highlights organizational processes through which iterative change and adaptation from low levels of the organization can dramatically impact organizational output. Bickel points to the important role played by informal networks as a tool promoting institutional learning. Downie and Nagl focus on organizational learning as a critical variable driving innovation. Doubler emphasizes the role that command atmosphere can play in creating a dynamic organizational process that frees the movement of information and ideas up and down the hierarchy. Eden points to the role that incremental increases in knowledge can have in forming ‘organizational frames’ that help guide organizational problem-solving activities. Demchack suggests that organizations have a way of coping with complexity in systems that when combined with a military mindset can stimulate creative and adaptive solutions to problems in the field.

### **The Behaviorist’s Contribution to Organic Innovation**

Underpinning much of the literature on organizational behavior is the idea that all large organizations, be they public or private, engage in rational and hence predictable actions. It is generally expected that organizational output flows predictably from a rationally conceived organizational structure. Organizational output, or action, is only the end product of a series of rational processes linked together in a causal, hierarchical chain. Dwight Waldo defined rational action ‘...as action correctly



calculated to realize given desired goals with minimum loss to the realization of other desired goals.’<sup>60</sup>

Max Weber offered the enduring ‘ideal’ model describing the structure of modern bureaucracy that is used by organizational theorists as the standard by which variation in organizational behavior is measured. In what could be characterized as the ‘paradigm of the perfect,’ Weber’s writings describe bureaucracy as the essence of modern industrial life, delivering repeatable, reliable and efficiently produced output in a structured fashion. Weber held that bureaucracy ‘...is superior to any other form in precision, in stability, in the stringency of its discipline, and in its reliability.’<sup>61</sup> He believed bureaucracy to be ‘indispensable’ to modern life and that ‘The choice is only that between bureaucracy and dilletantism in the field of administration.’<sup>62</sup> Bureaucracy had a number of enduring and attractive characteristics: (1) Hierarchy and centralized authority in which ‘...each lower office is under the control and supervision of a higher office;’<sup>63</sup> (2) Interaction between organizational components based on rules or regulations that create routinized interactions between and among organizational components; (3) Rationalization of organizational function that allowed the specialization and division of labor – specialization based on knowledge, which in turn produced a personnel system based on merit and competence;<sup>64</sup> and (4) Measurement of production and output through extensive records.<sup>65</sup>

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<sup>60</sup> Dwight Waldo, ‘What is Public Administration?’ in Jay M. Shafritz and Albert C. Hyde, Eds., *Classics of Public Administration* (Oak Park, Ill., Moore Publishing Co., 1978), p. 171.

<sup>61</sup> Max Weber, *The Theory of Social and Economic Organization* (New York: The Free Press, 1964), Translated by A. M. Henerson and Talcott Parsons, p. 337.

<sup>62</sup> Ibid.

<sup>63</sup> Ibid.

<sup>64</sup> Ibid.

<sup>65</sup> List also derived from Max Weber, *Essays in Sociology*, by H. Gerth and C. Wright Mills (Oxford: Oxford University Press, 1946). Also see Peter M. Blau and Marshall Meyer, *Bureaucracy in Modern Society*, 3rd Ed., (New York: Random House, 1987), pp. 18-25; Charles Perrow, *Complex Organizations: A Critical Essay* 3rd Ed., (New York: McGraw Hill, 1986), p. 3; Willam G. Scott,

Weber's theory is important for the purposes of this analysis because it predicts the genesis of what we would today call complex organizations. Weber foresaw that modern bureaucracies would become iteratively more specialized in their functions. He also foresaw the negative consequences within organizations that occur as functions became successively compartmentalized and decentralized. Such organizational structures would be difficult to alter and change. As is generally accepted, one objective of bureaucracy is in fact to make change difficult.<sup>66</sup> However, while bureaucracy largely succeeds as argued by Weber in structuring large and complex organizations to deliver predictable output, the functioning of these organizations invariably produces variation. It is the sources of variation that I believe are germane to my argument about the sources of internally-generated adaptation and innovation.

In a sense, Weber did a disservice in leading the field of organizational behavior down a path to which it clings to this day – a path that seeks to explain the dysfunctional nature of bureaucracy and the reasons behind the variability in organizational output. Writing in the 1940s, Robert Merton delivered a not uncommon critique of bureaucracy, pointing out that the very strengths of the organizational structure (rationalization, specialization, span of control, and efficiency) gave rise to a host of other maladies.<sup>67</sup> Merton identified several problems:

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Terence R. Mitchell, and Philip H. Birnbaum, *Organizational Theory: A Structural and Behavioral Analysis* 4th Ed. (Homewood: Richard D. Irwin Inc., 1981), pp. 4-7.

<sup>66</sup> As argued by Rosen, p. 2. See Karl W. Deutsch, 'On Theory and Research in Innovation', in Richard L. Merritt and Anna Merritt, eds., *Innovation in the Public Sector* (Beverly Hills: Sage, 1985), p. 20; Marshall Meyer, *Change in Public Bureaucracies* (London: Cambridge University Press, 1979), p. 99. Cited by Rosen, note 3, Chapter 1.

<sup>67</sup> Robert Merton, 'Bureaucratic Structure and Personality', *Social Forces* 18, No. 4 (May 1940), pp. 560-568.

(1) organizations can be plagued by ‘trained incapacity’ in which actions based upon training and skills that have been successfully applied in the past may result in inappropriate responses *under changed conditions*;<sup>68</sup> (2) the emphasis on predictability and efficiency could reduce organizational flexibility; and (3) devotion to rule-governed processes could lead to something called ‘goal displacement,’ by which ‘adherence to the rules, originally conceived as a means, becomes transformed into an end in itself.’<sup>69</sup> The focus on the maladies of bureaucracy, while instructive, obscures the creative and dynamic processes that can be produced in bureaucracies under certain conditions.

Chester Barnard described an enduring and competing vision to Weber in his work *The Functions of the Executive*.<sup>70</sup> Barnard believed that all organizations consisted of a cooperative social system that had important physical, psychological and social limitations that essentially forced people into cooperation. Barnard argued that organizations were by their very nature cooperative systems and in fact they could not fail to be so.<sup>71</sup> He differed from Weber, who argued that relationships within organizations could be bounded by authority and the rules governing the interaction within an organization’s specialized functional areas. Barnard suggested that, as social systems, all organizations were to some extent held hostage to intra-organizational social interaction. These interactions represented a powerful source of organizational productivity. Instead of seeking to limit the role of intra-organizational social systems like Weber, Barnard believed that these informal systems could be harnessed by managers and leaders in building productive and efficient organizations. Barnard

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<sup>68</sup> Ibid., p. 562.

<sup>69</sup> Ibid., p. 563.

<sup>70</sup> Chester Barnard, *The Function of the Executive* (Cambridge: Harvard University Press, 1939).

<sup>71</sup> As argued by Perrow, p. 63.

emphasized the key role played by leadership that could marshal the human potential of informal social networks outside the formal organizational structure. Barnard's emphasis on the social component of organizations was backed by the Hawthorne experiments, which attempted to identify sources of organizational productivity.

Researchers at the Hawthorne plant of the Western Electric Company in 1927 isolated two groups of workers doing the same jobs and kept records on the productivity of the groups.<sup>72</sup> The experiments started out with the intent of measuring the impact of interior lighting on worker efficiency and productivity. One group had better lighting than the other group, and saw the intensity of the interior lighting increase over time. To the astonishment of the researchers, the productivity of both groups went up. While an academic debate over the rigor of the tests has raged over the years, the experiments found that separation of both groups from the larger work force created strong social bonds within the groups that helped increase cooperation and productivity. The findings challenged the view, derived from Weberian ideas about scientific management, that workers could effectively be regarded as economic units of production that would operate in predictable ways in response to payment. The Hawthorne experiments demonstrated the powerful influence that informal social networks and relationships could exert upon organizational productivity. In interviews after the experiments, the workers reported that becoming separate from the broader organization made them feel special. The experiments revealed the powerful impact of human relations on the rational operation of the 'system,' suggesting that the discipline of behavioral sciences could be usefully applied to explain the sources of variation in the operation of large organizations. The experiments proved to be a

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<sup>72</sup> F.J. Roethlisberger, 'The Hawthorne Experiments', reprinted in Shafritz and Hyde, pp. 67-77.

precursor to further research on the impact of human motivation on the function of organizations. Maslow's theory of human motivation is perhaps the best known of these.<sup>73</sup>

Focusing on the human dimension as emphasized in Barnard's research remains relevant to this day and can be applied to the process of bottom-up military adaptation and innovation that is the chief concern of this study. As will be highlighted in the case studies, informal social networks operating outside the formal hierarchy proved to be extremely important sources of innovation and organizational productivity.

The so-called 'Behavioralist' school of organizational behavior has several other useful insights into the sources of organic change. Herbert Simon accepted Barnard's essential point that organizations are socially constructed collections of individuals. Simon, however, sought to delve deeper into understanding human motivation and decision-making. Simon fervently believed that understanding human behavior was the first step in building a more coherent framework for organizational behavior.<sup>74</sup> In a series of works, Simon advanced a theory of 'bounded rationality' that remains as powerful today as when he offered it up nearly sixty years ago. Simon argued that the process of human decision-making in organizations was bounded by a 'triangle' of limits: (1) unconscious tendencies that affected the ability to perform the organizational task; (2) the role played by values in a decision-making process that might be inconsistent with the organization's objectives; and (3) the fact that

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<sup>73</sup> A.H. Maslow, 'A Theory of Human Motivation', *Psychological Review* 50 (1943), pp. 370-396.

<sup>74</sup> Some of Simon's initial thinking is addressed in 'The Proverbs of Administration', *Public Administration Review* 6 (Winter 1946), pp. 53-67.

individuals made decisions with limited knowledge of things that could be relevant to their tasks.<sup>75</sup>

Simon and March used the concept of bounded rationality as a baseline for a decision-making model which proposed that humans would invariably be drawn to satisfactory, rather than strictly optimal, alternatives as they solved problems. Humans would not, they argued, engage in an exhaustive analysis of alternatives in a search for perfect solutions. They described this phenomenon as ‘satisficing’. The authors offered the proposition that: ‘Most human decision-making, whether individual or organizational, is concerned with discovery and selection of alternatives; only in exceptional cases is it concerned with the discovery and selection of optimal alternatives.’<sup>76</sup> To illustrate the difference between optimizing and satisficing, they noted that: ‘An example is the difference between searching a haystack to find the sharpest needle and searching the haystack to find a needle sharp enough to sew with.’<sup>77</sup> As in the metaphor offered by March and Simon, the standards by which satisfactory outcomes are reached are also a function of the definition of the situation. The standards can go up or down, depending on the positive or negative experiences flowing from the chosen course of action.<sup>78</sup>

The journey towards constructing a series of hypotheses on the process of organic change and innovation has started with the actions of organizations in battle and

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<sup>75</sup> Ibid., pp. 64-65. Also see March and Simon, pp. 136-171. Simon’s initial thinking in this piece provided fodder for a range of works that appeared over the next fifty years. See Herbert Simon, *Administrative Behavior*, 3rd Ed. (New York: Free Press, 1976); Simon, ‘A Behavioral Model of Rational Choice’, *The Quarterly Journal of Economics* 69, No. 1 (Feb. 1955), pp. 99-115; Simon, ‘Bounded Rationality and Organizational Learning’, *Organization Science* 2, No. 1 (1991), pp. 125-134; Simon, *Models of Bounded Rationality* (Cambridge: MIT Press, 1997).

<sup>76</sup> March and Simon, pp. 140-141.

<sup>77</sup> Ibid., 141.

<sup>78</sup> As observed by Perrow, *Complex Organizations*, p. 122.

moved steadily downward to the micro-level that looks at the decision-making process of individuals. There is one last stop before constructing a series of hypotheses on the nature of organic innovation and change.

John Steinbruner pushed the envelope of Simon's and March's thinking on the nature of human decision-making and the boundaries of human rationality that propel decision-making away from optimization. In his book *The Cybernetic Theory of Decision*,<sup>79</sup> he proposed an alternative to the 'analytical paradigm' that, he argues, incorporates a rational, value-maximizing approach to decision-making. Steinbruner argued that individual decision-making is not necessarily driven by the logic of preference ordering and a vision of clear outcomes. Instead he argued that: 'The cybernetic paradigm suggests rather than the central focus of the decision process is the business of eliminating the variety inherent in any significant decision problem.'<sup>80</sup> He advanced the propositions that decisions are aided by 'servomechanisms,' which act as regulators to keep the environment in balance for the individual, much like a thermostat keeps room temperature within a certain range. Such servomechanisms produce '...strikingly adaptive outcomes in very complicated environments,'<sup>81</sup> of precisely the kind that armed forces confront on the battlefield. Steinbruner summarized the workings of the cybernetic decision-making process as follows:

Roughly speaking, the mechanism of decision advanced by the cybernetic paradigm is which works on the on the principle of the recipe. The decision maker has a repertory of operations which he performs in sequence while monitoring a few feedback variables. He produces an outcome as a consequence of completing the

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<sup>79</sup> John D. Steinbruner, *The Cybernetic Theory of Decision* (Princeton: Princeton University Press, 1974).

<sup>80</sup> *Ibid.*, p. 56.

<sup>81</sup> *Ibid.*

sequence, but the outcome need not be conceptualized in advance. The cook, in this model, does not construct the relative preference for sweetness or tartness for an average range of customers in baking his pies. Rather he follows established recipes and watches attendance at the restaurant and the rate at which his pies disappear.<sup>82</sup>

Steinbruner's cybernetic paradigm argued that the desire to control uncertainty trumps the rational pursuit of optimal objectives. He argued that individual decision-making confronts complex problems by segmenting complexity into constituent components, which can then be passed for decisions to other actors. Thus, complex problems lead to complex organizational structures as demonstrated in Demchak's work. Steinbruner applies his decision-making framework to workings of bureaucracies, proposing that the learning process in cybernetic organizations manifests itself in changed behavior rather than changes in outcome calculation. 'Learning occurs in the sense that there is a systematic change in the pattern of activity in the organization. Over time, those programs and standard operating procedures persist that are successful in the limited sense which is pertinent; unsuccessful ones drop out.'<sup>83</sup>

The literature reviewed in this section all bears in various ways upon the process of organic organizational adaptation and innovation. Doubler, Eden and Demchak all tackle the issue of organizational change by treating the organization as the unit of analysis. All construct a series of related rationales that explain the process of organizational adaptation and innovation. I combine this analysis with a slice of organizational behavior literature that takes the unit of analysis down to the level of the individual – the irreducible component from which all organizations are built. Barnard, March and Simon all offer insights on the importance of individual behavior

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<sup>82</sup> Ibid., p. 55.

<sup>83</sup> Ibid., pp. 78-79. Also cited by Sagan, *The Limits of Safety*, p. 205.



and decision-making and the impact that human relationships can have on organizational behavior. Steinbruner brings the analysis full circle in his cybernetic paradigm which relates individual to organizational decision-making. Like the other authors, Steinbruner offers an explanation for organizational dynamism and adaptivity that provides a stark contrast to the image of the rigid modern bureaucracy described by Weber.

### **Implications for Wartime Organically Generated Innovation**

The arguments advanced in the literature reviewed above suggest a series of conditions that are necessary for hypotheses about the process of organic organizational adaptation and innovation that will be tested against the experiences of America's armed forces in Iraq. This literature suggests a number of vital hypotheses. Organizational learning clearly is vital to the process of successful wartime innovation. It requires a number of critical supporting elements, including a two-way vertical flow of ideas up and down the hierarchy in which the top of the hierarchy accepts inputs from the bottom; a horizontal free flow of ideas between organizational structures; and organizational leadership that establishes a 'culture' of learning and intellectual flexibility. 'Outside' or external institutional pressure to change is also important – in this case, while U.S. military organizations did not immediately respond to the top-down direction to get ready for irregular war, the fact that they knew their civilian masters supported the development of these capacities certainly helped create an organizational environment to adjust and innovate. Feedback loops from the environment guide iterative changes in behavior that become operationalized by changed organizational SOPs. Knowledge acquired through the feedback loops

populate organizational frames that inform the iterative adaptation of the SOPs that happen over time. The process of SOP evolution gathers momentum as learning increases over time and can produce fundamental departures in organizational operations.

Organizational behavior literature suggests various tendencies of bureaucracies that will be considered in the case studies that follow: that innovation would be impeded by individuals and organizational elements seeking satisfactory as opposed to optimal solutions; that inter- and intra-organizational relationships between people are an important source of organizational productivity and dynamism, and also of adaptivity and innovation; that these relationships serve to break down hierarchy and flatten the structure of organizational authority and can be part of a process to create networked organizational structures across function and different domains of organizational authority; and, that organizations can evolve and adapt to provide complex capacities that address and mirror complexities of the operating environment.

The perspectives offered on organizational learning and organizational behavior suggest conditions under which battlefield innovation is possible. As noted in chapter I, this study argues that military innovation is first and foremost a process that manifests itself on the battlefield in the form of changed standard operating procedures (SOPs); different relationships between and among combat arms; the blending of combat and noncombat capabilities to achieve battlefield ‘effect’; and, the eventual development of different missions for military units not previously envisioned in doctrine.

I will argue in the chapters that follow that doctrine is not an important *independent* variable in the process of innovation, but that in the case of the Iraq war, its appearance three years into the conflict provides evidence that innovation has happened. In this particular case, borne of the crucible of protracted war, doctrine thus emerged as a *dependent* variable in the process of wartime innovation.

## CHAPTER III

### WARTIME INNOVATION IN WESTERN ANBAR

#### FALL 2005-SUMMER 2006

On September 11, 2006, *The Washington Post* reported on an intelligence report authored by a seasoned Marine Corps intelligence analyst who stated that al-Anbar province in western Iraq had been ‘lost’ to insurgents.<sup>1</sup> The news article quoted an unidentified Army officer, who, in confirming the details of the classified report, provided a searing assessment of the state of affairs: ‘We haven’t been defeated militarily but we have been defeated politically – and that’s where wars are won and lost.’<sup>2</sup> The classified report, authored by veteran Marine Corps intelligence officer Colonel Peter Devlin, provided a litany of disastrous failures by the United States in the three years following the invasion.<sup>3</sup> The report, quoted and summarized below, highlighted a variety of negative and, it stated, perhaps irreversible trends:

- The social and political situation had deteriorated so badly that U.S. forces were ‘...no longer capable of defeating the insurgency in Al Anbar.’
- The social order had completely collapsed and that ‘Violence and criminality are now the principle driving factors’ in daily life in the province.

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<sup>1</sup> Thomas Ricks, ‘Situation Called Dire in West Iraq’, *Washington Post*, September 11, 2006, p. A1; Michael Gordon, ‘Grim Outlook Seen in West Iraq Without More Troops and Aid’, *New York Times*, September 12, 2006.

<sup>2</sup> Ibid.

<sup>3</sup> The text of the report, titled *State of the Insurgency in al-Anbar, I MEF G-2, SECRET//REL MCFI//20310816*, [http://media.washingtonpost.com/wp-srv/nation/documents/marines\\_iraq\\_document\\_020707.pdf](http://media.washingtonpost.com/wp-srv/nation/documents/marines_iraq_document_020707.pdf), accessed September 28, 2007.

- The Sunni tribal leadership had come to regard the Shia government in Baghdad as agents of Iran.
- The province had little prospect of attracting the investment needed to get the economy on its feet.
- Al Qaeda in Iraq (AQI) had become the ‘dominant organization of influence in al-Anbar province, surpassing nationalist insurgents, the Iraqi Government, and the MNF [multi-national forces] in its ability to control the day-to-day life of the average Sunni. AQ had become ‘...an integral part of the social fabric of Western Iraq...’ and that the people of al-Anbar had come to ‘...see it as inevitable part of daily life and, in some cases, their only hope for protection against a possible ethnic cleansing campaign by the central government.’
- Noting the steady increase of violence in the province, Devlin stated that ‘...the insurgency has strengthened in the last six months. Insurgent groups are better organized, increasingly achieve effective operational security, have improved their capabilities to cache and distribute weapons, and have refined and adapted their tactics. Control of the criminal enterprise means the majority of insurgents are now financially self sustaining at the lowest levels.’
- Devlin concluded that security and governance would continue to disintegrate in the province without a substantial influx of funds and the arrival of a division sized military force.<sup>4</sup>

Upon being made public, none of the senior military commanders in Iraq disavowed the report’s contents or conclusions. Major General Richard Zilmer, the top Marine Corps officer in al-Anbar stated that ‘I have seen the report, and I concur with that

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<sup>4</sup> Gordon, ‘Grim Outlook’.

assessment.’<sup>5</sup> The Multinational Forces Iraq (MNF-I) commander, Lieutenant General Peter Chiarelli, also endorsed the report’s conclusions.<sup>6</sup> Chiarelli told reporters: ‘If you read the report, Pete is right on target. I don’t believe there is any military strategy alone, any kinetic operations that we can run alone that will create the conditions for victory which we must have. I think the real heart of what Pete was telling us is that there are economic and political conditions that have to improve out at Al Anbar, as they do everywhere in Iraq, for us to be successful.’<sup>7</sup>

As the Devlin report became public, further questions about the American military commitment in Anbar arose when Chiarelli withdrew a battalion of 800 Army troops and their Stryker vehicles from the province. These troops re-joined 172<sup>nd</sup> Stryker Brigade Combat Team in Mosul and then re-deployed with the whole brigade to Baghdad to help deal with the city’s increasing sectarian violence. The Devlin report painted a bleak portrait of the political, military, and economic environment in Anbar three years after the invasion. Many commentators seized upon its gloomy assessment as a broader metaphor for American strategic failure in Iraq.<sup>8</sup> The military implications of Devlin’s report seemed clear: after three years in the field, the United States Army and Marine Corps had not mastered the art of counterinsurgency and confronted institutional failure. While the insurgents had adapted their tactics, techniques and operations to the environment – even reportedly becoming part of the social fabric of the province – the Army and Marine Corps had not demonstrated a

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<sup>5</sup> As quoted in Patrick J. McDonnell and Julie E. Barnes, ‘The Conflict in Iraq’, *Los Angeles Times*, September 13, 2007, p. 10.

<sup>6</sup> Leo Shane III, ‘Commander Fears Impact of Anbar Report’s Release’, *Stars and Stripes*, September 16, 2006.

<sup>7</sup> Pamela Hess, ‘Analysis: Anbar Troops Moved to Baghdad’, *UPI*, September 15, 2006.

<sup>8</sup> Arguments summarized in Kenneth Pollack, ‘The Seven Deadly Sins of Failure in Iraq: A Retrospective Analysis of the Reconstruction’, *Middle East Review of International Affairs* 10, No. 4 (December 2006), <http://meria.idc.ac.il/journal/2006/issue4/jv10no4a1.html>, accessed January 1, 2007.

similar adaptability. During the first two years of the war and into 2005, U.S. tactics remained focused on conventionally-oriented fire and maneuver missions. Indeed, MNF-I commander General Casey sought to consolidate U.S. troops at a few main operating bases isolated from as part of his plan to lower their visibility and turn responsibility for the war over to the Iraqis.<sup>9</sup>

This chapter covers the wartime innovation process of three units operating in Western Anbar province from the fall of 2005 through the summer of 2006: the 3<sup>rd</sup> Battalion, 6<sup>th</sup> Marine Regiment, or 3-6, and the 1<sup>st</sup> Battalion 7<sup>th</sup> Marine Regiment that operated in the area surrounding the city of Al Qaim along the Iraq-Syrian border; and, the 4-14 Cavalry that operated in the town of Rawah on the northern bank of the Euphrates River to the east of al Qaim. The 4-14 had been detached from the 172<sup>nd</sup> Stryker Brigade Combat Team operating in Ninewa province. The 3-6 was succeeded by 1-7 in the spring of 2006 whereas the 4-14 deployed into Rawah where there had previously been no sustained coalition military presence. The chapter starts with a summary of the insurgency in western Anbar and of the broader operational context that framed tactical operations by the units identified above. The case studies will be presented after this initial summary. During the fall of 2005, the American tactical approach in Anbar began to shift away from conventional operations towards COIN-oriented operations. The evolution from 3-6 to 1-7 captures this process, as the 3-6 established a tactical approach that was subsequently embellished by 1-7. The 4-14 case also demonstrates a similar evolutionary process as the unit gradually developed and embraced its approach to COIN.

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<sup>9</sup> Summarized in Thomas Ricks, *The Gamble*, pp. 12-13.

The insurgency had flourished in Anbar for a variety of reasons. The failure of local governance, coupled with the absence of any effective central government presence and the prioritization of public funds to non-Sunni regions, helped AQI to become a dominant political force in the province.<sup>10</sup> Devlin and others also identified American and Iraqi troop shortfalls in the province as a critical contributing factor to what looked like an unfolding disaster. The lack of manpower hampered efforts to extend effective control beyond the walls of isolated American and Iraqi military compounds.<sup>11</sup> In the summer before the Devlin report became public, some observers described American military tactics as ‘whack a mole’ in which hastily assembled units ricocheted from one crisis spot to the next mounting futile search and destroy missions designed to kill insurgents.<sup>12</sup> The emphasis on finding insurgents using conventional military tactics further highlighted problems created by the lack of combat troops in Anbar. The November 2004 assault on Fallujah highlighted American limitations. To consolidate the two Army battalions and six Marine Corps battalions and their support elements for the assault, other parts of Anbar and Ninewa province had to be denuded of troops. Military commanders lamented the approach which prevented them from remaining in one place long enough to build local relationships and apply the military and political tools at their disposal over an extended period.

The Devlin report’s gloomy forecast mirrored a similarly gloomy – even desperate – mood in Washington, DC. By the end of the summer in 2006, it became clear that

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<sup>10</sup> Thomas E. Ricks, ‘Situation Called Dire in West Iraq, Anbar is Lost Politically, Marine Analyst Says’, *Washington Post*, September 11, 2006, p. A1.

<sup>11</sup> *Ibid.*

<sup>12</sup> Senator John McCain used the term during an exchange with the Central Command’s General John Abizaid in the summer of 2006 in a hearing held by the Senate Armed Services Committee. McCain expanded on the metaphor in an August 20, 2006 appearance on Meet the Press; transcript at <http://www.msnbc.msn.com/id/14390980/>, accessed September 1, 2007.



President Bush had lost confidence in General Casey's leadership and his approach to the war. That fall he formed a group to review American strategy as a sense of desperation descended upon Washington.<sup>13</sup> Ironically, however, as national political and military leaders grappled with re-orienting America's Iraq strategy, military commanders on the ground in Anbar were refining their tactical COIN approaches and were making significant progress against the insurgents. In retrospect, the Devlin report represented rock bottom for the initial phase of the American COIN campaign in Iraq. Even as his report hit the press and doom and gloom pervaded in the White House, a turnaround in the COIN campaign in Anbar had been slowly gathering momentum over the previous 12 months.

A mere seven months after Devlin's dire assessment, his report seemed largely forgotten. By the spring of 2007, many commentators openly stated that Al Qaeda had been defeated in Anbar. In April 2007, Marine Colonel John Koenig – the senior officer in charge of economic development in the province – confidently stated: 'There are some people who would say we've won the war out here. I'm cautiously optimistic as we're going forward.'<sup>14</sup> Various statistical indicators backed up the optimistic assessments. As an illustration of the dramatic change which transpired over the last year, Anbar witnessed a 50 percent decrease in attacks between May 2006 and May 2007. A total of 400 incidents of violence occurred in May 2007 compared to 810 the year prior. Similarly, Ramadi experienced only 30 attacks in May 2007 as opposed to 254 in May 2006.<sup>15</sup> The situation in the Sunni heartland had improved so much that in October 2007, the U.S. Representative to the United

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<sup>13</sup> Woodward, *The War Within*.

<sup>14</sup> Kirk Semple, 'Uneasy Alliance is Taming One Insurgent Bastion', *New York Times*, April 29, 2007.

<sup>15</sup> Anthony Cordesman, 'Success or Failure? Iraq's Insurgency and Civil Violence and US Strategy: Developments through June 2007', *Center for Strategic and International Studies*, July 9, 2007, [http://www.csis.org/media/csis/pubs/070709\\_iraqinsurgupdate.pdf](http://www.csis.org/media/csis/pubs/070709_iraqinsurgupdate.pdf), accessed November 9, 2007.

Nations (UN), Ambassador Zalmay Khalilzad, reported that ‘the situation [in Anbar] province [is] largely stable and quiet, permitting reconstruction to take place.’<sup>16</sup> Few argued with his assessment.

Observers pointed to a series of reasons behind the progress in the successful battles against Al Qaeda and other Sunni insurgent groups in Anbar over the period from 2006-2007: (1) AQI over-playing its hand with the local tribal sheiks through intimidation and brutal tactics leading to alienation and disaffection with AQI's cause; (2) AQI's disruption of the local black market revenue generating activities by the Anbar tribal leadership that helped further split the insurgency; (3) An improved range of counter-insurgency practices by the United States that, among other things, saw units dispersed throughout the Al Anbar urban areas in common operating outposts that provided improved situational awareness, local security and better intelligence; (4) Improved efforts to involve the local population in providing local security through membership in the Iraqi police; (5) Realization by Sunnis that their political alliance with AQI held out no prospect for the recovery of their lost political authority and that a better relationship with the United States represented the only avenue to achieve this objective and to counter growing Shi-ite/Iranian influence in Baghdad; (6) Realization by the United States that it had to back off its plan for a classically designed democracy administered by a strong central government and instead re-empower local elites; (7) and, efforts by the central government in Baghdad to support local Sunni tribal leaders.<sup>17</sup>

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<sup>16</sup> Ambassador Zalmay Khalilzad, ‘Statement on the Situation Concerning Iraq: Remarks in the Security Council Chamber’, *U.S. Department of State*, October 19, 2007, <http://www.state.gov/p/io/rls/rm/93729.htm>, accessed November 7, 2007.

<sup>17</sup> Presentation titled ‘Best Practices in al-Anbar’ by Kelly Musick, Joint Center for Operational Analysis, Joint Forces Command, Naval Postgraduate School, September 13, 2007; Presentation titled

All these factors reduced the effectiveness of the insurgents in Anbar over the 2006-2007 period perhaps most dramatically reported in the battle for Ramadi throughout the fall of 2006.<sup>18</sup> In retrospect, however, dramatic events in and around Ramadi in late 2006 and early 2007 represented the culmination of a series of battles throughout Anbar province over the preceding two years in which the United States military took the fight to the insurgents; slowly but surely grasped the nuances of the complicated political and military environment; and made fundamental changes to their organizational SOPs to build a series of new COIN competencies. As previously noted, this dissertation does not argue that success in Anbar can be attributed solely to American military action, but it is clear that the tactical adaptation and organizational innovation of individual units played a significant part in that success. In Anbar, that innovation process unfolded over 24-odd months of hard fighting. The crucial battle of Ramadi in late 2006 and early 2007 must be seen in the context of military operations ongoing throughout the province over the previous two years. During this period, U.S. military units continually cycled through a series of tactics, techniques and procedures on the battlefield that saw growing competence of units in developing the appropriate balance between kinetic and non-kinetic operations; better development and integration of locally-derived intelligence with operations; better use of information operations in the contested areas; and application of a systems-based analysis of the environment that helped operationalize the concept of effects-based operations. The story of this iterative, evolutionary and organically driven process innovation began unfolding in Anbar after the Fallujah I and II assaults in 2004 – both

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‘Studying Insurgency in Al Anbar’, by Carter ‘Malkasian, Center for Naval Analyses, Naval Postgraduate School, November 28, 2007.

<sup>18</sup> As noted by Kilcullen, ‘Anatomy of a Tribal Revolt’.

of which featured conventional-style military operations and, in Fallujah I, a failed attempt to train Iraqi military units to take on the mission of combating the insurgents.

### **The End of the Beginning**

Many of the elements of the counterinsurgency campaign used successfully by Marines and Army units in Ramadi during late 2006 and early 2007 were previewed during Operation Hunter and its aftermath – a series of operations that began in July 2005 in which U.S. and Iraqi forces swept the villages of western Iraq along the Syrian border – Husaybah, Al Qaim, and Ubaydi (see Figure 3-1 below). In western Iraq, the Marine Corps and the Army began adapting and innovating as they sought a mix of institutional COIN capabilities tailored to the local environment. Out of the 2005-2006 campaigns in western Iraq emerged a series of COIN best practices that would gradually appear throughout Iraq as the Army and Marine Corps slowly but surely wrenched themselves (particularly in the Army) away from their institutional preference for traditional conventionally-oriented operations and plunged head-first into the cauldron of irregular warfare. Units built their COIN best practices from the ground up, a process fostered by an innovative and creative officer corps, supported by their professional cadre of non-commissioned officers and executed by soldiers and Marines on the battlefield.

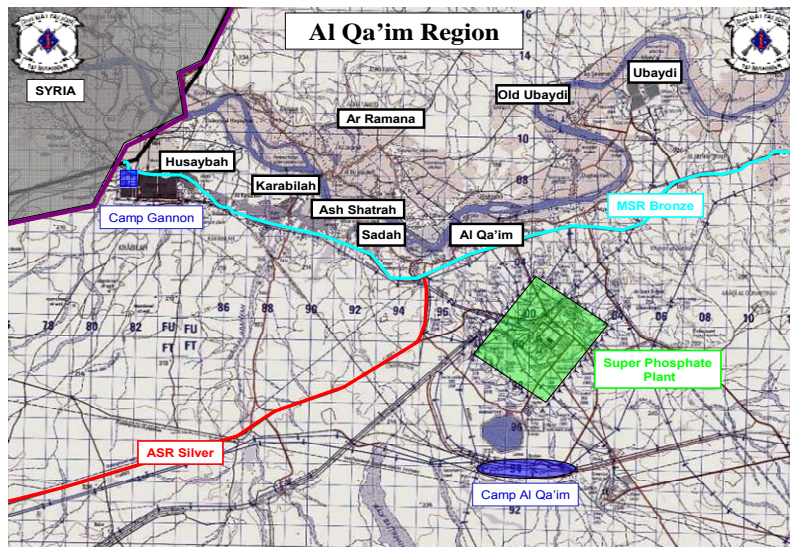
By late 2004, AQI had heavily infiltrated areas in western Iraq after being driven out of Fallujah. AQI naturally gravitated to the area to seize control over traditional smuggling routes into Iraq over the Syrian border – routes after the invasion that provided arms, men and money for the insurgency. In 2004-2005, Husaybah, a city of

30,000 along the border of Iraq and Syria in western Anbar province, was described by one military officers as ‘...a Wild West Border town.’<sup>19</sup> Figure 3-1 below, compiled by 2<sup>nd</sup> Battalion, 1<sup>st</sup> Marine Division, is a map of western Iraq that identifies the towns in the area and some of the U.S. facilities in 2004.

The military footprint in western Anbar had been reduced due to the demands of conducting the Fallujah operations in March and November 2004. By mid-2005, Al Qaim, Husaybah and the series of towns along the Euphrates River in western Anbar had become a center of AQI and insurgent resistance in western Iraq. By the summer of 2005, American forces in western Anbar remained confined to three primary outposts as indicated in Figure 3-2 below: a Marine company in a heavily bunkered base called Camp Gannon in Husaybah; a squad protecting a communications tower just north of Al Qaim in an outpost called Khe Sanh, and battalion headquarters at Camp Al Qaim comprised of two companies, an aviation detachment and logistics support elements. The combat power at Camp Al Qaim remained limited by a requirement that one of its companies provide security at the sprawling Al Asad airfield. Camp Gannon located on the outskirts of Husaybah was a heavily fortified facility, and it routinely received mortar and sniper fire from insurgents that freely roamed throughout the area.

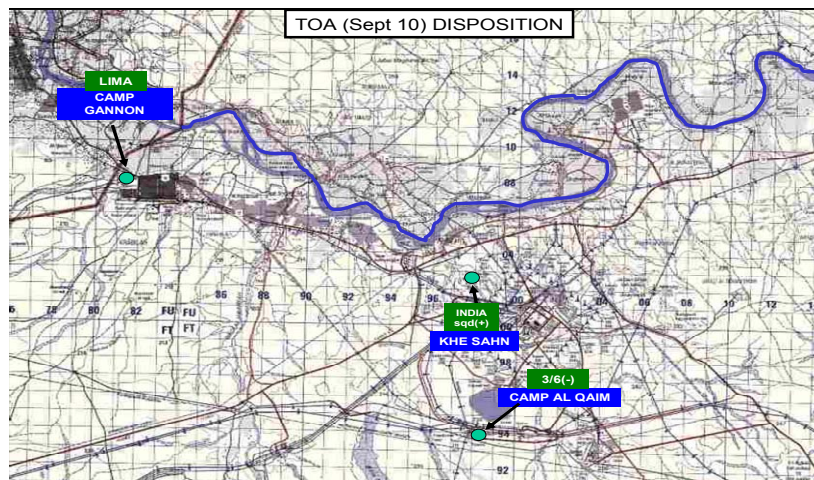
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<sup>19</sup> Lt. Evan Lopez, stationed in the region in 2004 and 2005, as quoted in David Cloud, ‘Recovery and War Vie in Iraq’, *International Herald Tribune*, April 6, 2006.



**Figure 3-1: Al Qaim Area in Western Iraq**

*Source: PowerPoint presentation compiled by 3<sup>rd</sup> Battalion, 6<sup>th</sup> Marines titled 'Al Qaim Iraq, August 05-Mar 06'.*



**Figure 3-2: Disposition of U.S. Forces in Western Anbar in September 2005**

*Source: PowerPoint Briefing compiled by 3<sup>rd</sup> Battalion 6<sup>th</sup> Marines titled 'Al Qaim Iraq, August 05-Mar 06'.*

While AQI gradually seized control over many areas in western Iraq in 2004 and 2005, their presence in towns like Al Qaim did not go unnoticed by local residents.

Over the period, a tactical alliance emerged between AQI and the Sunni insurgent nationalist groups bound together by their opposition to the occupation and the fears of growing Iranian Shi-ite influence throughout the country. Importantly, however, many of the foreign AQI insurgents remained outside the area's indigenous tribal and social structure – despite Devlin's assessment to the contrary. The Iraq-Syrian border region had long been controlled by the Albu Mahal tribe, one of the main Sunni groups comprising the Dulaym tribal confederation in Anbar. The Albu Mahals were spread out along the Western Euphrates River Valley from Fallujah all the way to the Syrian border, with significant concentrations in Al Qaim, Hit, and Husaybah. While the Albu Mahals never enthusiastically supported Saddam, members of the tribe nonetheless gradually gathered under various insurgent nationalist groups opposing the occupation. While initially supportive of AQI in late 2004, by the middle of 2005 evidence appeared suggesting that the Albu Mahals (as well as other tribal groups) had become uncomfortable with the relationship.<sup>20</sup> In a pattern that would be repeated elsewhere in Anbar in 2006 and 2007 in what would later become known as the tribal awakening, local tribes gradually came to object to AQI's heavy handed, brutal tactics of intimidation, AQI's interference with their revenue-generating smuggling activities, and AQI's attempts to work their way into the social structure through marriage. By the middle of 2005, the Albu Mahals and the Albu Nimr tribe had established their own militia – called the Hamza battalion – to actively resist AQI in the area along the Iraq-Syrian border. In mid-2005, press reports indicated that the Hamza battalion was actively assisting U.S. forces with intelligence tips in Operation

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<sup>20</sup> See, for example, Sabrina Tavernise and Dexter Filkins, 'Local Insurgents Tell of Clashes with Al Qaeda's Forces in Iraq', *New York Times*, January 11, 2006. Also see details in Steve Negus, 'Border Region Offers Glimmer of Hope for Post Insurgency Peace', *Financial Times*, May 6, 2006; Mark Mazzetti and Solomon Moore, 'Insurgents Flourish in Iraq's Wild West', *Los Angeles Times*, May 25, 2004.

Matador in May 2005.<sup>21</sup> In response, AQI entered into an alliance with two rival tribes, the Karguli and Salmoni tribes over the summer, and finally drove the Albu Mahals from Al Qaim in September 2005.<sup>22</sup> In early September, AQI had taken over Al Qaim, and posted a sign that read: ‘Welcome to the Islamic Republic of Qaim’. The Albu Mahals would later join with coalition forces in a unit called the ‘Desert Protectors’ in supporting the coalition offensives throughout the fall of 2005. They would be rewarded at the conclusion of the offensives and re-inserted into their positions of power and influence by coalition forces. As the Marines re-exerted control over Al Qaim, many members of the tribe found jobs with the newly reconstituted Iraq Army brigade and the police force. The assistance of the tribe in providing local security proved vital to reducing insurgent infiltrations into the city.

The terms and conditions of the relationship between American military forces and the Albu Mahals would be repeated elsewhere in Anbar over the next 24 months as the so-called ‘awakening’ process gathered momentum. Coalition forces adopted a laissez faire attitude towards the tribe’s revenue generating activities in exchange for help against AQI. The relationship would be solidified by giving the tribes important roles in the local government, police and armed forces. Figure 3-3 illustrates the tribal makeup along the Iraq-Syrian border.

These local dynamics coincided with a growing operational focus on Western Anbar by Multi-National Forces West (MNF-W, the coalition command whose area of

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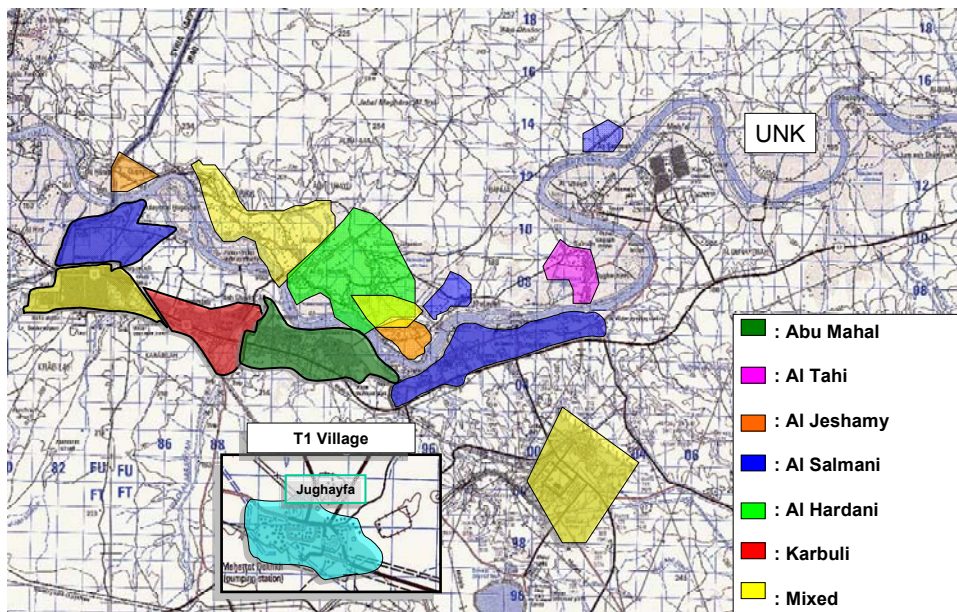
<sup>21</sup> Hannah Allam and Mohammed al Dulaimy, ‘Iraqis Lament Call for Help’, *Philadelphia Inquirer*, May 17, 2005.

<sup>22</sup> Ahmed Hashim, ‘Iraq’s Civil War’, *Current History* (January 2007), pp. 2-10; Malkasian, ‘Evidence from Al Anbar’, p. 123. Also see Christopher Allbritton, ‘Making Tribal War Work for the U.S. in Iraq’, *Time*, November 8, 2005; ‘Iraq’s Desert Protection Force at War’, StrategyPage, January 1, 2006, <http://www.strategypage.com/htmw/htworld/articles/20060101.aspx>, accessed January 5, 2007.



responsibility included Anbar Province) after the conclusion of the Fallujah operations in late 2004. This increased focus was importantly bounded, however, by the need to control violence in Fallujah and Ramadi, the two main urban centers in the province. These priorities meant that the forces available to combat the insurgency elsewhere in the province were limited. In addition to operations conducted against insurgents in Ramadi (although those insurgents were characterized at the time as ‘criminals,’ unlike the ‘professional jihadists’ that had controlled Fallujah),<sup>23</sup> others were executed in western Anbar to capture escaped Fallujah insurgents, and to prevent the infiltration of foreign fighters across the Syrian border.<sup>24</sup>

### Major Tribes Of Al Qaim Region



**Figure 3-3: Tribes in Al Qaim Region**

*Source: PowerPoint presentation titled ‘TF 1/7 Al Qaim PME Brief’, dated February 21, 2007*

<sup>23</sup> Christian T. Miller, ‘The Conflict in Iraq; Marines Are Cracking Down on Insurgent Stronghold of Ramadi; Checkpoints, vehicle inspections and a curfew form part of ‘proactive’ operation in the city’, *Los Angeles Times*, February 21, 2005.

<sup>24</sup> Tony Perry, ‘The World; After Fallujah, Marines’ Mission Shifts Northwest; Troops seek insurgents who fled the city during the assault last year. The rebels have new tactics’, *Los Angeles Times*, February 18, 2005.

Through the spring and summer of 2005, MNF-W's focus shifted from eastern Anbar to the western Euphrates and towns such as Al Qaim, Hit, and Haditha, in which AMZ and the AQI leadership was believed to be hiding, and which also served as the logistical hubs for what was believed to be a robust foreign fighter infiltration network.<sup>25</sup> U.S. Marines fought a series of offensives in the western reaches of the province, temporarily occupying towns along the Euphrates in attacks such as Operation 'River Blitz,'<sup>26</sup> Operation 'Matador,' Operation 'New Market,'<sup>27</sup> and Operation 'Sword.'<sup>28</sup> These actions consisted for the most part of conventional-style clearing operations, with the units returning to their forward operating bases at the conclusion of the operations. During Operation Matador in May 2005, 1,000 Marines fought a frustrating week-long series of skirmishes with insurgents along the Iraq-Syrian border in an attempt to stem the flow of foreign fighters across the border. During the operation, local residents accused the Marines laying siege to Al Qaim of using indiscriminate mortar and artillery fire and air strikes, resulting in collateral damage and civilian casualties.<sup>29</sup> Fasal al-Goud, a former governor of Anbar that had sought help against AQI, leveled strong criticism of the U.S tactics in Matador that, he said, only created more enemies. 'The Americans were bombing whole villages and saying they were only after the foreigners,' said al-Goud. 'An AK-47 can't

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<sup>25</sup> Ellen Knickmeyer, 'Zarqawi Followers Clash With Local Sunnis; Battle That Left Marines on Sidelines Reveals Fractures in Foreign Fighters' Support', *The Washington Post*, May 29, 2005; Mark Mazzetti and Solomon Moore, 'The Conflict in Iraq; Insurgents Flourish in Iraq's Wild West; The center of the rebel movement has shifted to Al Anbar province, near the border with Syria. But the U.S. has been moving its forces away', *Los Angeles Times*, May 24, 2005; Dan Murphy, 'After temporary gains, Marines leave Iraqi cities; As a week-long US operation ends, residents and some troops worry that insurgents will soon return', *The Christian Science Monitor*, March 3, 2005.

<sup>26</sup> Murphy, 'After Temporary Gains'.

<sup>27</sup> Carol J. Williams, 'The World; U.S. Troops Pour Into Rebel-Held Iraqi Town', *Los Angeles Times*, May 26, 2005.

<sup>28</sup> Patrick J. McDonnell, 'The Conflict in Iraq; Attacks Mar Anniversary of Return to Iraqi Rule; The insurgency claims at least a dozen more lives. Two American soldiers and an octogenarian legislator are among those killed', *Los Angeles Times*, June 29, 2005.

<sup>29</sup> Dahr Jamail, 'Operation Matador: Claims Over US Siege Challenged', *Inter Press Service*, May 19, 2005.

distinguish between a terrorist and a tribesman, so how could a missile or tank?’<sup>30</sup> The U.S. military nonetheless claimed the operation was a success, citing 125 killed insurgents and the detention of 39 insurgent suspects.<sup>31</sup> Participants in the operation, however, were not so sure. Major Steve White, director of operations of the 3<sup>rd</sup> Battalion, 25<sup>th</sup> Marine Regiment commented that ‘It’s an extremely frustrating fight. Fighting these guys is like picking up water. You’re going to lose every time.’<sup>32</sup> The approach to fighting the insurgents reflected the MNF-I command emphasis (coming from General Casey) on the ‘indirect approach,’ which emphasized lowering the U.S. military profile and boosting the capabilities of the Iraqi Security Forces, or ISF.<sup>33</sup> The approach on the battlefield also happened within a context in 2004 and 2005 that saw the consolidation of the U.S. military presence at larger bases at such sites as Tallil in southern Iraq, Al Asad in Al Anbar, Balad in central Iraq and Qayyarah in northern Iraq. The consolidation of forces in these bases reflected the approach that sought to lower the visibility of U.S. forces and turn responsibility over to the Iraqis.

Consistent with the indirect approach, the 2<sup>nd</sup> Battalion 7<sup>th</sup> Marine regiment mounted a 10-month effort to constitute combined action platoons of Iraqis and Marines around the city of Hit in al Anbar, a city of 100,000 that lies halfway between Ramadi and Al Qaim.<sup>34</sup> After standing up the 503<sup>rd</sup> Iraqi National Guard Battalion in mid 2004, however, the unit disintegrated in fighting with AQI in October and could render little

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<sup>30</sup> As quoted in Allam and al Dulaimy, ‘Iraqis Lament Call for Help’, *Philadelphia Inquirer*, May 17, 2005.

<sup>31</sup> Ellen Knickmeyer and Caryle Murphy, ‘U.S. Ends Iraqi Border Offensive’, *Washington Post*, May 15, 2005, p. A24.

<sup>32</sup> As quoted in Mazzetti and Moore, ‘The Conflict in Iraq’.

<sup>33</sup> As noted by Malkasian, ‘Did the Coalition Need More Forces in Anbar?’, pp. 120-121.

<sup>34</sup> LTC Philip Skuta, ‘Introduction to 2/7 CAP Platoon Actions in Iraq’, *Marine Corps Gazette* (April 2005), p. 35; Skuta, ‘Partnering With the Iraqi Security Forces’, *Marine Corps Gazette* (April 2005), pp. 36-38; Lt. Jason Goodale and Lt. Jon Webre, ‘The Combined Action Platoon in Iraq’, *Marine Corps Gazette* (April 2005), pp. 40-42.

assistance to U.S. forces in their battles for control over the area with insurgents that had appeared in the area after the clearing actions in and around Falluja.<sup>35</sup>

Although attacks continued throughout Iraq at a high pace during the spring of 2005, some data provided room for optimism. Statistics revealed that attacks in April 2005 had actually dropped since January (22 percent, to 40 per day), and U.S. casualties were at their lowest level in a year. In addition, at least anecdotally, Iraqi cooperation with the occupation was improving, with Iraqi civilians providing more intelligence to the coalition.<sup>36</sup> In addition, coalition leaders claimed that newly recruited Iraqi military and police forces would soon 'be trained to take over counterinsurgency missions in most of Iraq.'<sup>37</sup>

That hope, however, masked a growing unease by American forces fighting the insurgency in the western Anbar. Limited manpower, coupled with the intense security needs of Fallujah and Ramadi, ensured that the coalition could not maintain a sustained presence in the various towns of the region. In some towns such as Rawah, Hit and Haditha, there had been little sustained coalition presence at all during the war, and locals who had collaborated with the coalition during the short interludes when the coalition was there had been threatened or killed when those troops left.<sup>38</sup>

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<sup>35</sup> Malkasian, 'Did the Coalition Need More Forces in Anbar?', p. 123.

<sup>36</sup> Jill Carroll, 'Evolution in Iraq's insurgency; Attacks on U.S. troops are down 22 percent since January, but some are more sophisticated', *The Christian Science Monitor*, April 7, 2005.

<sup>37</sup> Mark Mazzetti, 'The Conflict in Iraq; Insurgency Is Waning, a Top U.S. General Says', *Los Angeles Times*, March 2, 2005.

<sup>38</sup> Jill Carroll and Dan Murphy, 'Iraqi insurgents are a moving target; As the attacks in west Iraq ended, insurgents' bombs in Baghdad killed at least 152', *The Christian Science Monitor*, September 15, 2005.

By the middle of 2005, military commanders described western Anbar as the ‘epicenter of the country’s deadly insurgency’<sup>39</sup> and reporters labeled the Euphrates valley the ‘Ho Chi Minh Trail’ of the war.<sup>40</sup> Despite the region’s importance, the western campaigns were conducted by only three battalions of 2,100 Marines instead of the four battalions of 3,600 Marines that had occupied the region a year before.<sup>41</sup> Despite hopes that the shortfall in coalition troops could soon be filled by Iraqis,<sup>42</sup> that optimism was illusory, as it proved extremely difficult to get trained Iraqi units to western Anbar and even more difficult to recruit and retain keep local Sunnis in the various Iraqi security forces.<sup>43</sup> Despite coalition assessments that they had killed enough insurgent leaders along the border to reduce AQI’s military capabilities,<sup>44</sup> the lack of sustained coalition presence everywhere ensured that the insurgents could retreat when the Marines entered a town, but return and kill whoever had collaborated (or were just accused of collaborating) with the occupiers.<sup>45</sup>

Despite failing to capture or kill AQI leader Abu Musab al-Zarqawi, or AMZ, the various operations along the Syrian border in the spring of 2005 provided a glimpse into the possibility of exploiting divisions between AQI and local Iraqis. During May 2005, Marine units operating along the border near Al Qaim reported clashes between AQI followers and local tribes over the murder by AQI of a local tribal leader, and their dissatisfaction with AQI’s imposition of strict rules banning items such as

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<sup>39</sup> Mazzetti and Moore, ‘The Conflict in Iraq’.

<sup>40</sup> John F. Burns, ‘Iraq’s Ho Chi Minh Trail’, *New York Times*, June 5, 2005.

<sup>41</sup> Carroll and Murphy, ‘Iraqi Insurgents’; Mazzetti and Moore, ‘The Conflict in Iraq’.

<sup>42</sup> Burns, ‘Iraq’s Ho Chi Minh Trail’.

<sup>43</sup> Solomon Moore, ‘The World; Rebels in Western Iraq Under Siege’, *Los Angeles Times*, May 10, 2005.

<sup>44</sup> Knickmeyer, ‘U.S. Ends Iraqi Border Offensive’.

<sup>45</sup> Jeffrey Fleishman, ‘The Conflict in Iraq; U.S. Ponders Iraq Fight After Zarqawi; The militant may have suffered grave injuries. If he dies, the insurgency’s divisions could widen’, *Los Angeles Times*, May 28, 2005.

western dress, smoking, and satellite television.<sup>46</sup> At least briefly, the insurgency seemed in disarray, and coalition spokesmen declared that ‘this is not an expanding insurgency,’ because ‘the flow of foreign fighters was ebbing,’ and suicide and vehicle bombings were decreasing.<sup>47</sup> Despite this self-proclaimed success along the border during the summer of 2005 (or possibly in spite of), similar coalition operations in the region were prosecuted throughout the fall, with continued sweeps of Anbar towns in Operation ‘Scimitar,’<sup>48</sup> Operation ‘Quick Strike,’<sup>49</sup> Operation ‘Sayyid,’<sup>50</sup> Operation ‘Iron Fist’, and Operation ‘River Gate,’<sup>51</sup> designed to interrupt infiltration of fighters across the Syrian border. In spite of (or possibly because of) the coalition’s emphasis on western Anbar, insurgent activity also increased in Fallujah and Ramadi.<sup>52</sup> The continued lack of a ‘consistent armed presence’ by the coalition throughout much of the province ensured little cooperation by the locals against insurgents.<sup>53</sup> The largest of these operations was Operation Steel Curtain, which consisted of 2,500 marines and soldiers and 1,000 Iraqi troops.

The conventionally-oriented military operations of the period that concluded with Operation Steel Curtain in November 2005 demonstrated a growing understanding

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<sup>46</sup> Ibid.

<sup>47</sup> Craig S. Smith and Eric Schmitt, ‘U.S. Contends Campaign Has Cut Suicide Attacks’, *New York Times*, August 5, 2005.; John Hendren, ‘The World; 8 U.S. Troops Killed in Battle for Border; The deaths in western Iraq come as American forces fight for control of the area, believed to be a foreign supply route for the insurgency’, *Los Angeles Times*, August 3, 2005..

<sup>48</sup> Edward Wong and John F. Burns, ‘Marines and Iraqi Troops Start Push Against Rebels’, *New York Times*, July 10, 2005.

<sup>49</sup> Jonathan Finan and Saad Sarhan, ‘U.S., Iraq Strike Volatile Area; Politicians Stall Constitution Writing to Resolve Central Issues’, *The Washington Post*, August 7, 2005.

<sup>50</sup> Bradley Graham, ‘Forces Bolstered In Western Iraq; Commanders Hope to Block Infiltration’, *The Washington Post*, September 21, 2005.

<sup>51</sup> Louise Roug, ‘The World; 6 Marines Slain by Bombs in Western Iraq Offensive; U.S. and government troops mounted two operations against suspected foreign fighters in advance of the constitutional vote’, *Los Angeles Times*, October 8, 2005.

<sup>52</sup> Craig S. Smith, ‘U.S. and Iraq Step Up Effort to Block Insurgents’ Routes’, *New York Times*, October 3, 2005.

<sup>53</sup> Richard Boudreaux, ‘The World; U.S. and Iraqi Forces Mount Offensive’, *Los Angeles Times*, October 5, 2005.

that killing the insurgents and/or driving them from the area represented only the first phase of the 'clear, hold and build' COIN campaign that would eventually take hold throughout Iraq. Each of these phases came to be built on standardized best practices tailored to the local environments – best practices that eventually spread to other units in the province – that tailored the procedures to the local circumstance. Eventually, the procedures for fighting the insurgency developed during 2005 and 2006 found their way into institutionalized doctrine in December 2006.

The planning for the last major conventional offensive of 2005, Operation Steel Curtain, demonstrated a grasp of effects-based operations – a recognition that the application of combat power had to take place within a wider social and political construct that sought to address and mitigate the potentially negative second order effects of those operations on the local population. Developments in the aftermath of Steel Curtain represented a critical turning point in the conduct of counterinsurgency campaign in Anbar and for the entire country.

The 2<sup>nd</sup> Marine Division drew up an extensive 'Joint Restricted No Strike Target List' in each of the towns in an attempt to prevent the targeting of mosques, schools, water towers, cemeteries, public buildings, water treatment facilities, areas of historical and religious significance, and hospitals. Sixteen of the sites were identified in Ubaydi, 29 in Husaybah, 26 in Karabilah, nine in Ar Rabi, three in Khutaylah. Destruction of any of the targets on the list had to be cleared by the Central Command. The operations were accompanied by a 'non-kinetic effects' plan that featured loudspeaker broadcasts, radio broadcasts on AM frequencies, damage payments to residents whose property had been damaged and extensive distribution of radios, handbills and posters

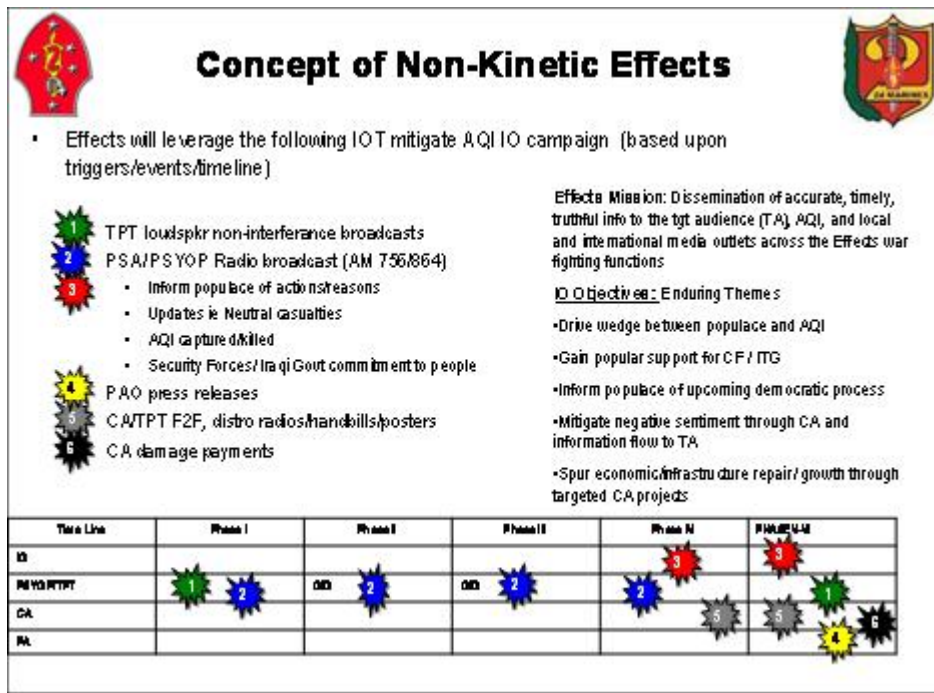
in the areas.<sup>54</sup> Four combat correspondents were distributed through the force and a conscious effort was made to shape the reporting coming out of the event. Figure 3-4 below describes the approach taken to integrate information operations, civic affairs and reconstruction into the conventional military operation.

While the planning for the series of military operations in late 2005 demonstrated an increasing awareness of the complexity of the battle space, battlefield tactics adopted after the operations' conclusions proved far more critical to the long-term success of the COIN campaign in the area. In western Anbar in late 2005, U. S. battlefield tactics changed in ways that reflected a completely different appreciation of the environment and for the appropriate role played by U.S. military forces. While operations earlier in the year featured conventionally-oriented search and destroy missions like Operation Matador, incoming units in late 2005 realized that a new tactical approach would be necessary to tame the badlands of western Anbar. This period marked the beginning of the innovation process that built momentum throughout 2006 and 2007 in Anbar in the battle against the insurgents. The innovative approach to counterinsurgency operations in western Anbar proved to be a preview of what would come later in the eastern part of the province in 2006 and 2007.

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<sup>54</sup> 'Operation Steel Curtain (al Hajip Elfulathi)', 2<sup>nd</sup> Marine Division/Regimental Combat Team 2 briefing, undated.





**Figure 3-4: Concept of Non-Kinetic Effects**

*Source: PowerPoint presentation titled '2<sup>nd</sup> Marine Division/2<sup>nd</sup> Regimental Combat Team's concept of operations for Operation Steel Curtain'.*

### 3<sup>rd</sup> Battalion, 6<sup>th</sup> Marine Regiment

At the outset of the fall 2005 clearing operations along the Syrian-Iraq border, the U.S. military footprint consisted of three main operating bases: Camp Gannon, Khe Sanh and Camp Al Qaim as illustrated in Figure 3-1. In July 2005 during his initial site survey of the area, the Lieutenant Colonel Dale Alford, commander of the incoming Marine battalion, 3<sup>rd</sup> Battalion 6<sup>th</sup> Marine regiment (3-6) that would be taking over operation in Al Qaim, realized that the isolated base areas in western Iraq had effectively ceded much of the border region to the insurgents – a blend of Baathist nationalists and AQI jihadists. Wherever the U.S. forces weren't, the insurgents exercised control. Despite the dire situation, Alford confronted what was in many respects a familiar environment. He had seen many of the circumstances of

western Anbar before in a storied Marine Corps career that had seen him involved in Haiti, West Africa, the Balkans – deployments that during the 1990s had come to be derisively referred to as ‘military operations other than war’.<sup>55</sup>

The tactical approach to counterinsurgency taken by 3-6 in western Iraq was informed less by specific doctrine and training than by Alford’s vast experiences in fighting ‘irregular’ war and by the battalion’s previous experience conducting counterinsurgency operations in Afghanistan from April through December of 2004. Operating in a cluster of provinces in northeastern Afghanistan over eight months, the unit had performed a diverse array of tasks: fighting Taliban insurgents, training and integrating Afghan National Army units into its operations, providing security for provincial reconstruction projects, building organic intelligence capacities at the company level, and, establishing a sustained small unit presence in its areas of operations. All these lessons would be applied during the Iraq deployment, with the task of tactical execution falling primarily to the battalion’s 350 non-commissioned officers who understood the unit’s command priorities.<sup>56</sup>

Upon deploying the unit into western Anbar in September 2005, Alford immediately dispersed his forces out of the three main operating areas.<sup>57</sup> As Alford emphasized to his battalion on a nearly continuous basis: ‘It’s the People Stupid.’<sup>58</sup> Alford framed the battalion’s approach to conducting the counterinsurgency by a simple objective: ‘to make the people choose us over the bad guys.’<sup>59</sup> The disposition of these bases is

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<sup>55</sup> Interview conducted by the author with Lieutenant Colonel Julian Alford, then commanding officer of 3<sup>rd</sup> Battalion 6<sup>th</sup> Marine Regiment, 2<sup>nd</sup> Marine Division, February 29, 2008.

<sup>56</sup> Ibid.

<sup>57</sup> Ibid.

<sup>58</sup> 3/6 PowerPoint presentation titled ‘Command Brief’, undated.

<sup>59</sup> Ibid.

illustrated below in Figure 3-1a and b. The dispersal of his forces out of their main operating bases represented the first step in his bid to establish a local presence to counter the insurgents. By the end of its first month, Alford had pushed the battalion into a variety of different outposts throughout the area as illustrated in Figure 3-1b. At the conclusion of Steel Curtain, 3-6 had further dispersed throughout the operational area into sixteen outposts in partnership with Iraqi security forces.

Using a Caterpillar D-9 bulldozer left behind by departing Army units, Alford's engineers built a series of platoon-sized outposts that were jointly manned by 3-6 and the newly formed Iraqi 1<sup>st</sup> Brigade. As shown in Figure 3-16a and 3-16b below, these hastily prepared bases were rudimentary in nature but served as the instruments to quickly disperse the battalion and increase the presence of U.S. and Iraqi forces throughout the area. After the shaping conventional military operations in the fall, 3-6 then launched the next phase of the 'clear, hold, build' approach. The next several months saw 3-6 focus on arriving at an appropriate balance of kinetic and non-kinetic tools to consolidate their control over the area. Alford established six command priorities for 3-6: (1) build up the Iraqi Security Forces; (2) establish combined action platoons to operate out of the combat outposts; (3) build and support the Iraqi police; (4) continue aggressive operations against the insurgents; (4) focus on civil affairs and reconstruction; (5) build local governance and leadership.<sup>60</sup> These five objectives constituted so-called 'logical lines of operations,' or LOOs around which to structure the unit's operations during its entire deployment.

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<sup>60</sup> 3/6 PowerPoint presentation titled 'Al Qaim August 05 – March 06',

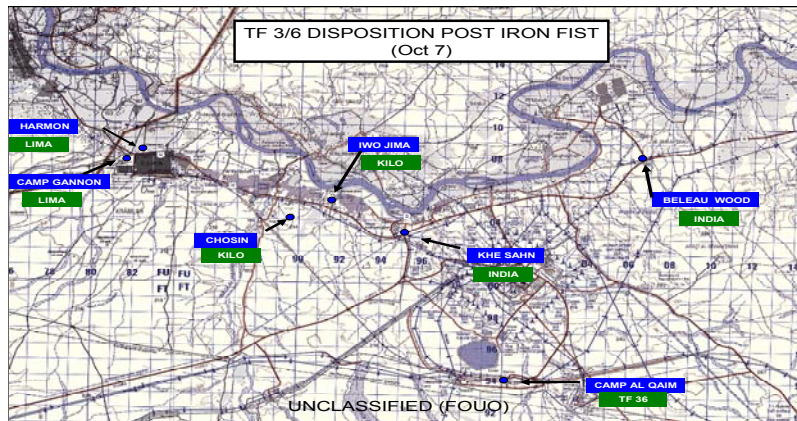


Figure 3-5a

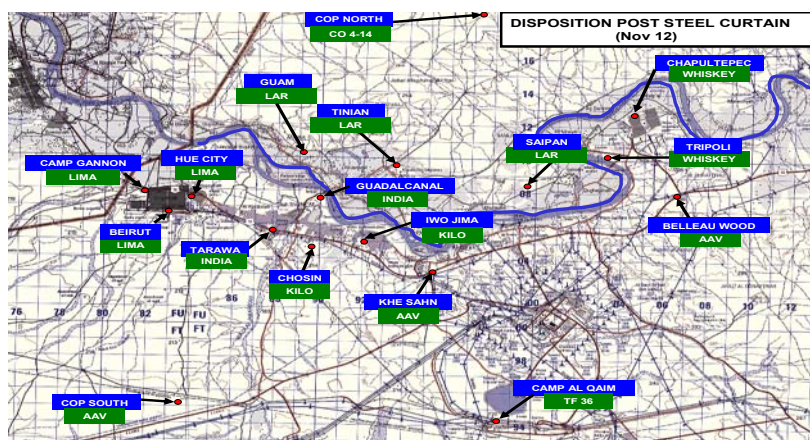


Figure 3-5b

*Figures 3-5a (top) and 3-5b (bottom). The Dispersal of 3/6 in and around Al Qaim during the fall of 2005.*

Each of the platoon-sized outposts patrolled their local areas on a near-constant basis to convince the local populace that the Iraqi-American teams were there to stay and would not be returning to a large military base. Alford developed an innovative metric for each of his outposts – he requested all to report the number of meals that his personnel had eaten in local households. Alford kept track of his so-called ‘eats on streets’ as one way to track the degree of local engagement by the joint U.S.-Iraqi team patrols.<sup>61</sup> Alford directed that most of 3-6’s patrols to occur on foot, not in vehicles, as the unit began to execute the ‘hold’ part of the plan. Alford intended the

<sup>61</sup> Author interview with Alford.

outposts to function as a variation of the combined action platoon model from Vietnam in which Iraqis and Marines lived and operated together on a continuous basis. The joint patrols proceeded to develop an intelligence reporting network built on local relationships. Each local network pooled their reports with the other combat outposts, giving the 3-6 battalion headquarters a fused and nuanced picture of the local environment. As the battalion moved to the 'hold' part of the campaign, kinetic operations against the insurgents continued through joint Iraqi-U.S. actions aimed at border interdiction, river interdiction, snap vehicle check points, time sensitive targeting and targeted raids.<sup>62</sup> As would be demonstrated throughout the innovative COIN campaign in Iraq, none of the 'clear, hold, and build' phases ever occurred as mutually exclusive operations. All phases happened simultaneously and were interrelated.

After the establishment of the combat outposts, 3-6 embarked on a series of initiatives to vest the tribal leadership into the system of local security.<sup>63</sup> The battalion embarked on parallel efforts to re-establish the local police force that had been decimated by AQI's campaign of intimidation and coercion. Alford subsequently sent 585 local recruits to the police academy in Baghdad for a two week training course – a recruiting effort backed by the local tribal sheiks. In addition, 3/6 placed contracts to rebuild four police stations that had been destroyed by the insurgents. The standup of the police force coincided with the building of a new Iraqi Security Force brigade – 3<sup>rd</sup> Battalion, 7<sup>th</sup> Brigade – which drew largely from the local tribes in western Anbar. Through the first three months of 2006, the joint patrols and steady standup of the

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<sup>62</sup> 3/6 PowerPoint Brief titled 'Al Qaim August 05 – March 06'.,

<sup>63</sup> For details of one round of meetings in December 2005, see Bill Roggio, 'The Sulemani', *The Long War Journal*, December 1, 2005, [http://www.longwarjournal.org/archives/2005/12/the\\_sulemani\\_1-print.php](http://www.longwarjournal.org/archives/2005/12/the_sulemani_1-print.php), accessed September 20, 2007.

local police force gradually transformed the security environment in western Anbar and led to a reduction in violence. Sniping and IED attacks against the joint Iraqi-U.S. patrols declined dramatically in the spring of 2006. By the early spring, 3-6 began supplementing these efforts with civil affairs and reconstruction projects in the area. The battalion assigned civil affairs officers to work with the tribes on a daily basis to address such issues as electricity, water availability, sewage, schools, hospitals, roads and garbage removal.

### **1<sup>st</sup> Battalion, 7<sup>th</sup> Marine Regiment**

After the departure of 3-6 in the spring of 2006, 1<sup>st</sup> Battalion, 7<sup>th</sup> Marine Regiment, or 1-7, commanded by Lieutenant Colonel Nick Marano, deployed into the Al Qaim area and continued to consolidate the 'hold' phase of the COIN campaign, building on the efforts of 3-6 to consolidate the gains in the counterinsurgency made in the fall of 2005. This was 1-7's third tour in Iraq (one of which was in Al Qaim), and Marano had extensive Iraq experience through his two prior tours working at the Marine Corps MEF headquarters in Anbar and at MNF-I in Baghdad. The prior experience of the unit and its commanding officer assured that the organization possessed a high degree of situational awareness before it deployed into the area. Upon arriving in Al Qaim, Marano promulgated a new series of 'logical lines of operation,' or LOOs, that related tactical operations with desired strategic effects. Marano developed his LOOs independently through his own initiative, though he drew the approach from his

previous experiences working in the Marine Expeditionary Force, or MEF, headquarters in Iraq at Camp Fallujah.<sup>64</sup>



**Figure 3-6: 1<sup>st</sup> Battalion, 7<sup>th</sup> Marine Regiment Logical Lines of Operation**

*Source: PowerPoint presentation titled 'Al Qaim, PME', February 21, 2007*

Figure 3-6 above shows the logical lines of operation as developed by Marano in the spring of 2006. He broke the LOOs down for each of the towns in 1/7's area of operation. The LOOs were 'a bit ahead of the wave,' according to Marano. These LOOs were adopted by Regimental Combat Team 7, which deployed into the Al Qaim region after 1-7's departure in the summer of 2006.<sup>65</sup> Figure 3-6 describes 1-7's LOOs as applied to the main towns in the 1-7 area of operations. The LOOs reflect a clear and increasing grasp of the need to achieve the right mix of kinetic and non-kinetic tools to achieve the desired effect in 1-7's area of operations. The evolving approach of 1-7 throughout the spring of 2006 reflected a clear and steady

<sup>64</sup> Interview with Colonel Nicholas Marano, 1/7 commanding officer, conducted by the author on April 17, 2008.

<sup>65</sup> Ibid.



development of core competencies that helped the unit arrive at an appropriate blend of organizational capacities in fighting its COIN campaign.

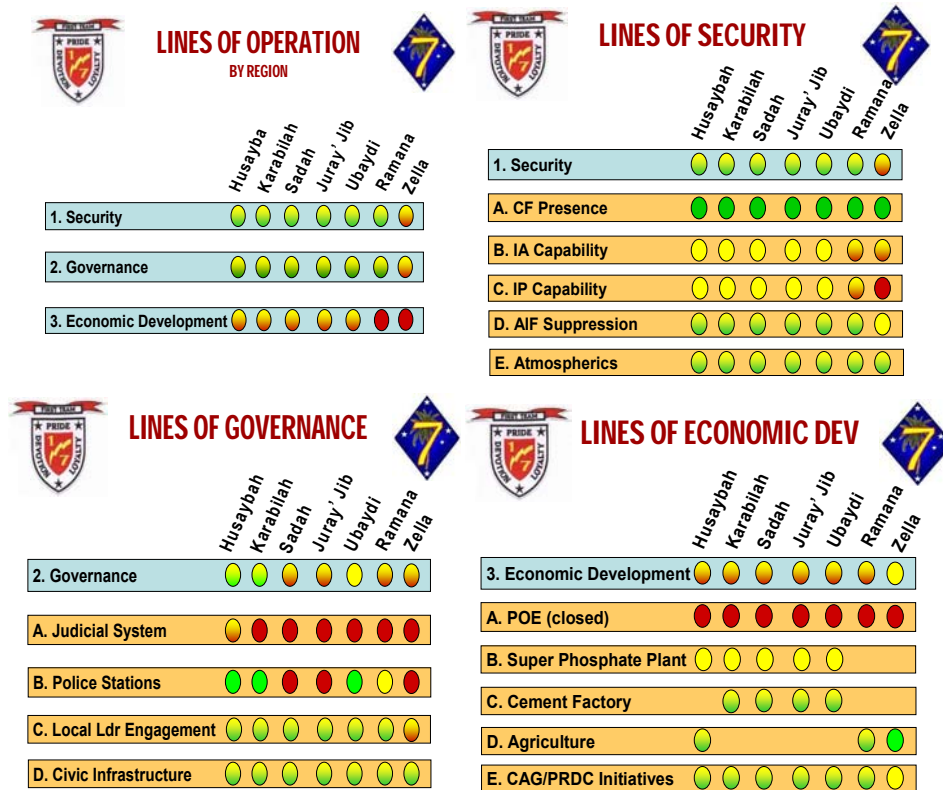


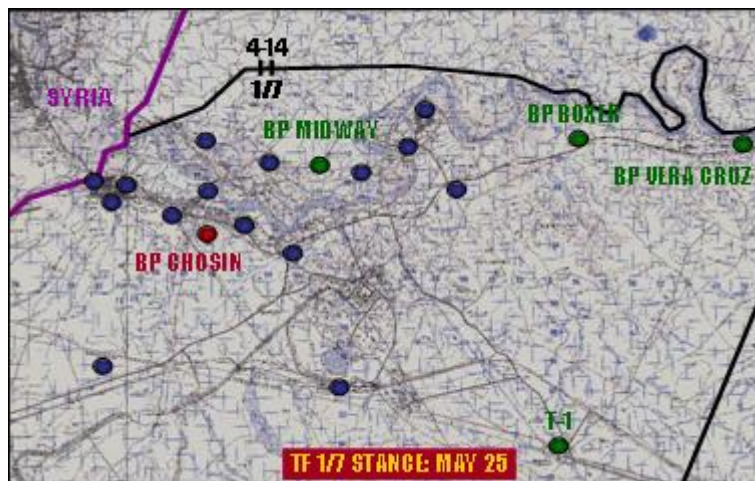
Figure 3-7: Breakdown of the 1<sup>st</sup> Battalion, 7<sup>th</sup> Marine Regiment LOOs

Source: PowerPoint Presentation titled 'Al Qaim, PME', February 21, 2007.

The approaches of 3-6 and 1-7 reflected strands of continuity and the process of organizational innovation as the evolving tactics, techniques and procedures, or TTPs, towards the COIN campaign in western Iraq gained momentum during late 2005 and early 2006. Upon deploying into western Anbar in the spring of 2006, Marano spread most of the battalion into the dozen-odd bases established by Alford in the fall of 2005. Marano sought to continue the process of pushing the unit out into remote areas and, established additional combat outposts in Western Anbar to consolidate the Marines' presence throughout the area. Despite his command's concerns that 1-7 was



spread too thinly, MEF headquarters supported Marano's request to continue pushing the battalion out into more small outposts manned jointly with Marines and Iraqis.<sup>66</sup>



**Figure 3-8: 1<sup>st</sup> Battalion, 7<sup>th</sup> Marine Regiment Footprint, May 2006**

*Source: PowerPoint Presentation titled 'Al Qaim, PME', February 21, 2007*

Shown in figure 3-8 above is deployment in western Anbar in May of 2006, which featured the additions of Battle Positions (BPs) Chosin, BP Vera Cruz, BP Boxer, and T-1 (shown above in green and red). These outposts were manned by platoon- and squad-sized units. By June of 2006, 1-7 was spread out in more than 15 outposts of varying size.<sup>67</sup>

These pictures shown in Figure 3-17 demonstrate the variations in 1-7's outposts built to supplement the ones constructed by 3-6 in the fall of 2005. These outposts pushed 1-7 into the remote areas of Anbar province along the Iraqi-Syrian border. The distance between the outposts created a communications and supply problem for 1-7.

<sup>66</sup> Ibid.

<sup>67</sup> Andrew Tilghman, 'Marines Living 'Outside the Wire' on Syrian Border See Progress', *Stars and Stripes*, June 12, 2006.

Given the dispersal of his battalion over such wide area, Marano moved the unit to a concept of distributed operations, with significant authority for operations delegated down the chain of command to the company and squad level. He created four maneuver companies for the battalion to give his unit greater mobility and flexibility in responding to contingencies.<sup>68</sup>

As 1-7 further dispersed through western Anbar, it built on the progress of 3-6 in generating its own intelligence. By April of 2006, the locally-oriented joint ISF-Marine patrols generated nearly 80 percent of the unit's intelligence.<sup>69</sup> The organic generation of intelligence that resulted grew dramatically during the spring and summer of 2006, overloading 1-7's standard S-2 complement of between four and six officers. By end of its deployment, the 1-7 S-2 staff had grown to over 30 analysts. The battalion's efforts to build organizational capacity to meet the demands for intelligence collection and analysis represented a critical component in its COIN campaign. The 1-7 intelligence effort represented a multifaceted program built on a wide array of technologies, new software and database programs, and perhaps, most importantly, a shared understanding throughout the unit of the importance of gathering data on a systematic basis to develop a nuanced understanding of the complex operational environment.

As a first step in building situational awareness, the unit organized a census and vehicle registration program for all the towns under its control in the spring of 2006.<sup>70</sup>

Over the objections of Marano's headquarters at the regimental combat team, vehicle

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<sup>68</sup> 1/7 Brief

<sup>69</sup> John Koopman, 'Marines Helping to Line Up Sunnis for Iraq's Army', *San Francisco Chronicle*, March 27, 2006. The article quotes Captain Todd Pillo, the 1/7 intelligence officer, who gives this number.

<sup>70</sup> Author interview with Colonel Marano.

checkpoints were established at BP Vera Cruz and T-1. Every vehicle had to be registered with the local police, and a color-coded sticker system identified the town from which the vehicle originated. The system allowed the joint patrols to clearly identify unregistered vehicles as well as vehicles that were not from the immediate patrol areas. The vehicle registration system represented one component on an area-wide population census conducted by 1-7 throughout early 2006. Each town in the area was divided up into discrete named neighborhoods; each street received a name, and each house received a number to allow 1-7 and its surrounding units to have a common frame of reference for its respective areas.

Shown in Figure 3-18 (p. 162) are pictures of Husaybah that divided the city into sectors and assigned responsibility to 1-7, 2-7 and 3-7, respectively. Each neighborhood, street and house was identified in a discrete naming system to give the units a common baseline understanding of the environment. As part of the census, Marines went to every house in their sector and took a picture of the male head of household and identified family members. At the end of each week, the battalion held a leaders' meeting at which each unit presented a thumb drive with the census data to the battalion intelligence officer that was downloaded into a database maintained by the battalion S-2.

The census data proved critical to 1-7's operations throughout its deployment. Information gathered in the census, including the vehicle registration, was entered into to database called COPLINK, a law enforcement database and analysis software program used by the Phoenix Police Department that used artificial intelligence to draw upon multiple databases. Its appearance with 1-7 in Al Qaim was no accident.

Marano's use of expertise from the American law enforcement community happened as a result of a series of programs administered in the Pentagon. These programs sought to investigate the utility of building new COIN procedures that drew from the experiences of police departments around the United States. An organization called the Technical Support Working Group, or TSWG, convened a series of workshops in the summer of 2005 to familiarize experienced law enforcement officers from major metropolitan police departments with the COIN environment in Iraq and to determine whether their law enforcement experiences could be of assistance.<sup>71</sup> TSWG was one component of an ad-hoc organization called the Combating Terrorism Technology Task Force, or CTTF, to support the Defense Department's efforts to fight the Global War on Terror (GWOT). A key function of CTTF was to coordinate DoD efforts to counter IED attacks in Iraq and Afghanistan. It was ready with funding to support any technologies or other means to support the Marines and Army engaged in the COIN fight in Iraq.

The workshops found a receptive audience with the Marines and General James Mattis, who wanted to buttress the Marine Corps' already strong combat competencies in irregular warfare and counterinsurgency. He encouraged Marano and others to draw upon law enforcement expertise in preparing for their Iraq deployments.

A July 2005 workshop joined together police detectives from the Fairfax County Police Department, heads of the gang units from the Boston and Chicago police departments as well as the deputy superintendents from these departments. Another

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<sup>71</sup> Results of one workshop are summarized in an unpublished white paper titled, 'Confidence of the Community: Law Enforcement Support to Counterinsurgency', dated June 27, 2005.

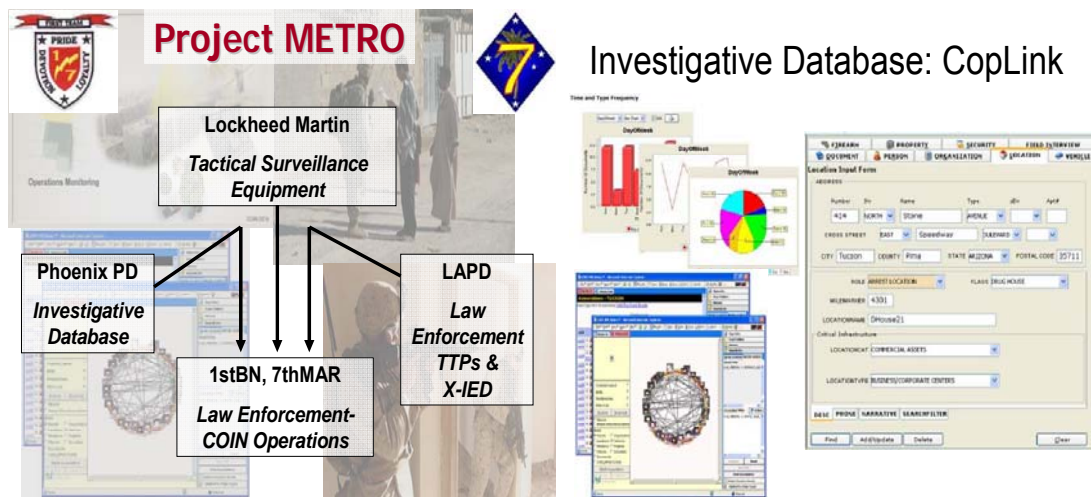
member of the group was a detective sergeant from Los Angeles Police Department (LAPD), Ralph Morten, who had recently traveled to Iraq to train Marines in tactical level skills to counter the IED threat. The attendees included several echelons of law enforcement skills, including senior departmental leadership, functional unit leadership – counter-gang units, as well as officers who engage in daily enforcement operations and investigations. Supporting and guiding the discussions of the law enforcement officers was the Interagency Coordinator for Joint IED Task Force, a Marine captain with extensive experience in Iraq and an expert on the insurgency and the IED problem. Additional participants included a former Navy Seal, a senior analyst from Defense Intelligence Agency (DIA), and a member of the Army Science Board.

The workshops helped build momentum within the Marines to investigate the utility of law enforcement training and TTPs for the COIN environment in Iraq. During 1-7's pre-deployment training, the unit worked extensively with a variety of police departments, including the Los Angeles and Phoenix police departments, to help the unit develop a police-like set of tactics, techniques and procedures built around skills for observation, profiling, and questioning.<sup>72</sup> The training sought to make individual Marines comfortable with thinking about their jobs as similar to that of a policeman on the beat. Marano believed that a gang warfare frame of reference might be useful in thinking through the tactical challenge facing 1-7 in Al Qaim – as had been highlighted in the summer collaborative workshops. The battalion drew extensively upon the expertise Morten, a Los Angeles police detective that spent several months advising 1-7 in Iraq. Morten, a 27-year veteran of the LAPD, was regarded as one of

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<sup>72</sup> Author interview with Marano.

the nation's top experts on suicide bombings after receiving of several years of training by the Israeli police.<sup>73</sup> Morten connected the unit with contacts in the Pentagon to provide \$2.5 million in funding for a partnership with Lockheed-Martin that developed into an initiative that 1-7 called 'Project METRO,' or Mobile Embedded Target and Reconnaissance Operation, which fused together the capabilities of the COPLINK database with new training based on tactical TTPs, and a suite of surveillance equipment provided by Lockheed-Martin Corporation.<sup>74</sup>



**Figure 3-9: Summary of the Major Elements of Project Metro Used by 1-7**

*Source: PowerPoint Presentation titled 'Al Qaim, PME', February 21, 2007*

'Project METRO' fused together a series of disparate capabilities and technologies that shaped 1-7's approach to fighting in the COIN environment in Al Qaim in the spring and summer of 2006. The battalion staff inputted data gathered in the census and vehicle registration efforts into COPLINK; deployed sensors and cameras in areas

<sup>73</sup> Morten conducted numerous training seminars for deploying troops on suicide bombings and improvised explosive devices. See H.G. Reza, 'Arming Marines With Know-How For Staying Alive', *Los Angeles Times*, October 24, 2005.

<sup>74</sup> Matt Hilburn, 'Policing the Insurgents', *Seapower Magazine*, March 2006, [http://www.navyleague.org/sea\\_power/mar06-44.php](http://www.navyleague.org/sea_power/mar06-44.php), accessed October 1, 2007.

identified through pattern analysis of attacks. All the information was queued to the battalion operations center to provide an integrated common operational picture that helped support all operations – both kinetic and non-kinetic.

As indicated in Figure 3-19, the suite of sensors and data processing capabilities lent itself to the new TTPs developed for 1-7's counterinsurgency campaign. The surveillance helped monitor insurgent activity in remote areas, and information collected in the program greatly assisted in understanding the local insurgent networks. The unit installed overt and covert surveillance equipment throughout the urban areas and other areas with high IED activity. The centerpiece of the system was a series of police surveillance cameras installed throughout the border city of Husaybah, which had a population of 120,000.

Marano's regimental headquarters initially opposed the initiative because of the belief that Marano would use the equipment for force protection instead of counterinsurgency and counter-IED tasks.<sup>75</sup> Marano's lobbying at the headquarters eventually convinced his superiors to let him try out his ideas. (The Marines subsequently developed something called GBOSS, which is a powerful surveillance sensors mounted on towers inside base camp areas.<sup>76</sup>) The partnership with Lockheed Martin brought other surveillance equipment, such as acoustic recorders that were left inside target houses suspected of supporting insurgent activity. The system included something called a Wearable Intelligent Recording Environment (WIRE), a throat microphone and a small computerized personal data assistant (PDA) that turned

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<sup>75</sup> Author interview with Marano.

<sup>76</sup> See details of GBOSS in Richard Tomkins, 'U.S. Troops Deploy New Weapon in Iraq', *Middle East Times*, November 20, 2007.

verbal observations into text. Fifty of these units were deployed with 1/7.<sup>77</sup> The program also consisted of a covert camera system tied to an extensive sensor array on Syrian-Iraqi border. The battalion intelligence cell made extensive use of pattern analysis using the information from the different collection techniques. All of these programs had a symbiotic effect: Marine and Iraqi foot patrols with enhanced skill sets tailored more towards law enforcement than traditional massed fire conventional operations; better intelligence collection and the enhanced situational awareness that resulted from the patrols; and a flexible battalion command element set up both to receive information and push information down to the lowest levels quickly in support of operations. The de facto flattened organizational hierarchy created with the free flow of information up and down the command would be repeated elsewhere by other units in their COIN campaign.

Morten's deployment with 1-7 and the attempt to adapt law enforcement technologies and TTPs to the COIN environment in Iraq were judged to be a great success. In its report to Lockheed-Martin Corporation on the utility of its suite of sensors, 1-7 noted that while not all the technologies worked well, the COPLINK database and supporting sensor suite '...vastly [reduced] the time necessary to create a target package from several hours to several minutes...' and that the system was extremely useful in counter-IED operations.<sup>78</sup>

The law enforcement TTPs also greatly assisted in tailoring 1-7's patrol techniques to the environment. One resulting new TTPs assigned specific neighborhoods to specific daily patrols. The unit reported that the new TTPs '...allowed for them [Baker

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<sup>77</sup> According to Hilburn, 'Combat Hunter'.

<sup>78</sup> Memorandum from 1-7 Marines Intelligence Section to Lockheed Martin, October 2, 2006.



Company] to develop the ‘cop on the beat’ mentality, knowing their terrain, and more importantly, knowing the people of the area. The level of familiarity gained with the area and its inhabitants allowed for easier detection of suspicious activity/items/personnel. More importantly, these tactics greatly facilitated the relationship with the local population, providing them with a much greater sense of security and willingness to provide information.’<sup>79</sup>

The initial focus on law enforcement techniques and the advice received by Morten eventually evolved into a more formalized training program called Combat Hunter that became integrated into the pre-deployment training of all Marine units headed to Iraq as part of the Mojave Viper training sequence administered at the Marine Air Ground Combat Center in Twenty-nine Palms Base, California. Under the program, Marines receive training to develop improved observation skills to better spot anomalies in their environment. In addition to using their own faculties, Marines are being shown how to make better use of imaging devices and other observation technologies to spot insurgent and insurgent activities. The program is part of an attempt to instill an offensive mindset in the battle against insurgents in Iraq.<sup>80</sup> The collective result of the innovative COIN focus resulted in a steady reduction in violence and attacks during the spring of 2006. Figure 3-10 shows data that tracks the slow but steady reduction in violence in and around Al Qaim from December 2005 to July of 2006. IEDs remained a persistent problem for the 1-7 throughout the

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<sup>79</sup> Memorandum from Commanding Officer, Baker Company [Captain C. A. Wolfenbarger, USMC], 1-7 to Commanding General 1<sup>st</sup> Marine Expeditionary Force, Subject: OIF 05-07 Lessons Learned in Regards to Training Provided by Mr. Ralph. Morten, LAPD, October 4, 2006.

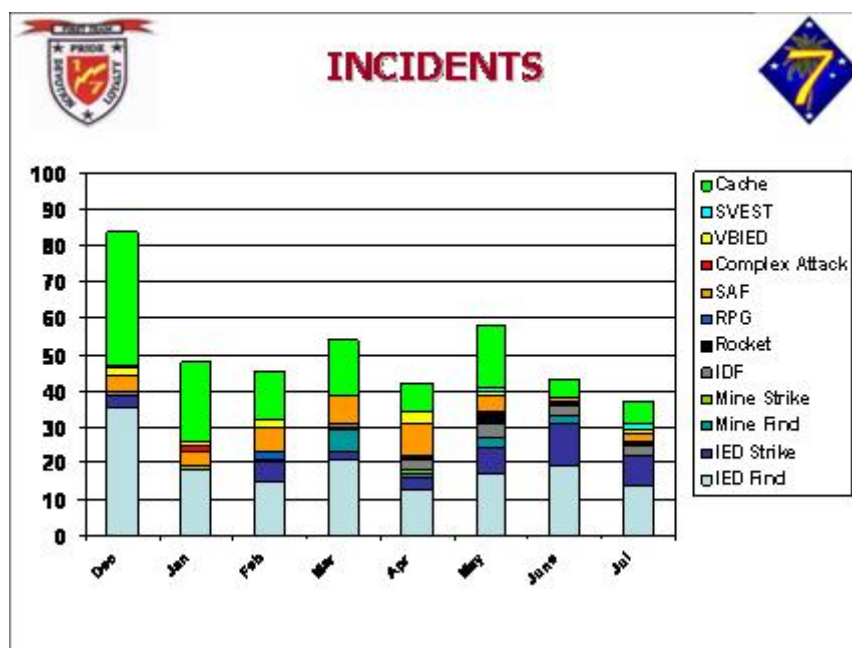
<sup>80</sup> Matt Hilburn, ‘Combat Hunter’, *Seapower Magazine*, October 2007; Rick Rogers, ‘Teaching Marines to be Like Hunters’, *The San Diego Union-Tribune*, February 29, 2008, Molly Dewitt, ‘Insurgents Beware; Marines are Ready’, *jdnews.com*, March 22, 2008, [http://www.jdnews.com/news/marines\\_55612\\_article.html/training\\_combat.html](http://www.jdnews.com/news/marines_55612_article.html/training_combat.html), accessed November 15, 2008.

deployment. 1-7 focused extensively on the IED supply chain, which gradually reduced insurgent attacks during the deployment. In March 2006, 1-7 stepped up recruiting local Iraqis for the ISF. Nearly 400 appeared on March 27, 2006 to join up. According to Marano, 'A lot of these guys were insurgents. It wasn't long ago we were shooting at them.'<sup>81</sup> The focus on building the ISF occurred simultaneously with the buildup of the local police force that had been started by 3-6 in the fall of 2005. Also building on the local leader engagement efforts mounted by 2-6, 1-7 successfully created a series of new police stations in and around the unit's outposts throughout the area. By the end of the spring, the unit had built a police force totaling 1,400 in the Al Qaim area. After receiving support from the local tribal leadership, new Iraqi police stations were stood up in Husaybah, Ubaydi, Karabila, Sa'dah and Al Qaim. Marano stationed the police forces near U.S. outposts along with Iraqi security forces that steadily increased in number throughout 1-7's deployment. Concurrent with the focus on standing up the local police, developing the ISF, and conducting counterinsurgency operations, Marano's unit focused intensively on reconstruction and infrastructure in the towns throughout the area.

The last arrow in 1-7's quiver of LOOs consisted of economic development projects throughout the Al Qaim area. The battalion systematically set about attempting to resurrect critical parts of the area's neglected infrastructure. The unit rebuilt schools, water treatment plants, health clinics, recreation centers, roads and even soccer fields. Two of the most important of these were the construction of two bridges over the Euphrates that had been destroyed during heavy fighting in 2005. The bridges were vital to restore the local commerce in the Al Qaim region and western Iraq.

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<sup>81</sup> John Koopman, 'Marines Helping to Line Up Sunnis for Iraq's Army', *San Francisco Chronicle*, March 27, 2006.



**Figure 3-10**

Source: PowerPoint Presentation titled 'Al Qaim, PME', February 21, 2007

By the spring of 2006, the environment in western Iraq had improved dramatically. By this point in the campaign, Colonel Blake Crowe, commander of all the Marines in western Anbar called the area around Al-Qaim 'the model for where they want us to go.'<sup>82</sup> Unsurprisingly, the progress made in western Anbar over the period received attention from the senior military leadership. Head of U.S. Forces in Iraq, General George Casey told a reporter in the spring of 2006: 'Look at what Colonel Alford accomplished [in Al Qaim]. He was one my best battalion commanders. He showed how to turn a city around.'<sup>83</sup>

<sup>82</sup> Charles Crain, 'Marines on the Beat in Iraq', *Asia Times Online*, June 7, 2006, [http://www.atimes.com/atimes/Middle\\_East/HF07Ak02.html](http://www.atimes.com/atimes/Middle_East/HF07Ak02.html).

<sup>83</sup> As quoted by Bing West in 'Streetwise', *The Atlantic*, January/February 2007, <http://www.theatlantic.com/doc/print/200701/west-iraq>

### **Summary of Innovation by 3-6 and 1-7**

Operations in western Anbar featured a number of critical tactical adaptations that effectively resulted in new organizational best practices for the conduct of the counterinsurgency campaign in the area. A critical and underlying feature of all these steps was the freedom of action granted by MEF headquarters in Fallujah and the Multi-National Headquarters in Baghdad to unit commanders. In the cases examined here, neither Alford nor Marano reported significant micromanagement or opposition to their initiatives at higher headquarters. Both units received wide latitude to structure their tactical approaches to the environment.

Both Marine units made significant adaptations to their respective approaches in fighting the counterinsurgency in western Iraq. The evolutionary approach to the environment gathered momentum over the period of 2005-2006 that saw fundamental changes to the way the units were used on the battlefield. The approach saw growing awareness of the complexity of the battle space and of the need to look at military operations through the analytical lens of effects-based operations. The process of building new and flexible SOPs to cope with the dynamic environment would prove to be a feature of many of the units fighting the insurgents elsewhere in Al Anbar.

Almost none of the major TTPs developed by the Marines in western Anbar specifically came from military doctrine – though many were informed by the historic experiences of the commanding officers and the previous deployments of units in both Iraq and Afghanistan. It's clear that each of the commanding officers sought an optimal solution to the counterinsurgency – a solution framed by previous personal

and organizational experiences and perspectives. Both commanders successfully created 'learning organizations,' that could evolve and adapt relatively quickly in the environment. The learning process first manifested itself with a new method of tactical employment taken by 3/6 in distributing the unit widely throughout the area in combat outposts. These outposts provide means to patrol on foot on a near constant basis. The outposts became part of a hub and spoke network of outposts and logistics centers used by the units to push their presence down to the local level. Metrics were developed by battalion leadership to encourage local interaction.

Both battalions developed a variety of new procedures to conduct the counterinsurgency, starting with 3-6's move to the concept of combined action platoons with joint, local operations to start the process of building local security. 1-7 built on the momentum, first building a census database for people and vehicles. Information gathered during these activities were combined in the METRO program and COPLINK software that added law enforcement training techniques to build new organizational capacities to meet the demands of the environment. Importantly, the application of law enforcement technologies and techniques was possible because senior Marine Corps leaders recognized the need to develop new organizational capacities in the summer of 2005 to fight the insurgents. In this case, organizational innovation became manifested on the battlefield but was supported through a collaborative interagency process. That process drew upon law enforcement expertise that eventually was successfully applied by 1-7 in fighting the insurgent networks along the Iraq-Syrian border.

The census activities created an organizational need for greater information and processing capacities within 1-7, and Marano had the flexibility to build a significantly larger intelligence processing section. Information passed freely throughout the organizations and was effectively used to support decision-making throughout the unit both at headquarters and in the field.

Both battalions clearly grasped the concept of effects-based operations and each constantly sought to achieve the right balance between kinetic and non-kinetic effects throughout their deployments. Both battalions immediately recognized the need to develop organic intelligence capacities in the forward deployed units. Instead of relying on the formal organizational intelligence structure at the battalion level in which information was pushed down the hierarchy to units, intelligence came to be generated organically from the ground up. Information passed freely up and down the chain of command to all units deployed in the field. Improved intelligence collection led to better situational awareness, which in turn led to better command decision-making on apportioning the mix of kinetic and non-kinetic tools available for the environment. Improved collection manifested itself in increased tips on insurgent presence and operations from the population as the model of building and disseminating intelligence evolved to match the complexities of the operational environment.

The pursuit of local relationships by the units proved crucial to the COIN campaigns for 3-6 and 1-7. While they may not have created the split in the insurgency, military leaders took full advantage of the splits to successfully enlist the Albu Mahals into the fight against AQI. After the clearing operations that culminated in Steel Curtain, the

U.S. tribal outreach activities picked up in speed and intensity to build new political relationships throughout the communities. The relationships developed with the Mahals provided both units with a critical building block in the re-constituting of the local police force in the Al Qaim region and enlisting the local population in the Iraqi army. The local relationships received an added boost by the civil-military operations focused on reconstruction projects to rebuild local infrastructure.

#### **TF 4-14 Cavalry Group in Rawah, Western Anbar: August 2005-July 2006**

While the Marines battled insurgents in Al Qaim and in the towns up and down the Euphrates River in western Iraq in late 2005, the Army's 4<sup>th</sup> Squadron, 14<sup>th</sup> (4-14) Cavalry Regiment from the 172<sup>nd</sup> Stryker Brigade Combat Team, or 172 SBCT, took on the insurgents in a piece of northern Anbar that straddled the Euphrates River east of Al Qaim. Its operations centered on the towns of Rawah, Anah, and Riyannah. The unit, commanded by Lieutenant Colonel Mark Freitag, operated in the area sandwiched between the Marine Corps' 1<sup>st</sup> Battalion, 7<sup>th</sup> Regiment in Al Qaim and the 3<sup>rd</sup> Battalion, 3<sup>rd</sup> Regiment based out of Al Asad Air Base.

Rawah and Anah were predominately Sunni towns that had done well under Saddam. Prior to the U.S. invasion, these prosperous Sunni towns were populated by functionaries and regime loyalists.<sup>84</sup> Both towns had good roads, schools, and water systems. Unlike much of Iraq, there were no persistent electricity outages. Rawah, about 175 miles northwest of Baghdad and 60 miles from the Syrian border, was a town of approximately 20,000, though some estimated that only 5,000 residents were

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<sup>84</sup> Background from Ulrike Putz, 'An Iraq Town Shrugs Off Terror', *Spiegelonline*, December 14, 2007.

left there when 4-14 arrived. Anah had a population of approximately 30,000. The unit also had responsibility for an area called Ramana – a series of small towns along the northern bank of the Euphrates stretching up to the Syrian border.

In August 2005, 4-14 replaced the 2<sup>nd</sup> Squadron, 14<sup>th</sup> Cavalry Regiment of the 1-25 SBCT that had been ordered to deploy to Rawah from Mosul in July. The 2-14<sup>th</sup> mounted the first sustained coalition military presence in the town since the invasion. MNF-W gave 4-14 the mission of securing the Iraq-Syrian border and interdicting the flow of insurgents and supplies into Anbar and up towards Mosul. By mid-September 2005, 4-14, found itself detached from the 172<sup>nd</sup> SBCT and placed under the operational control of the Marine Corps' 2<sup>nd</sup> Regimental Combat Team, commanded by Colonel Steve Davis, at Al Asad Air Base. In the fall of 2005, Colonel Davis exercised command over all the units conducting the counterinsurgency campaign in western Anbar province along the Euphrates River to the Iraq-Syrian border.

Like virtually all American units operating across Iraq, 4-14 functioned as a composite, joint task force – drawing on personnel from across all the military departments and a variety of civilian agencies. Working under the Marines proved to be an adjustment for 4-14 as it did for other Army units in Anbar due to different vernacular and dissimilar unit reporting requirements required by the II MEF headquarters.<sup>85</sup> Like other units, however, 4-14 quickly overcame these difficulties and fashioned a good working relationship with the Marine headquarters staff.<sup>86</sup>

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<sup>86</sup> Author interview with Lieutenant Colonel Mark Freitag, commanding officer, TF 4/14, May 15, 2008.



As the insurgency in Anbar gathered strength in 2004 and 2005, concerns at MNF-W grew about the important role that Rawah played as a staging point for supplies and insurgents coming in over the Syrian border. Rawah was also believed to be a way station for insurgents going north to Mosul, and Anah was seen as an important command node for the Anbar insurgency. After the storming of Fallujah in November 2004, U.S. troops periodically swept the area looking for caches and high-value targets. In one well-publicized raid in Rawah in May 2005, U.S. forces captured a key associate of AMZ, Ghassan Muhammad Amin Husayn al-Rawi, and discovered a car bomb factory housing vehicles, 200 bags of phosphate, machine guns and ammunition. One Rawah resident told coalition forces during the raid that ‘Ghassan Amin runs Rawah and nobody does anything without Ghassan Amin’s approval.’<sup>87</sup> As was the case throughout much of western Iraq during late 2004 and early 2005, however, U.S. forces lacked the numbers to remain in areas after the raids had been conducted. When 2-14 arrived in July 2005, Rawah and Anah were firmly in the grips of an insurgent group called the Jama’at al Tawid al Jihad, or Group for Monotheism and Jihad. This Al Qaeda affiliated group consisted mostly of local Sunni insurgents, with a few foreign fighters that piloted the suicide vehicle attacks. Captain Tom Hart, the 4-14 fire support officer, estimated that 98 percent of the local population in Rawah passively supported the insurgency.<sup>88</sup> In Anah, insurgents had blown up the police station, chased out the police, and killed the chairman of the city council.<sup>89</sup> A campaign of fear and intimidation effectively discouraged the local population from aiding U.S. forces. In a practice that was standard at the time in the province, the insurgents showed particular brutality to any residents trying to join the local police.

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<sup>87</sup> As quoted in ‘Coalition Announces Capture of Zarqawi ‘Key Associate’’, *American Forces Press Service News Articles*, May 7, 2005.

<sup>88</sup> As quoted in Sean Naylor, ‘Rawah and Baghdad’, *Army Times*, August 28, 2006.

<sup>89</sup> Sean Naylor, ‘Liberating Anah’, *Army Times*, August 26, 2006.

In July 2005, one unlucky recruit's head was thrown into a banana crate in the Rawah main square as a message to others thinking of joining the police.<sup>90</sup> While the population wasn't necessarily overtly hostile when 4-14 arrived in August, it didn't exactly welcome the new unit with open arms.

The 4-14's parent unit, 172<sup>nd</sup> SBCT, had no prior experience in conducting counterinsurgency operations and had not been previously deployed to Iraq. The unit was in the process of transitioning from a light infantry unit to one of the Army's new Stryker Brigade Combat Teams. It was fielding its new Stryker vehicles when it was ordered to deploy in Iraq in late 2004 – a 19-ton, wheeled vehicle based on the same chassis as the Marine Corps' light armed vehicle. The 172<sup>nd</sup> SBCT, based in Fort Wainwright, Alaska, represented the third Army infantry brigade to integrate the new Stryker wheeled vehicle. The vehicle and its supporting network-centric technologies constituted the leading edge of the Army's transformation efforts started in 1990s by then Army Chief of Staff General Shinseki to make the Army lighter and more easily deployable around the world. The Stryker brigades represented a centerpiece of the broader Army-wide effort to move its combat organizational structure from division- to brigade-sized units. The units incorporated many advanced digital capabilities that gave it the latest technologies for command and control, enhanced situational awareness from sensor feeds, reconnaissance, and networked capabilities that enabled real-time communications between units. Many of the vehicles carried classified computer terminals that enabled intelligence and other information to quickly flow in real time from headquarters down to the tactical level.

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<sup>90</sup> Putz, 'An Iraqi Town Shrugs Off Terror'.

The SBCT's digital capability flowed from a suite of electronic systems called the Army Battle Command System, which consisted of a variety of different elements. The backbone was the Force XXI Battle Command, Brigade and Below network, or FBCB2, which forms the principal digital command and control system for all Army units below the size of a brigade. The FBCB2 consists of a variety of hardware and software elements that interconnects platforms through a communications infrastructure called the Tactical Internet that allows the transmission of encrypted data down to the tactical level for situational awareness, intelligence, and command and control. Another important supporting component of the FBCB2 is the all source analysis system, or ASAS, which automates the processing of various kinds of intelligence (human intelligence, signals intelligence, electronic intelligence, communications intelligence, and measurement and signature intelligence) with an integrated architecture throughout the all command echelons.<sup>91</sup> These technical capabilities provided 4-14 with avenues for innovation on the battlefield as will be discussed below.

The 4-14 worked hard in its pre-deployment training to get its soldiers qualified on these systems – no easy task given the complexity of the various systems and databases.<sup>92</sup> These series of complex systems gave 4-14 the ability to integrate real-time situational information and sensor data into a force level database with simultaneous display and near real-time access for the commander and staff to receive an integrated common operational picture at each echelon. The systems facilitated the

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<sup>91</sup> These capabilities introduced new, complex workloads for the SBCT fire support officers. See 1<sup>st</sup> Lieutenant Jeffrey J. Bouldin, 'The FSO's AO Database for the Stryker Company', *Field Artillery Magazine* (January/February 2006), pp. 40-41.

<sup>92</sup> Interview with Major Joseph Blanding, 4-14, S-3, brigade support group, conducted as part of the Operational Leadership Experiences Project, Combat Studies Institute, Fort Leavenworth, Kansas, September 17, 2007.

flow of voice and data throughout all the tactical echelons of the brigade, providing situational awareness, intelligence, global positioning coordinates and knowledge of all friendly force locations. The 4-14's communications capacities were augmented during its time in Anbar with TACSAT radios, or tactical satellite radios, which allowed 4-14 to communicate over the wide distances in its area. During its deployment in Anbar, 4-14 scavenged enough of these radios to equip the whole group with the devices, and all patrols out of its bases were required to have them in addition to the organic FBCB2 system.<sup>93</sup>

The 172<sup>nd</sup> began preparations for its deployment in August 2004 at Fort Wainwright where deteriorating weather conditions during the fall introduced significant challenges to the training cycle. The unit had not received its full complement of Strykers and had to cycle each company through its training sequence one at a time – handing off vehicles and equipment between each unit entering the training sequence. By November, the unit had constructed a series of new live fire training ranges and villages to train its soldiers how to fight in an urban environment. The villages were replete with role playing Iraqis, imams and local tribal leadership. The 172<sup>nd</sup> was well aware it was deploying into an active insurgency – a mission for which it had no doctrinal grounding. *FM 3-21.31, The Stryker Brigade Combat Team*, represented the operative doctrine at the time of the deployment – though it played little role as a direct guide in preparing the 172<sup>nd</sup> for battle in Iraq.<sup>94</sup> The 4-14<sup>th</sup> performed as the brigade's RSTA, or Reconnaissance, Surveillance and Target Acquisition, and drew also upon *FM 3-20.96, Reconnaissance Squadron (RSTA)* as additional doctrinal

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<sup>93</sup> Freitag interview.

<sup>94</sup> *FM 3-21.31, The Stryker Brigade Combat Team*, Headquarters, Department of Army (March 2003), <http://www.globalsecurity.org/military/library/policy/army/fm/3-21-31/index.html>, accessed June 20, 2008.

guidance in structuring its approach to the battlefield. The 4-14<sup>th</sup>'s overall doctrinal purpose in the 172<sup>nd</sup> SBCT was to:

...provide accurate and timely information over a large operating area... The cavalry squadron (RSTA) provides a great deal of the information required by the commander and staff to conduct proper planning, direct operations, and visualize the future battlefield. The squadron possesses robust capabilities to successfully meet the varied and unique intelligence, surveillance, and reconnaissance challenges inherent in smaller-scale contingency operations and in major theaters of war. The cavalry squadron (RSTA) has an extensive HUMINT capability and acts as the eyes and ears of the commander. In addition, RSTA operations allow the commander to shape the battlefield, accepting or initiating combat at the time and place of his choosing.<sup>95</sup>

As was the case with the entire unit, there were no plans to use the 4-14<sup>th</sup> in its doctrinal role operating across the brigade's area of operations. The 172<sup>nd</sup> was scheduled to fall in on the battle space of 1/25 SBCT on a unit-for-unit replacement in and around Mosul and Ninewa Province in northern Iraq. The 172<sup>nd</sup> structured its training and deployment preparations based on extensive information from video conferences with the 1/25 SBCT, classified e-mail, and information transmitted via the Army's growing informal digital network of passing along lessons learned in the Iraq counterinsurgency campaign via the website managed by the Army Center for Lessons Learned (CALL) at Fort Leavenworth.<sup>96</sup> In addition to the CALL website, the 172<sup>nd</sup> drew extensively on information on Strykernet – a dedicated website for all Stryker units to pass along after-action reports and other documents dedicated to improving the situational awareness of incoming units. The 4-14 was slated to replace

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<sup>95</sup> Ibid., Chapter I, Para. 1-19.

<sup>96</sup> Author interview with 172<sup>nd</sup> SBCT Commanding Officer Colonel Michael Shields, December 3, 2008.

the 2-14 in Tal Afar to the west of Mosul and to act as ‘land owner’ – operating similarly to an infantry battalion but with fewer personnel. Hence, the unit’s training prior to deployment focused on standard infantry small unit tasks of patrolling and fire and maneuver.<sup>97</sup> In the spring of 2005, 4-14 detached from the 172<sup>nd</sup> in Alaska and moved south to Fort Bliss, Texas to train in cooperation with the U.S. border patrol around El Paso. Freitag believed that the experiences of border interdiction working along the U.S.-Mexico border might prove relevant to conditions in Iraq. The wide open spaces of the southwestern United States were similar in some respects to the terrain he expected to encounter in northern Iraq. He devised a training sequence while at Fort Bliss in which each third of the unit cycled through gunnery training, military operations in urban terrain in an old mining town, and operations in support of the border patrol.<sup>98</sup> After completing its three-month sequence at Fort Bliss, the unit cycled through the Joint Readiness Training Center in Fort Polk, Louisiana in May 2005 along with the rest of the 172<sup>nd</sup> SBCT – the final stop for most units before deploying to Iraq in August.<sup>99</sup>

After the unit arrived in northern Iraq in the late summer, it deployed into northern Anbar to replace the 2-14 cavalry group as part of the broader effort to stem the flow of insurgents and supplies down the Euphrates River valley to Ramadi and Fallujah. While 4-14 arrived in Rawah with no operational experience in fighting a counterinsurgency, the unit worked hard to prepare itself for the environment in its training workup and availed itself of the Army’s extensive informal network that passed along previous experiences of units through e-mail, the Army’s Center for

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<sup>97</sup> Author e-mail exchange with Lieutenant Colonel Freitag, November 6, 2008.

<sup>98</sup> Freitag interview.

<sup>99</sup> Background in this paragraph drawn from author interview with 172<sup>nd</sup> SBCT Commanding Officer Colonel Michael Shields, May 15, 2008.

Lessons Learned website and Internet blogs.<sup>100</sup> The unit drew heavily on the prior experiences of 3/2 and 1/25 SBCT deployments in Mosul from February 2004 to October 2005.<sup>101</sup> The lack of doctrinal background in COIN proved no hindrance to the unit as it quickly built a series of COIN competencies as it adapted to the environment around Rawah. As noted by the 4-14 operations officer (S-3), Major Doug Merritt: ‘There was a lot of learning on the fly. It was the fight you get versus the fight you want.’<sup>102</sup> Like the Marine units operating in adjacent sectors, the COIN-related practices built by 4-14 were generated organically within the unit and built via a series of complex feedback loops that included all command echelons. As will be detailed below, the tactical intelligence fusion cycle developed by 4-14 included inputs from virtually all parts of the organizational structure – ranging from the soldiers in the field to the intelligence section and unit’s senior leadership. The 4-14’s process of organic battlefield innovation proceeded in much the same way as the Marine units in adjacent sectors as the unit sought the right balance between kinetic and non-kinetic tools. The process was also undoubtedly shaped by its institutional predispositions as an Army unit and the particular technical capabilities brought to the fight by its RSTA-SBCT structure. Like its parent organization, the 4-14 demonstrated significant learning capacities during its deployment that flowed from an organization-wide philosophy that emphasized cross-functional collaboration and learning.

The 4-14 consisted of 800 troops and 60 Stryker vehicles with additional personnel that took the task force numbers to 1,200-1,500 personnel. The unit’s main combat

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<sup>100</sup> Freitag interview; Shields interviews.

<sup>101</sup> The experiences of 3/2 and 1/25 SBCT are captured in *Networked Forces in Stability Operations* (Santa Monica: Rand Corporation, 2007).

<sup>102</sup> Interview with Major Douglas Merritt, Operational Leadership Experiences Interview Collection, Combat Studies Institute, Fort Leavenworth, Kansas, August 22, 2007.

power came from its two cavalry troops and one infantry company. When it deployed into Rawah August 2005, it partnered with the Iraqi Army's 3<sup>rd</sup> Battalion, 1st Brigade, 1st Division, or 3/1/1 and the 5<sup>th</sup> Battalion, 3<sup>rd</sup> Brigade of the Department of Border Enforcement (DBE) stationed in a small outpost along the Syrian border (See Figure 3-11 below). The ISF's 3/1/1 was later replaced by a brand new Iraqi battalion (3/2/7) in the fall of 2005. Training the new ISF battalion became a major focus for 4-14 in the late fall and winter of 2006.

Throughout its year fighting in Anbar, 4-14 self-generated a scheme of operations that included commonalities and differences with the Marine units operating in adjacent sectors. Like the Marines, 4-14's mission was relatively straightforward: (1) Prepare Iraqi Security Force and the border detachments to assume their own battle space and provide security across the AO; (2) Engage the local tribal and city leadership to respect the Rule of Law and to establish a city government structure in Rawah and Anah ; (3) Disrupt the insurgents' ability to conduct operations throughout and prevent foreign fighter movement from Syria into Iraq; (4) Deny insurgent access to the civilian population through an information operations and civil-military operations; (5) Control the lines of communication through vehicle control points; (6) Maintain the initiative through precision targeting of insurgent command and control and their support structure; (7) Fight in the insurgent decision cycle; (8) and Protect coalition soldiers by improving force protection and the standard of living on COP Rawah, COP North, and COP Anah.<sup>103</sup> As straightforward as these priorities seemed, 4-14's innovation process differed significantly from its neighboring Marine units.

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<sup>103</sup> Drawn from PowerPoint briefing slide, '4-14 Commander's Intent', undated.



The unit conducted operations in what was known as AO Saber – an area of 27,200 square kilometers in western Iraq that stretched north along 68 kilometers of the Iraq-Syrian border. The area was the size of the state of Rhode Island – the largest battalion-sized area of operations in western Iraq. Freitag freely described 4-14’s operations as ‘an economy of force mission.’<sup>104</sup> The wide open spaces of in the area were conducive to the unit’s 25 Long Range Advanced Scout Surveillance Systems, or LRAS, mounted on the surveillance version of their Strykers. The system provided units with ability to do real-time, long-range optical reconnaissance across Saber’s wide open spaces. The unit divided Saber into three operational sub-sectors: Black Horse, along the Syrian Border; Assassin, north of the Euphrates River; and, Apache, south of the Euphrates (see Figure 3-11 below).

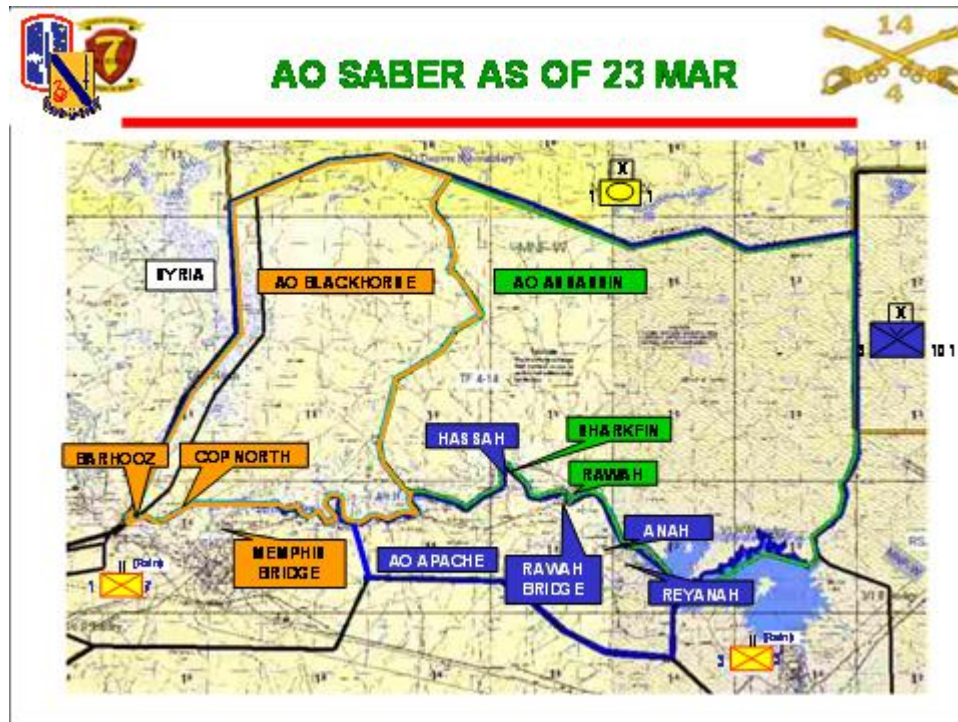
Like the Marine Corps units in the neighboring sectors, 4-14 slowly spread its presence throughout its area in a series of outposts. In late August, 4-14 deployed to Rawah and completed COP Rawah three miles outside the town.<sup>105</sup> As part of its mission of securing approximately 70 miles of the Iraq-Syrian border, 4-14 drew upon help from the Seabees’ Naval Mobile Construction Battalion 17 in building Combat Outpost North, or COP North, and improving the road leading from the outpost back to Rawah. COP North served as the 4-14 platform on which to begin standing up the Iraqi border enforcement battalion to seal the Iraq-Syrian border. By the spring of 2006, 4-14 helped establish a series of small border posts manned by the Iraqis (see Figures 3-13 and 3-14). The border outposts had a measurable impact on reducing the flow of insurgents across the Syrian border and the outposts throughout the rest of

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<sup>104</sup> Freitag interview.

<sup>105</sup> As described in John Hendren, ‘Base Set Up to Curb Rebels’, *Los Angeles Times*, July 31, 2005, p. A-1. For details of supporting the operation of COP Rawah, see, Pfc Spencer Case, ‘129<sup>th</sup> Forward Logistics Element Supports Rawah’, *Anaconda Times*, September 25, 2005, p. 4.

Saber proved decisive in the defeat of the insurgents in the area. By the late spring of 2006, the network of outposts had spread to COP Anah and a smaller outpost in Reyanah in the southeast section of Saber.



**Figure 3-11: Area of Operation Saber**

*Source: PowerPoint Presentation Titled 'TF 4-14 Briefing to BG Neller,' March 2006.*

Border Fort Number 53 is shown in Figure 3-22a and Border Fort Number 47 in Figure 3-22b (p. 164). They are examples of the basing infrastructure developed by 4-14 throughout its area of operations to contain the movement of insurgents and their materiel across the Iraq-Syrian border. (Shown in Figure 3-23 on page 165 is combat outpost Anah, established during the spring of 2006.)

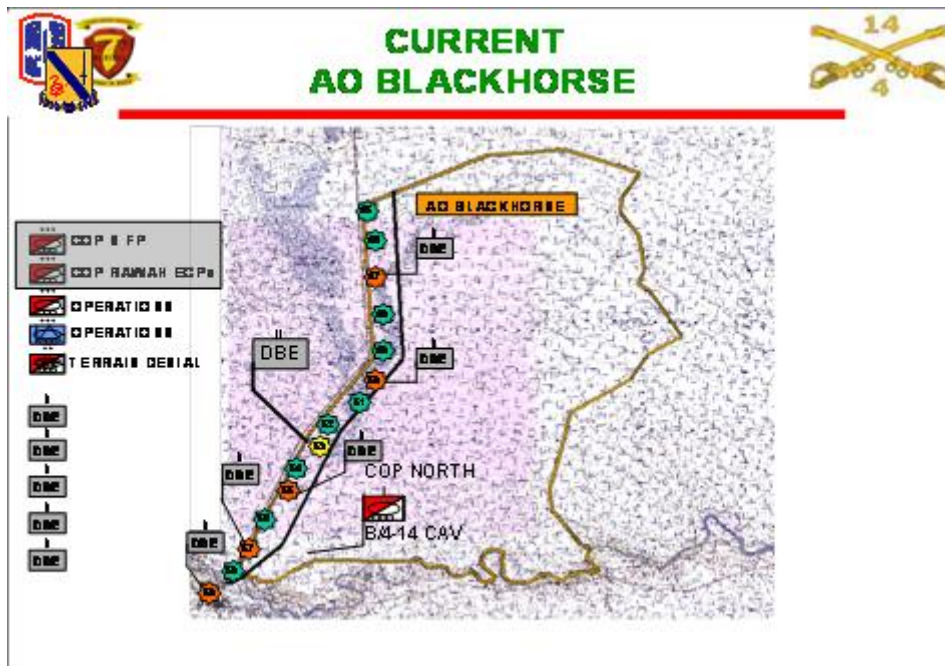
While 4-14 worked on securing the Iraq-Syrian border, it confronted a violent insurgency in and around Rawah and Anah that greatly complicated other COIN activities, such as civil-military operations, information operations, and development of the police force.<sup>106</sup> The unit quickly realized the importance of developing a tactical intelligence fusion cycle to better integrate intelligence and operations. The 4-14<sup>th</sup> had a robust intelligence analysis section, or S-2, that worked to integrate all the different ‘ints’ of the intelligence discipline: MASINT, or measurement and signature intelligence; ELINT, electronic intelligence; COMINT, or communications intelligence; HUMINT, or human-derived intelligence; SIGINT, or signals intelligence, and IMINT, or imagery intelligence. Since the 4-14<sup>th</sup> functioned as an SBCT RSTA, its intelligence section was larger than a conventional infantry battalion (8 versus 6). Prior to its Iraq deployment, the unit also picked up a trained, all source intelligence technician (chief warrant officer, Matt Gray) that had significantly more experience than comparable intelligence specialists in a typical infantry unit.<sup>107</sup> According to the 4-14 operations officer, ‘The ability of the squadron to fuse intel into valuable targeting was phenomenal. The Army assets provided by our brigade gave the squadron a significant advantage [over the Marines], which resulted in our targeting process to be superior.’<sup>108</sup> While 4-14 had studied and practiced the integration of intelligence and operations during training, it never developed the integration process until combat. The fusion process received critical support from special operations forces that operated throughout Anbar in coordination with conventionally-structured units.

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<sup>106</sup> Freitag interview.

<sup>107</sup> Ibid.

<sup>108</sup> Merritt interview.



**Figure 3-12: Border Forts/Outposts Established by 4-14**

*Source: PowerPoint Presentation Titled 'TF 4-14 Briefing to BG Neller,' March 2006*

The relationship between intelligence and operations is a lively topic for debate in the Army. The respective arguments can be summarized in two positions: (1) intelligence drives maneuver; and (2) maneuver drives intelligence. The tension between these positions was summarized by the Army's Joint Readiness Training Center in its 2004 newsletter with the statement: 'Remember, Intelligence drives maneuver, but the commander drives intelligence.'<sup>109</sup> The 4-14's experience demonstrated that neither of these perspectives was correct. The unit discovered that intelligence and maneuver went hand-in-hand, enabled through its digital network that tied patrolling soldiers to their S-2 and higher intelligence echelons. Early in the Anbar deployment, the unit's intelligence fusion process proved instrumental in the discovery of what at the time was one of the largest discoveries of insurgent arms and supplies in Anbar province –

<sup>109</sup> *Center for Army Lessons Learned Newsletter No. 01-04*, Joint Readiness Training Center Training Program Observations, Chapter 3, Intelligence, [http://www.globalsecurity.org/military/library/report/call/call\\_01-4\\_ch3.htm](http://www.globalsecurity.org/military/library/report/call/call_01-4_ch3.htm), accessed November 20, 2007.

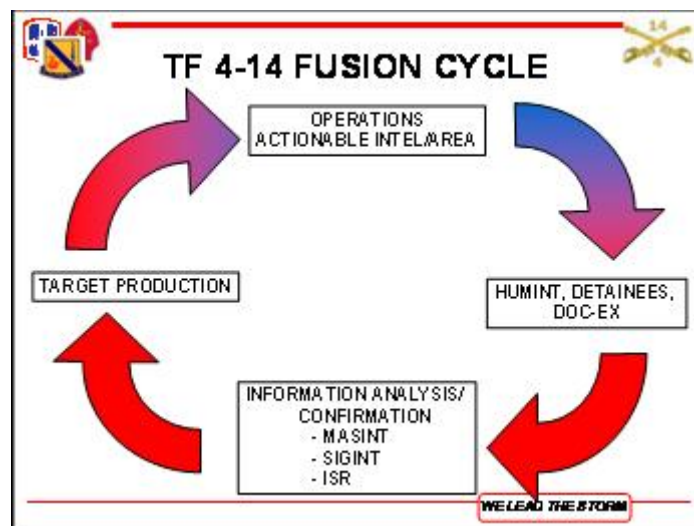
the so-called 'Chicken Farm' cache in early October 2005. In late September, 4-14 launched Operation Appaloosa in Anah. It had been provided a series of 'high value targets,' or HVTs, by its intelligence section that were believed to be involved in the insurgency. The operation picked up seven of the 10 targeted individuals during the operation. In the course of the interrogations, several of the detainees provided information on additional members the insurgent network as well as the presence of a large cache of weapons used for insurgent operations located southeast of Anah. While initial searches of the suspected areas proved unsuccessful, information from the interrogations helped vector JSTARS, or Joint Surveillance, Tracking and Surveillance Radar System, coverage of the area. JSTARS is an Air Force aircraft that provides wide area surveillance coverage through a variety of different sensors over the province that was controlled by the MNF-W headquarters. The JSTARs surveillance subsequently picked up indications of activity at night in the area. That information helped direct a 4-14 patrol to a farm southeast of Anah. While the farm appeared empty, one of the enlisted men in the raiding party hotwired a backhoe on the site and started digging in an area just south of the farm that had several odd-looking depressions in the terrain. The patrol soon uncovered a cache of 220 rocket-propelled grenades; 40,000 7.62mm armor-piercing rifle or machine gun rounds; 100 2.75-inch diameter rockets; 10 mines; 1,000 .50-caliber rifle or machine gun rounds; 68 mortar rounds; 100 shotgun shells; 20 improvised claymore mines; 1,959 artillery projectiles; one rifle; a mortar bipod; four 122mm rocket engines; one mortar tube; 3,000 feet of detonation cord; 37 40-pound bags of red and black explosive powder; and 100 1-ounce primers.<sup>110</sup> The ammunition took three days to destroy. The resulting

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<sup>110</sup> Details in 'Troops From Alaska Find Huge Weapons Cache Behind Chicken Coop Using Hotwired Backhoe', *Anchorage Daily News*, October 17, 2005.

4-14 intelligence fusion cycle used in the cache discovery in Operation Appaloosa is illustrated below in Figure 3-13, and in Figure 3-24 on page 165.

Continued development and refinement of the intelligence fusion cycle proved its worth throughout the 4-14 deployment in Anbar. The task of intelligence collection got down to the unit level, with information then pushed back to 4-14 S-2 section virtually instantly for analysis and matching against various data sets available to the All Source Analysis System. The fusion of tactical, operational and strategic-level data sets allowed soldiers to use the group's digital links as intelligence enablers that got coupled with the mobility of the Stryker to cover extremely large areas in the SABER area. The fusion cycle worked both ways: information got pushed up the chain of command almost instantly, and the 4-14 S-2 section could push analyzed SIGINT hits to a platoon on patrol 45 minutes away from its headquarters to guide the patrol's tactical questioning at that point on the ground by a platoon.



**Figure 3-13: The 4-14 Fusion Cycle**

*Source: PowerPoint Briefing Titled '4-14 Intelligence Fusion Cycle,' undated.*

The information allowed units to determine target locations, execute raids, and capture their targets – a process that featured continuous information flow back and forth across the digital domain in near real time from the tip of the spear to the command and intelligence elements. The process was further refined and perfected in the 172<sup>nd</sup>'s deployment in Mosul, as will be detailed in chapter five. After assisting in the November 2005 clearing operations in Steel Curtain, 4-14 continued refining its fusion process that steered its own kinetic approach away from clearing operations to swarm tactics and precision raids featuring the Stryker's mobility.<sup>111</sup>

The fusion cycle again demonstrated its value in the disruption of insurgent operations during the fall of 2005 and into 2006. The slow but steady progress of gathering locally-generated intelligence, fusing that with national-level databases allowed 4-14 to continue targeting insurgent leaders that lead to steady discovery of insurgent arms caches throughout the area. On February 16, 2006, 4-14 picked up a high-value target in Rawah that revealed the general locations of arms caches used by the local insurgent cells. Three days later the unit uncovered what up until that point was the largest arms cache discovered in Anbar (see Figure 3-25 on page 166.)

The fusion process worked well in vectoring the Iraqi border detachments and 4-14 elements to intercept border crossings. JSTARs feeds and imagery intelligence were used repeatedly in the spring of 2006 in a variety of operations to stop the flow of smugglers and insurgents entering Iraq on a variety of routes In January JSTARs

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<sup>111</sup> Author interview with Lieutenant Colonel Freitag.

reported on 8 to 9 crossings per month. By June, the border crossing had been reduced to one.<sup>112</sup>

The refinement in the intelligence fusion cycle perhaps reached its peak in the spring and summer of 2006 in the elimination of an insurgent cell operating out of Anah by the 131 troops of Apache Company, 4<sup>th</sup> Battalion, 23<sup>rd</sup> Infantry (4-23) commanded by Captain Matthew Albertus.<sup>113</sup> Operations by 4-23 reflected a firm grasp of the intelligence fusion cycle in its four-month campaign against an entrenched insurgent cell. Albertus primarily relied on the development of locally-derived intelligence, which he integrated with other intelligence sources being fused at COP Rawah to build a comprehensive understanding of the insurgent network. Albertus successfully combined the intelligence fusion cycle with the mobility and data processing capacities of his Strykers that destroyed the insurgent cell with comparatively little force-on-force engagements.

The troops took up residence in COP Anah (see Figure 3-23 on page 165) in late March, about two miles outside the town – the first sustained presence around Anah since the invasion. The establishment of COP Anah was followed by the establishment a month later of a small outpost in the village of Reyanah with eight American and 30 Iraqi soldiers. Critical elements of the intelligence fusion process were put in place immediately. The 4-23 brought a tactical intelligence human intelligence team with it into COP Anah, and began receiving volumes of technical intelligence from COP Rawah soon after it opened.<sup>114</sup> These technical sources of

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<sup>112</sup> Ibid.

<sup>113</sup> As detailed by Sean Naylor, ‘Liberating Anah’; Additional information from author interview with Freitag; Author interview with Major Matthew Albertus, March 12, 2009.

<sup>114</sup> Ibid.



information were gradually complemented by a stream of human intelligence being gathered through the 4-23 patrols in and around the town on the insurgent cell there headed by Abu Hamza – a senior AQI operative in western Anbar. Albertus began parallel efforts in April and May to re-introduce a police force in Anah and managed to recruit seven applicants that were subsequently sent off to Jordan for training. He also began outreach efforts to the city council, which had been cowed into submission by AQI. By June, the insurgent cell was feeling the pressure and mounted a series of unsuccessful attacks on COP Anah using mortars and suicide vehicle bombers. The lack of success in these attacks gradually undermined the insurgents’ support in the town. By the end of June, the newly trained policemen returned. The intelligence from several of the new police enabled the human intelligence team to build a wiring diagram of Anah’s 60-person insurgent network. Through the intelligence sourcing, the unit’s tactical intelligence team built a comprehensive understanding of the history of network members that had previously worked together, as well as the social relationships of the network participants. As described by Albertus, ‘This is where the targeting process at the company level really starts to come together. We’ve got a source that’s very reliable; a HUMINT team that’s executing on a daily basis, gathering information; we’ve got platoons out there gathering information on a daily basis; we’ve got an S-2 shop that we’re completely tied in with. Now we’ve got actionable targets that we’re able to conduct close target reconnaissance targets on, conduct these precision raids.’<sup>115</sup> In early July, Albertus conducted a series of targeted raids on locations identified from the fusion of signals and human intelligence (see Figure 3-26 on page 167). The raids detained fourteen of Abu Hamza’s top aides – all without firing a shot. The key catch was Wissam Hussein Ali, senior AQI operative

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<sup>115</sup> As quote in Naylor.

coordinating the movement of insurgent supplies and men across the Syrian border. Abu Hamza was subsequently withdrawn from the area by AQI. The intelligence flow that started as trickle in April and May had turned into a waterfall over the course of several months, and by the end July the Anah cell had been completely disrupted. In the three months of taking down the cell and capturing 32 of the members, Company A fired live rounds on only three occasions: engaging two suicide vehicle bombers and when ambushing a roadside bomb cell. The HUMINT team leader summarized the action by stating: ‘It’s been more of a police action than combat.’<sup>116</sup>

The 4-14 approach to fighting the insurgency evolved gradually over its deployment in Anbar. Operations in October were dominated by the constitutional referendum in which 4-14 provided local security for the vote in Rawah during which 1500 residents voted. In December during the parliamentary elections, 3864 residents of Rawah voted. In November, the unit focused upon dealing with improvised explosive devices, conducting cordon and search operations, and supporting Operation Steel Curtain in November. Operation Percheron in the first two weeks of December found the unit and its ISF counterpart conducting cordon and search operations in the Ramana region – the towns along the Euphrates River in the Western part of the Saber area of operations. These cordon and search operations disrupted insurgent operations, provided local security for the December 15 elections, built relationships with ISF and border detachments and continued to generate detainees to feed intelligence into the 4-14 fusion process. Operation Percheron established an ISF/4-14 presence in Ramana, instituting a series of tactical control points throughout the area at key road

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<sup>116</sup> Ibid.

junctures. The operations uncovered thirteen weapons caches in the area and detained 21 suspected insurgents.

By December, after continuing to gain familiarity with the area, Freitag developed an overarching COIN framework for the entire unit that integrated kinetic and non-kinetic effects (as indicated in Figure 3-14). The methodology became the basis for 4-14's operations during the remainder of its deployment. The four logical lines of operations – develop the Iraqi security forces; combat operations, civil military operations and information operations – bore striking similarities to the emphasis in the neighboring Marine sectors. The development of the COIN methodology coincided with the decision in the spring of 2006 to minimize organization-wide, squadron operations and instead push operations to company- and platoon-level operations in their various sectors.<sup>117</sup> This allowed local commanders to develop their own battle space by themselves without undue interference from the headquarters in Rawah. As noted by 4-14 operations officer, Major Doug Merritt: 'The biggest success was early on, breaking up the battle space and pushing responsibility down from the squadron commander to the company and troop commanders and letting them develop their own AOs. We did that, backed off in the headquarters and minimized squadron-level operations.'<sup>118</sup> Pushing the fight down to the platoon level led to further improvements in the flow of information from the units up the chain of command that improved situational awareness throughout the area of operations. Merritt noted that 'Information was bottom fed for the most part, aside from some SIGINT or higher assets we'd tie to together.'<sup>119</sup>

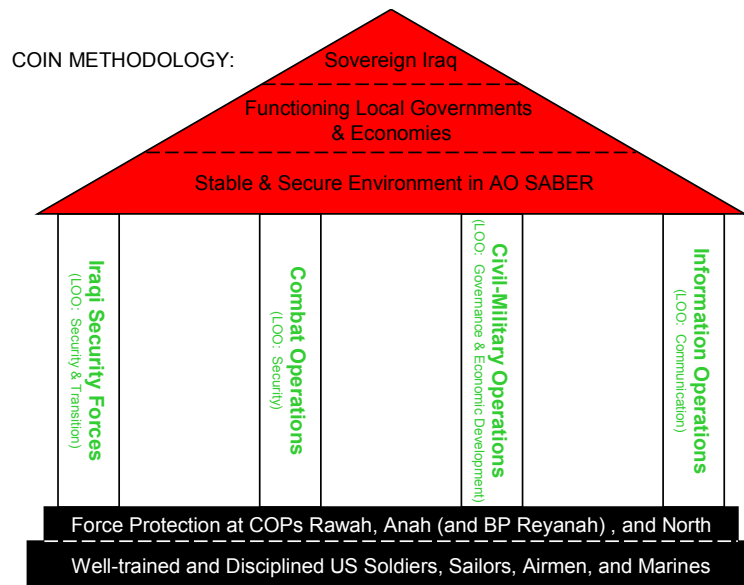
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<sup>117</sup> Merritt interview.

<sup>118</sup> Ibid.

<sup>119</sup> Ibid.

The four tiers of the 4-14 COIN methodology (ISF training; combat operations; civil-military activities and information operations) became the basis for the development of an integrated approach to the battlefield as the unit searched for the right mix of kinetic and non-kinetic effects. After focusing on kinetic operations during the fall of 2005, 4-14’s emphasis during the spring began to reflect the integration of the other pillars into the unit’s operations. Like the Marines in neighboring sectors, Freitag and his staff began reaching out to the local leadership – with mixed results. Relationships with the local tribal and political leaders never developed as fully as they did in other neighboring sectors. Freitag also never built a comprehensive information operations campaign due to the requirement that all information operations be routed for prior approval through the regimental headquarters.



**Figure 3-14: 4-14 COIN Methodology**

*Source: PowerPoint Briefing Titled, ‘COIN Targeting Guidance,’ Undated.*

Other pillars of the evolving COIN strategy began to fall into place during the fall. In November, 4-14’s B Company started individual and small unit training programs

with the newly arrived Iraqi Army 3/2/7 – a brand new battalion with extremely poor skills. During February and March of 2006, 4-14 cycled the Iraqi battalion through a series of training exercises that emphasized weapons handling and safety, reflexive fire techniques, vehicle searches, squad level movement techniques, developing rules of engagement. On March 6-8, 4-14 conducted weapons training and marksmanship proficiency for 3/2/7, following this with an eight-day course on advanced medical procedures for the battalion's medical platoon.

January 2006 marked the beginning of the 'Year of the Police' in Iraq, and 4-14 moved to build up the ISF and Iraqi police capacity throughout its area. TF 4-14 initiated the IP process through a series of recruiting drives that began in March and went through June. In March, 4-14 launched Operation Lippizan – a three-day recruiting drive in Rawah that began with handbills and broadcasts urging the locals to sign up. The recruits went through a four-station interviewing process. At the first station the recruits were interviewed by the Police Transition Team to make sure they fit the requirements to be an IP. The second station was to check their proficiency in reading and writing Arabic. At the third station the recruits were medically screened to insure they did not have any medical issues. The recruits were then given a physical fitness test to make sure they are able to meet the physical requirements of being an IP. The Operation attracted 31 recruits that got sent off to training. In early April, four recruits were identified and sent to the to senior leadership courses at Baghdad.

To coordinate the unit's efforts, 4-14 created two police training teams, or PTTs, from within the unit supported with vehicles, radios and other supplies. The PTT established a training regime that included advanced marksmanship, sensitive site

exploitation and combat lifesaving skills. Some of 4-14's senior non-commissioned officers took the lead in creating the training schedule and establishing the facilities for use by the new police. In Operation Brumby, 4-14 partnered with the 3/2/7 Iraqi Army to set up police recruiting drives in and around the towns of Rawah and Anah. The first IP Screening took place at the Youth Center in Anah on April 6. Over the next four days, seven recruits completed the screening process and were sent to COP Rawah in preparation for onward movement to the Jordan Police Academy. In Rawah, 12 additional candidates were screened on the same day. The recruits were put through a four-stage interview process designed by the Police Transition Team (PTT). At the first station the recruits were interviewed by the PTT to make sure they fit the requirements to be an IP and check their proficiency in reading and writing Arabic. At the second station the recruits received a medical screening. The third station was a BATTIS screening where the candidates were placed into a database and screened against known AIF. The recruits then received a physical fitness test to make sure they could meet the physical requirements of being an IP. The IP screening site closed with a total of nine candidates screened with seven approved. By the middle of June, the first police recruits began returning to the area from their training in Baghdad and Jordan and started standing up the first police force in the area in nearly two years, as indicated in Figure 3-27 on page 168.<sup>120</sup>

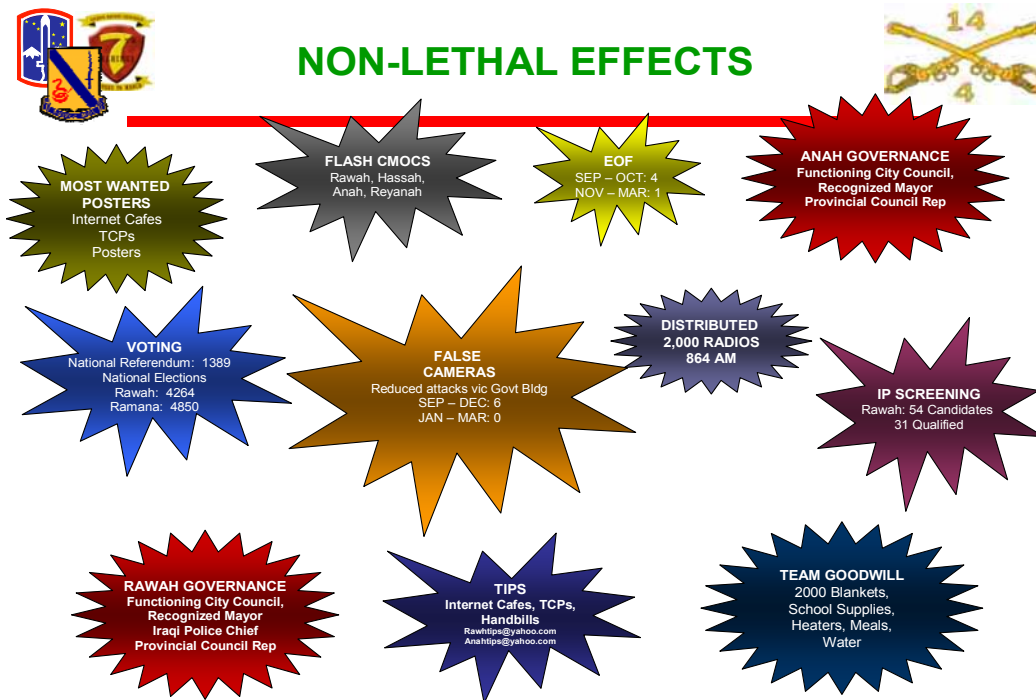
The 4-14 experiences in AO Saber featured civil-military operations tailored to fit within the evolving approach on the battlefield that sought to balance kinetic and non-kinetic activities. The unit launched \$75,000 worth of construction projects in its area as part of its effort to enhance the area's governmental infrastructure.

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<sup>120</sup> Sources for the 4-14 police training program are Freitag interview and 4-14 Storyboard PowerPoint briefings.

4-14's COIN methodology reflected the evolution of the unit's approach to the COIN fight that, during the fall of 2005, started out with cordon and search operations and, as the situation stabilized in Saber, created space for the unit to integrate civil military operations into its operations. The unit worked to help support the re-development of local governance in Rawah and Anah. In the spring, it ran a series of civil-military operations programs at various small towns in its sector, distributing radios, blankets and medical care into local communities. It also launched some small reconstruction projects to help improve local services, focusing on projects such as water treatment and repairs to government buildings.

The experience of 4-14 in Saber reflected the clear evolution of counterinsurgency procedures throughout its one-year deployment in Anbar. Despite its lack of doctrinal grounding in counterinsurgency, the unit drew extensively upon multiple sources of information to structure a training cycle that prepared it for the environment in western Iraq. This process developed iteratively over time until by the spring of 2006 4-14 had built an integrated approach to the battlefield that balanced kinetic and non-kinetic effects. The unit immediately demonstrated its proficiency and adaptability in the kinetic portions of the fight. The cordon and search operations in the fall of 2005 demonstrated the unit's conventionally-oriented capacities. For example, the unit appeared ready to apply the intelligence fusion cycle quickly upon arrival in its discovery of the chicken farm cache in October 2005. The procedures developed early in the deployment enabled 4-14 to develop an HVT targeting process that unit members believed was superior to its Marine counterparts.



**Figure 3-15: 4-14's Non Lethal COIN Activities**

*Source: PowerPoint Briefing Titled, 'COIN Targeting Guidance,' Undated*

**Summary of 4-14 Innovation**

The experience of 4-14 reflected commonalities and differences with the Marine units fighting in its contiguous sectors. Like the Marine units, 4-14 first established continuous presence in insurgent areas, using its COPs to disrupt insurgent operations and gradually improve local security. Like the Marine units, it also partnered with and slowly helped develop Iraqi military capability as well as Iraqi police units. As was the case in other sectors of Anbar, the local police forces had been destroyed or driven into hiding by the campaign of fear and intimidation.

4-14 continuously worked on its intelligence fusion cycle, a process helped by the SBCT's advanced technologies and its robust intelligence manning structure. The



intelligence fusion cycle played a major role in the unit's operations in disrupting insurgent operations through the discovery of caches and the building of the knowledge of the insurgent networks. In Anah, this process reached its peak over a four-month period in which the fusion of all-source intelligence drove unit operations that rolled up the insurgent network in the town with little direct kinetic operations and no collateral damage to the town and its inhabitants. Like Lieutenant Colonel Marano's 1-7 operations in Al Qaim, 4-14 proved adept at orienting its organizational capacities in intelligence generation and analysis to the needs of its operators.

A critical underlying element to the evolution of 4-14's approach over the year was mindset of the unit leadership that had a number of important characteristics. First, the leadership had no preconceived ideas about how it was supposed to structure its operations to achieve battlefield success. Just as important, there was no 'school solution' being forced down the chain of either the military or civilian chains of command.

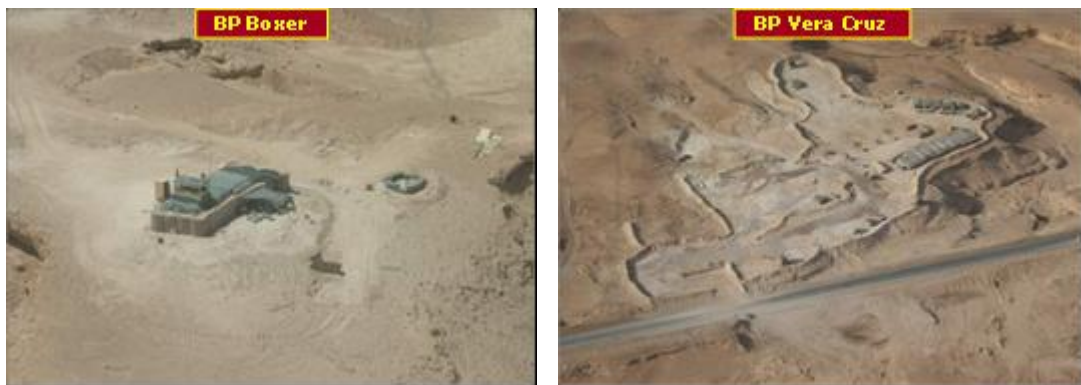
Like the Marine battalions in adjacent sectors, 4-14 demonstrated itself to be a learning organization that constantly searched for an optimal solution to the problems posed by the insurgency in its area. It drew upon disparate sources of information to overcome its lack of historical experiences and perspectives in fighting an irregular war. The organizational leadership freely delegated authority and, by necessity due to its small size and large operating area, quickly adopted a scheme of distributed operations not unlike its Marine counterparts.

The unit clearly understood that the human terrain constituted the critical center of gravity in the fight. Since it lacked the numbers to establish a continuous presence in the area, it creatively drew upon the technical and operational capacities of the Stryker to nevertheless effectively contest control over the population with the insurgents. 4-14's tactical intelligence fusion cycle developed iteratively over the deployment and proved effective in uncovering numerous arms caches and, in the spring of 2006, helped take down the insurgent network in Anah in operations that included little overt applications of force. 4-14 clearly grasped the concept of effects based operations and throughout its deployment sought appropriate mix of kinetic and non-kinetic tools in applying its organizational capacities in the environment. It built new organizational capacities from scratch with the development of its police training teams that flowed from its recognition of the critical role that Iraqi police could play in helping to establish local security.



**Figure 3-16a (left) and 3-16b (right)**

Two operating posts constructed by 3/6 after their deployment: Khe Sanh on the left and Guam on the right.

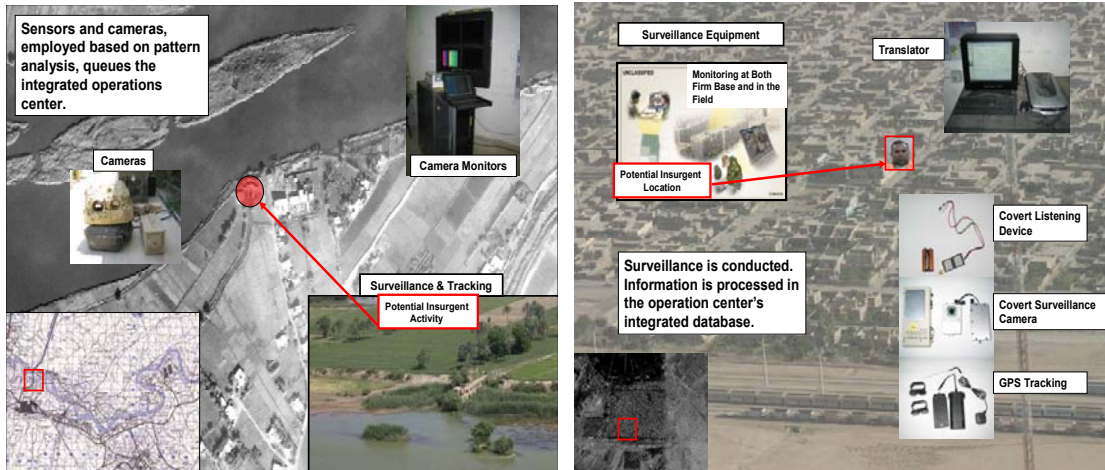


**Figure 3-17: Two outposts BP Boxer and BP Vera Cruz used in western Anbar.**



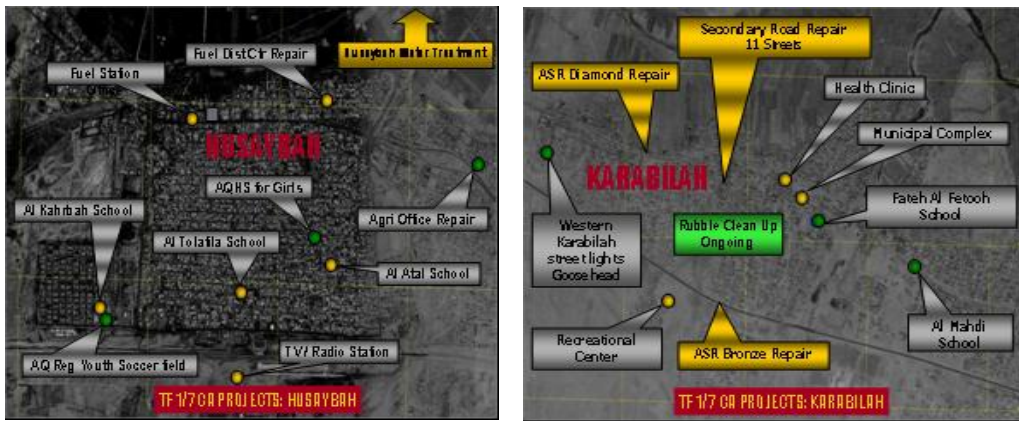
**Figure 3-18**

*Source: PowerPoint Presentation titled 'Al Qaim, PME', February 21, 2007*



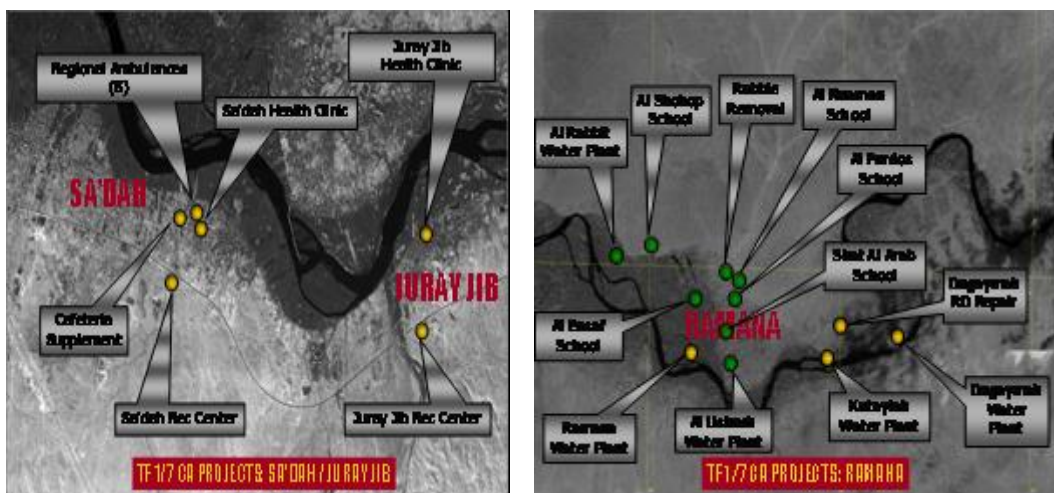
**Figure 3-19: Project METRO Detail**

Source: PowerPoint Presentation titled 'Al Qaim, PME', February 21, 2007



**Figure 3-20a (left) and 3-20b (right): CMO in Western Anbar**

Source: PowerPoint Presentation titled 'Al Qaim, PME', February 21, 2007



**Figure 3-21a (left) and 3-21b (right): CMO in Western Anbar**

Source: PowerPoint Presentation titled 'Al Qaim, PME', February 21, 2007

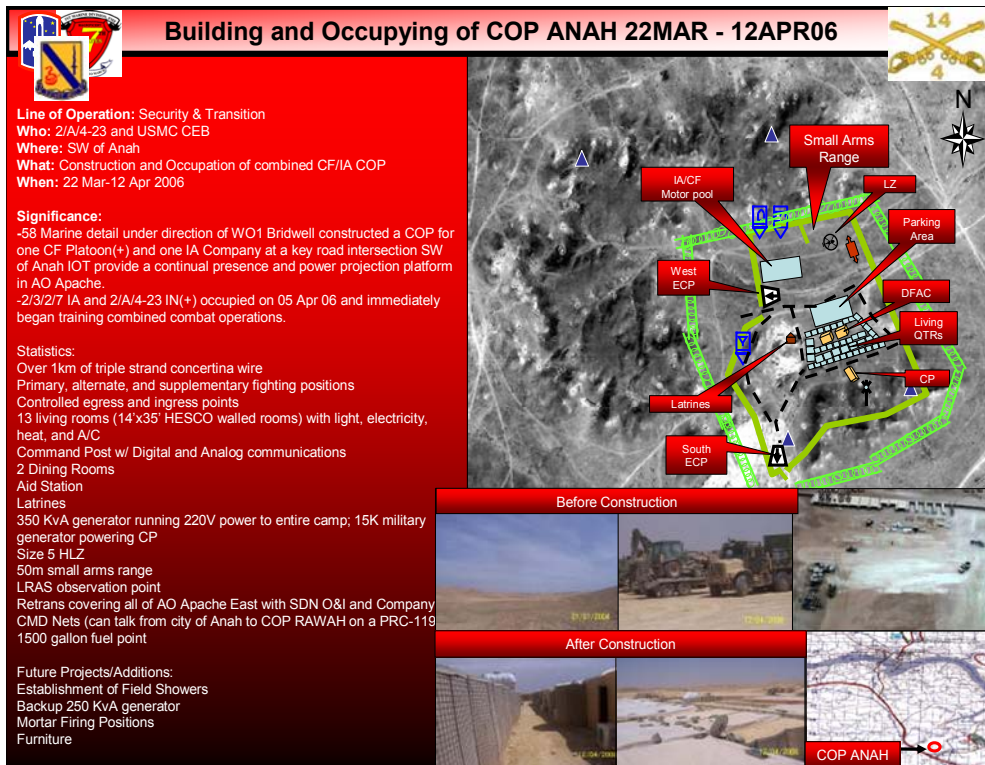




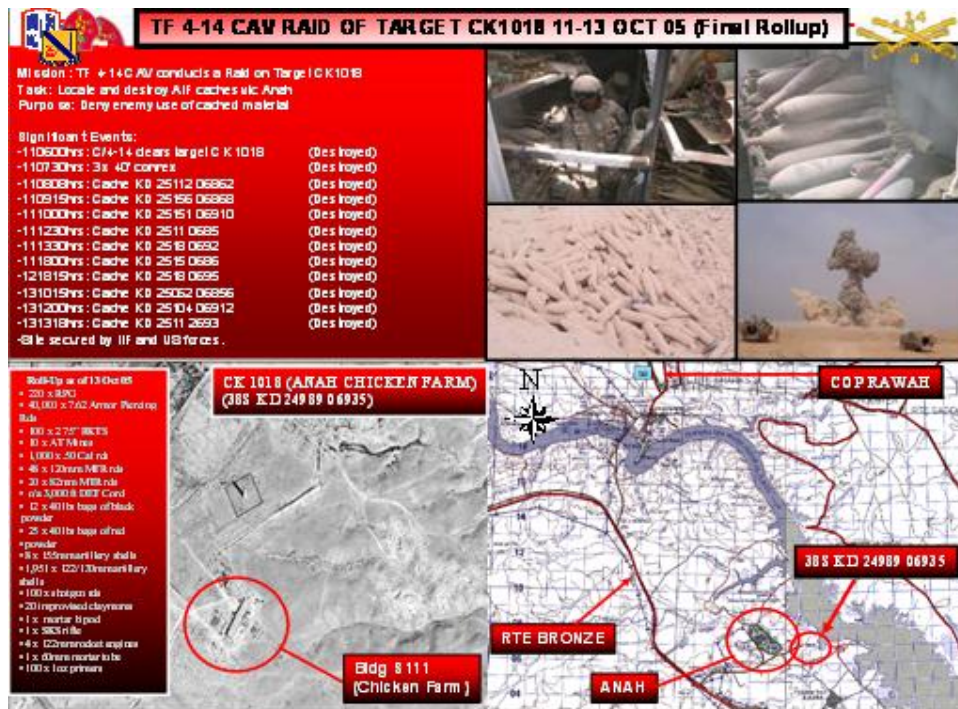
**Figure 3-22a: Border Fort Number 53**



**Figure 3-22b: Border Fort Number 47**



**Figure 3-23: Combat Outpost Anah, established by 4-14 in March/April 2006**  
 Source: '4-14 Storyboards,' 4-14 PowerPoint Briefings.




**Figure 3-24: The Chicken Farm Cache Find**  
 Source: 4-14 Storyboard PowerPoint Briefs.




**Figure 3-25: February 20, 2006 Arms Cache Find by 4-14 near Rawah**

*Source: 4-14 Storyboard PowerPoint Briefs.*






## A/4-23IN CORDON AND SEARCH xxx 08 JUL 06



**Line of Operation:** Security  
**Who:** TAC/A/4-23  
**What:** Cordon and Search of xxx  
**When:** 07 2230 - 08 0730 JUL 06  
**Where:** 375 GU 74113 08017, GRG F119, Anah, Iraq

**Significance:** On 08 JUL 06, TAC/A/4-23 IN conducted a Cordon and Search to detain or destroy xxx at his home in Anah. Xxx is a member of Abu Hamza, the local Juma'a Al Towhid Al Jihad associated terrorist cell. xxx is also a former high level member of the Ba'ath party.

The TAC moved dismounted along with the rest of A/4-23 from an assembly area 800 meters north of the city and entered the target house through the front door. Tactical questioning and SSE revealed that the family in that home did not match the characteristics of xxx. At 0230 one of the informants who had provided information on xxx moved to the objective with 3/A/4-23 and identified the house across the street to the south as xxx's home. The TAC moved to its second objective of the night and immediately identified the target. The tactical informant confirmed positive ID and also recognized xxx's black 1989 BMW (license plate 45513) and his oldest son yyy saying that he had seen yyy drive the BMW around Anah while intimidating locals whom he perceived to be supporting CF. yyy also claimed to be an auto mechanic in Anah's Al Sinaa district who never traveled, but a search revealed what appeared to be a fake passport. TAC/A/4-23 detained both xxx and yyy and confiscated their vehicle. The significance of this operation is the success with which A company was able to flow from one objective to the next based on actionable intelligence and the severe blow that JTJ will feel after losing the man reported to be its fourth in charge in the Anbar Province.

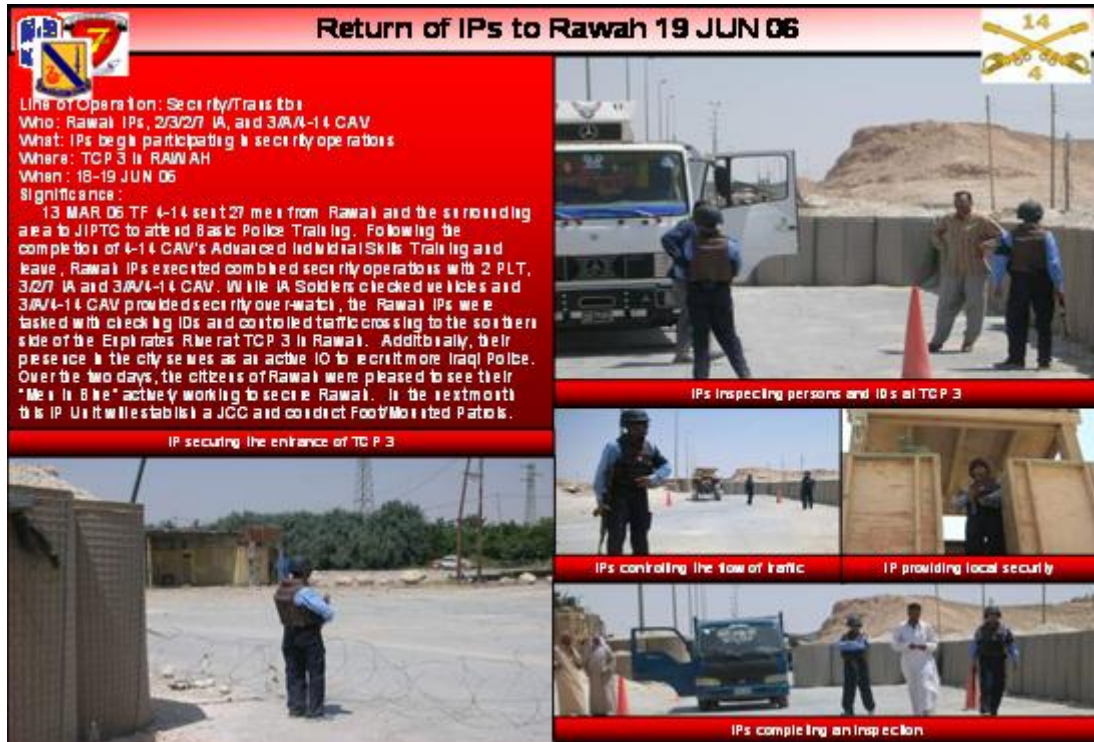


xxx Target homes in Qadisiyah neighborhood, Northern Anah

**Figure 3-26: One of the Raids in July 2006 in Anah**

*Source: 4-14 Storyboard PowerPoint Briefs.*





**Figure 3-27: Return of Iraqi Police to Rawah**

*Source: 4-14 Storyboard PowerPoint Briefs*

## **CHAPTER IV**

### **WARTIME INNOVATION IN ANBAR:**

#### **THE BATTLE FOR RAMADI, JULY 2005–MARCH 2007**

As Marine and Army units slogged through different phases of the clear, hold and build approach to COIN in Western Anbar, units in and around Ramadi confronted a very difficult environment but nonetheless exhibited the same process of organically-generated innovation as they also executed their version of clear, hold, and build. Much of the halting first steps in the COIN campaign in Ramadi happened under the watch of the 2nd Brigade, 28<sup>th</sup> Infantry Division brigade combat team, or 2/28 BCT, which deployed to Anbar in late July 2005. The unit conducted operations in ‘AO Topeka,’ an immense 29,000 square kilometer area that included Ramadi, the area west of Fallujah, east of Hit and extending north to Lake Tharthar and south of Lake Habbaniyah. The unit’s area of operations extended from Ramadi to Habbaniyah, about 30 miles to the east, encompassing about 450,000 people living along the Euphrates River. Ramadi, the capital of Anbar, clearly represented the most important city in Topeka – the largest city between the Syrian, Jordanian and Saudi borders and Baghdad. Like Al Qaim in Western Iraq during 2004 and 2005, Ramadi had become an insurgent haven. During 2005 and 2006 the city arguably became the key battleground between the U.S. military and the insurgents for control over Anbar. Over this period, Ramadi enjoyed the reputation as the most dangerous city in Iraq outside Baghdad.

This chapter covers combat operations by 2/28 and 1/1 in Ramadi over the period from July 2005 to March 2007. The chapter opens with a summary of the insurgency in Ramadi before moving on to a discussion of process of battlefield innovation within the two brigades. The 1/1 section includes two in-depth case studies of battalion-level operations by 1<sup>st</sup> Battalion, 6<sup>th</sup> Marines and 1<sup>st</sup> Battalion 37<sup>th</sup> Armored that operated next to each other in Ramadi during the fall and spring of 2006-2007. Both battalion-level cases clearly illustrate a process of iterative tactical adaptation that developed into organizational innovation. Operations by these two brigades need to be seen as a continuum in which the wrenching, iterative process of adaptation and innovation by 2/28 set the conditions for the 1/1's successful COIN campaign in the fall of 2006. The iterative process of adaptation and innovation that unfolded between the units when 1/1 replaced 2/28 a year later bore a resemblance to the experiences of the two Marine battalions in chapter three. Like the Marine battalions in western Anbar, the momentum established by 2/28 in its COIN campaign proved instrumental in creating the necessary conditions for success when 1/1 took over a year later in the summer of 2006. The commander of 1/1, Colonel Sean MacFarland, described the 12-month period of 2/28's operations as critical to the success of 1/1 in the fall of 2006. A standard Army way of thinking about a battlefield is that the objective is to 'find, fix, flank, and destroy the enemy.' As described by MacFarland, 2/28 performed the 'find and fix' portions of the mission, which gave him the opportunity to 'flank and destroy' the enemy as will be described in the second half of this chapter.<sup>1</sup> The COIN campaign of these two units spanning 18 months together represented a critical turning point in the war that broke the back of AQI and the Sunni insurgency in Anbar

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<sup>1</sup> Author interview with MacFarland.

by the spring of 2007. It was a turning point facilitated through the wartime innovation exhibited by both brigades.

When 2/28 arrived, the insurgents had fought the American military to a standstill in Ramadi – and some U.S. commanders doubted whether ‘victory’ was achievable in any form. Marine Colonel Steve Davis, a commander of Marine Forces in Western Anbar, told a reporter in August 2005: ‘I don’t think of this in terms of winning,’ adding that he expected the insurgency in Anbar to last for years.<sup>2</sup> In May 2006, one correspondent aptly summarized the situation: ‘The sheer scale of violence in Ramadi is astounding.’<sup>3</sup> The same reporter quoted a Marine officer citing statistics indicating that Ramadi accounted for two-thirds of all the roadside bombs, outright attacks, and exchanges of gunfire in all of Iraq during a recent reporting period.<sup>4</sup> Throughout the 2/28 deployment, the unit experienced 42 events a day involving gunfire, IEDs, or direct attacks – one of the highest rates of all U.S. forces in Iraq. During its deployment the brigade suffered 1,052 attacks by IEDs, and successfully detonated another 1,083 roadside bombs. When 2/28’s successor unit arrived a year later, it reported on the existence of a system of complex subsurface IED belts throughout the city.<sup>5</sup>

By the summer of 2005, Ramadi had become a center of insurgent resistance in Anbar in the aftermath of the Fallujah battles in late 2004. In and around the city (see map in Figure 4-1), a complex array of nationalist groups, criminals, and AQI cells competed

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<sup>2</sup> As quoted in Tom Lasseter, ‘Insurgents Have Changed U.S. Ideas About Winning’, *Philadelphia Inquirer*, August 28, 2005, p. A1.

<sup>3</sup> Associated Press, ‘Insurgents Hamper U.S., Iraqi Forces in Ramadi’, *Associated Press*, May 22, 2006.

<sup>4</sup> *Ibid.*

<sup>5</sup> Major Niel Smith and Colonel Sean MacFarland, ‘Anbar Awakens: The Tipping Point’, *Military Review* (March/April 2008), p. 42.

and cooperated in the struggle for local power and influence. AQI represented the most dangerous of the insurgent groups due to its brutal tactics and the fact that no negotiation was possible between U.S. forces and the AQI leadership. AQI consisted mostly of foreign fighters and local extremists. AQI was the most powerful of the groups in Ramadi. The second most powerful group consisted of nationalists, and included a wide array of religious and tribal leaders. The primary goal of this latter group was to drive U.S. forces from the city and recover their lost position of political and economic power. The nationalist group was particularly entrenched in Ramadi, which was home to former members of the Ba'ath Party and unemployed Iraqi soldiers who served under Saddam Hussein and were thrown out of work when the Coalition Provisional Authority disbanded the Iraqi Army in May 2003. This group proved to be a dangerous adversary, since its members had prior military training married with intimate knowledge of the terrain, the local population, and the location of hidden weapons caches. The last problem group for 2/28 in Ramadi consisted of criminals – who exerted a powerful influence on the area's underground economy that had built up during Saddam's era. While the criminals had no overarching formalized structure, they sold arms to the insurgents and actively intimidated the police and local tribal leaders.<sup>6</sup>

As was the case in Western Anbar, opposition to the occupation initially united the diverse array of insurgent groups and criminals operating in the city. The lack of troops crippled attempts by American and Iraqi armed forces to exert control over the city. Their COIN tactics consisted mostly of targeted raids mounted out of their base

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<sup>6</sup> The breakdown in the insurgent groups in and around Ramadi is drawn from Brigadier General John Gronski, 'Setting the Conditions in Ramadi', July 2007, unpublished paper used with permission of the author.

areas. In the spring of 2005, a variety of reports noted that the Marines of E Company, 2<sup>nd</sup> Marine Division had lost a third of its troops – the highest casualty rate of any unit in Iraq – during its six month deployment.<sup>7</sup> Army Sergeant Class Tom Coffey, a platoon commander for 2/28 in southern Ramadi, summarized the predicament of American forces: ‘There’s no way I can control this area with the men I have,’ said Coffey. ‘The reports are that the insurgents are using these southern control points because they’re open. We can’t keep them closed because I don’t have the manpower.’<sup>8</sup>

Other reports stated that large sections of the city had been mostly abandoned by the U.S. troops, giving the insurgents de-facto control over many neighborhoods. Public beheadings by insurgents were widely reported in the summer of 2005 and in one particularly gruesome incident children were reported to be playing soccer with heads of a decapitated Iraqi Shiite policeman.<sup>9</sup> Insurgents had blown up all but one of Ramadi’s police stations in the winter of 2004-2005, and the Iraqi police and National Guard in the city had effectively disbanded. To make matters worse, in the spring of 2005 the Iraqi national government in Baghdad sent Shiites to police Ramadi – a city that was nearly 100 percent Sunni.<sup>10</sup> Needless the say, most of the police remained barricaded inside their stations.

The United States mounted a series of conventionally-oriented clearing operations in the area in the spring of 2005, but the lack of troops crippled U.S. attempts to mount

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<sup>7</sup> Michel Moss, ‘Bloodied Marines Sound Off About Want of Armor and Want of Men’, *New York Times*, April 25, 2005.

<sup>8</sup> As quoted in Lasseter, ‘Insurgents Have Changed U.S. Ideas’.

<sup>9</sup> Rory Carroll, ‘Gunmen Take Over Ramadi as Bomb Kills Five Marines’, *Guardian.co.uk*, June 17, 2005.

<sup>10</sup> Anny Scott Tyson, ‘To the Dismay of Local Sunnis, Shiites Arrive to Police Ramadi’, *Washington Post*, May 7, 2005, p. A13.

any sustained presence in the city.<sup>11</sup> Iraqi Army Colonel Ali Hassan voiced the frustration of many, when he stated, ‘We just go out, lose people and come back. The insurgents are moving freely everywhere. We need a big operation. We need control.’<sup>12</sup> The troop shortage became so acute that one Marine unit acknowledged stationing cardboard dummies with camouflage shirts along highway observation posts to create the impression that there were more troops than there actually were.<sup>13</sup> The casualties suffered by the Marines in Ramadi by IED attacks on their high-mobility multi-purpose wheeled vehicles, or HMMWVs, became a cause célèbre in the United States Congress to speed up deliveries of more heavily-armored versions of the vehicles.<sup>14</sup>

The 2<sup>nd</sup> Brigade Combat Team of the 28<sup>th</sup> Infantry Division, or 2/28 BCT, deployed into al Anbar in July and August of 2005, relieving the 2/2 Infantry Division. The composite unit consisted of four battalions from the Pennsylvania National Guard (1-109 and 110 Infantry Battalions, 876 Engineer Battalion, and the 228 Forward Support Battalion), the 1-172 Armor Battalion from Vermont, the 2-222 Field Artillery Battalion from Utah, the 231 Military Intelligence Company from Kentucky, the A/138 Signal Company from Indiana, the A/1-167 Armored Cavalry Troop from Nebraska, and the 779 Maintenance Squadron from Tennessee. Other task force members included the 3<sup>rd</sup> Battalion, 8<sup>th</sup> Marine Regiment (which replaced 1<sup>st</sup> Battalion, 5<sup>th</sup> Marine Regiment in September 2005), and the 1<sup>st</sup> Battalion, 506<sup>th</sup> Infantry Regiment (from the 101<sup>st</sup> Air Assault Division), which replaced the 2<sup>nd</sup>

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<sup>11</sup> See, for example, Jackie Spinner, ‘Marines, Iraqi Forces Launch Offensive in Ramadi’, *Washington Post*, February 21, 2005, p. A21; T. Christian Miller, ‘Marines are Cracking Down on Insurgent Stronghold of Ramadi’, *Los Angeles Times*, February 21, 2005, p. A4.

<sup>12</sup> AP report, ‘Insurgents Hamper U.S. Iraqi Operations in Ramadi’.

<sup>13</sup> Quoted in Moss, ‘Bloodied Marines Sound Off’.

<sup>14</sup> *Ibid.*

Battalion, 69<sup>th</sup> Armored Regiment in January 2006). Figure 4-1 below shows the diverse sources of manpower for the unit with personnel spread between 34 states totaling some 5,500 men and women.

The unit faced significant built-in hurdles as it deployed into Iraq – circumstances that might have militated against the innovation process. At the time of the 2/28's deployment, the Army was only a year into its plan to 'transform' its force structure by moving from larger and heavier division-sized units to a lighter and more flexible brigade that boasted greater organic support capacities. 2/28 deployed into Iraq as a 'legacy' unit largely structured and equipped to fight a campaign-style conventional war. In its case, the primary combat power of 2/28 came from its M-1 tanks and Bradley Fighting Vehicles – hardly a force structure suited to the demands of the urban COIN campaign that it would confront in Ramadi. The brigade's core consisted of National Guard elements – weekend warriors that could not be expected to display the same combat competencies as their active duty counterparts.

Other hurdles stood in 2/28's path. As a legacy unit, 2/28 arrived in Iraq expecting to be 'sourced' in its area of operations for critical logistical requirements, such as heavy equipment transporters, trucks, and tractor trailers to move its troops and equipment. For an armored brigade, battlefield mobility depends on robust transportation support. Doctrinally, logistical support should have come from an Army main support battalion, consisting of a transportation company with three platoons (light, medium and heavy). These three platoons would have provided 50-60 5-ton cargo trucks, tractor/trailers, and, most important – heavy equipment transporters, the only Army tactical transportation asset that can move M1 Tanks, Bradley Fighting Vehicles and



Paladin tracked artillery. Upon arriving in Ramadi, 2/28 discovered that it would have to rely on one Marine heavy equipment transporter platoon with only four HETs that supported operations throughout Anbar. As an expeditionary light infantry force with a ship-to-shore logistical support structure, the Marines were simply not organized or equipped to support an Army armored brigade. As the 2/28 logistics officer Major Mark Pike commented: ‘The lack of a major support battalion in our area of operations coupled with virtually no support from the Marine Corps meant we were on an island logistically.’<sup>15</sup> Eventually, 2/28 consolidated its logistical operations at Taqqadum Air Base, stocking 5,000 lines of stock numbered parts managed by the 228<sup>th</sup> Forward Support Battalion. The 228<sup>th</sup> had to build a wall around its logistical hub to stop logistics-starved neighboring Marine units from stealing parts. The unit’s adaptation to its logistical shortfalls would constitute one of the most significant parts of the innovation process during its deployment.<sup>16</sup>

The brigade deployed into Iraq with no prior experience operating together outside the training workup, and it had no prior experience in conducting counterinsurgency operations on an organization-wide basis. Five months of training at Camp Shelby, Mississippi and the National Training Center at Fort Irwin, CA, focused almost exclusively on conventional military operations that focused on fire and maneuver exercises designed to bring firepower to bear on the enemy.<sup>17</sup> As the unit after-action report summarized the experience: ‘The training was maneuver oriented and focused primarily on survival on the battlefield of Iraq.’<sup>18</sup> Upon arriving in Iraq, 2/28 discovered that much of its training was simply inappropriate or irrelevant in the

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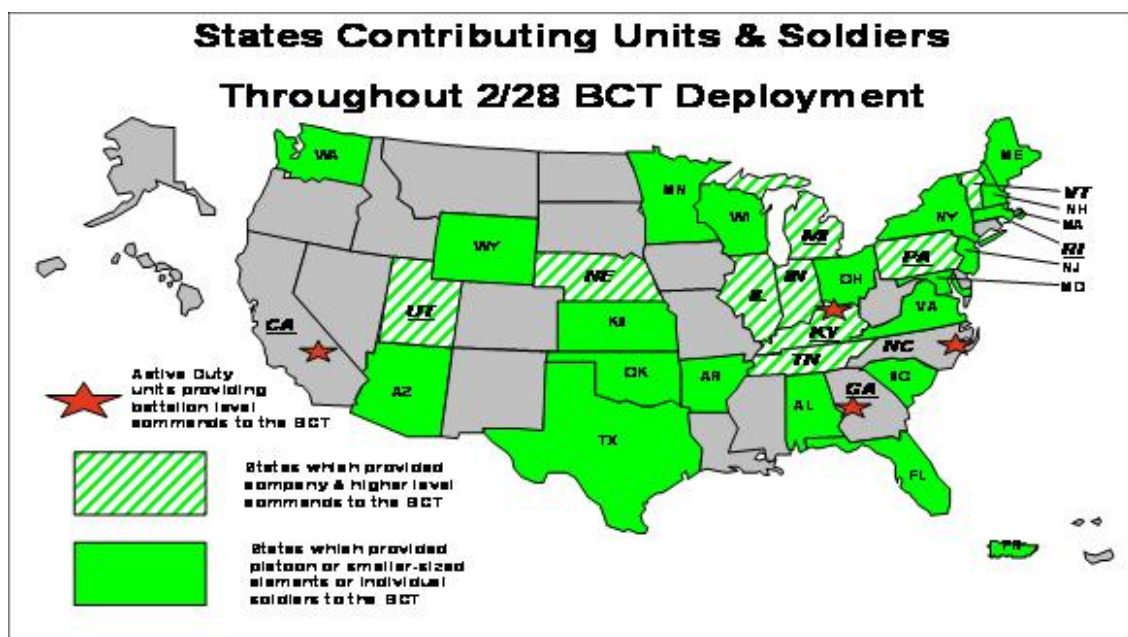
<sup>15</sup> Author interview with Major Mark Pike, 2/28 logistics officer, January 17, 2008.

<sup>16</sup> Ibid

<sup>17</sup> Author interview with General John Gronski,.

<sup>18</sup> *2/28 After Action Review Report on Iraq Deployment*, undated, p. 1.

environment in which it would be operating.<sup>19</sup> Over the course of its deployment, 2/28 made impressive strides in reorienting its approach to the battlefield, turning itself into an organization that embraced effects-based operations in a complex environment – although limitations in its capacities prevented the unit from fully executing effective operations across the spectrum of combat operations.



**Figure 4-1**

*Source: Provided by General John Gronski to author*

While 2/28’s training included interactions with simulated Iraqi villagers, its training cycle contained no sustained focus on counterinsurgency tactics. Upon its arrival in al Anbar in July 2005, MNF-W’s command guidance to 2/28 was to ‘neutralize the insurgency and develop the Iraqi Security Forces in order to create a secure and stable

<sup>19</sup> Interview with Brigadier General John Gronski, December 20, 2007, by the Contemporary Operations Study Team, Combat Studies Institute, Fort Leavenworth, Kansas.

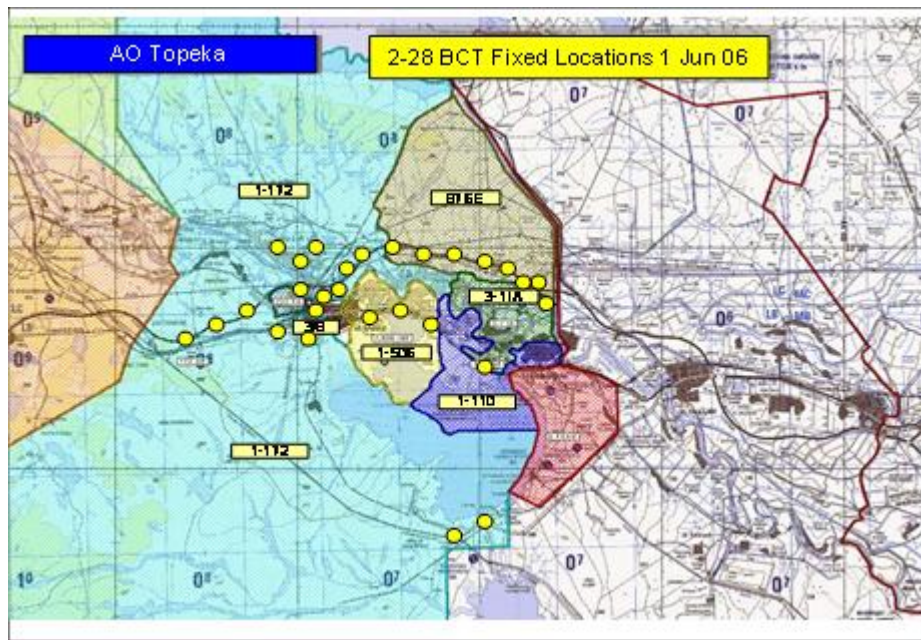
environment for the Iraqi people.’<sup>20</sup> The 2/28 commanding officer, Colonel John Gronski, initially established a series organization-wide ‘tasks’ to achieve this objective:

- (1) Protect the force;
- (2) defeat insurgent leaders;
- (3) reduce insurgent weapon systems;
- (4) destroy or detain insurgent forces;
- (5) increase public support for military operations;
- (6) train and integrate Iraqi Security Forces;
- (7) treat the Iraqi civilians with dignity and respect;
- (8) conduct aggressive combat patrols (mounted and dismounted) and employ observation posts.

These tasks represented Gronski’s ‘commander’s intent’ for units in structuring their battlefield operations. He continuously revised this ‘intent’ through 2/28’s deployment in recognition of his evolving understanding of the complex environment and the need to rebalance of the tools at the unit’s disposal to bring about the desired end-state of a stable and peaceful Ramadi. While 2/28 did not fully achieve the objectives given to it upon arrival, the unit clearly played an instrumental role in setting the conditions for the success of the units that followed.

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<sup>20</sup> Ibid.

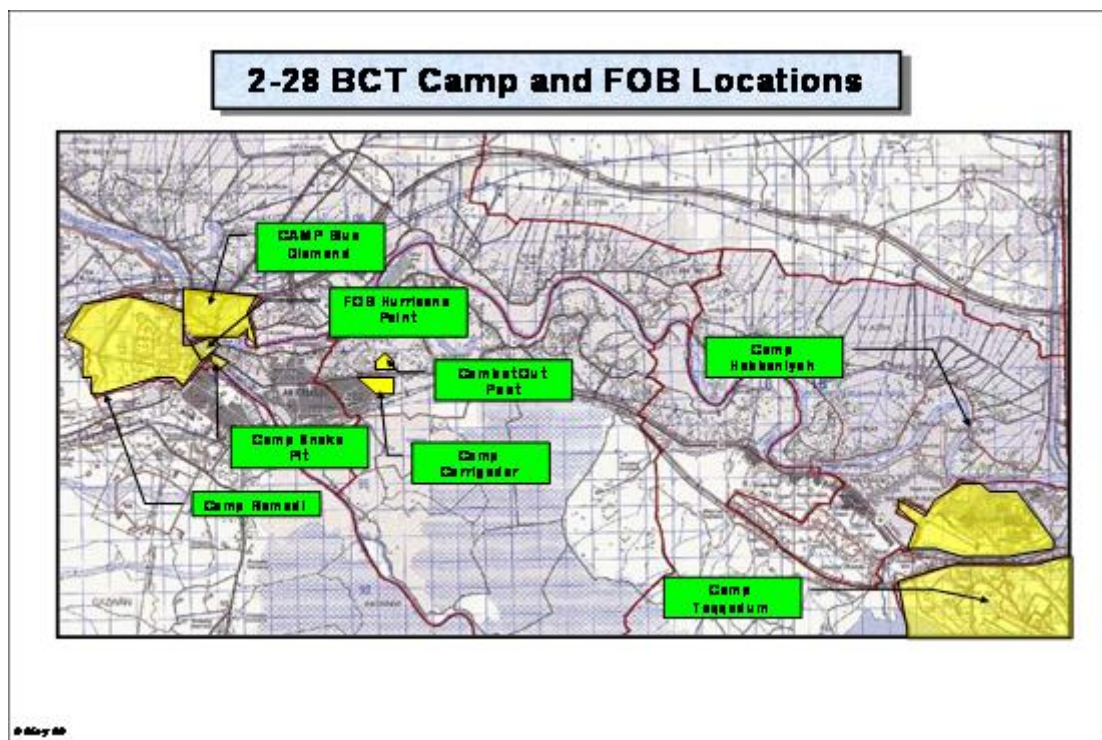


**Figure 4-2**

*Source: Provided by General John Gronski to author*

Shown above in Figure 4-2 is the disposition and fixed locations of 2/28 and its 5,400 personnel at the end of its deployment in June 2006 in the Topeka AOR. The deployment scheme sought to surround the insurgent bastion in Ramadi, restrict the insurgents' movement, and provide security along the main roads supplying forces in Western Iraq. Manpower shortages represented an important limiting factor in 2/28's building the diverse array of operational capacities needed to fully prosecute a successful COIN campaign. Many of 2/28's fixed locations, as seen in Figure 4-2, were located on the roads – major supply routes, or MSR, Michigan and Mobile. This was for a good reason – the roads represented the main supply routes to all units operating in Western al Anbar and they were frequent targets for IED attacks. Requirements for base security as well as providing convoy security along the main roads drained the combat power of the brigade and reduced its ability to provide a continuous presence in the contested city neighborhoods. The unit constantly searched

for work around solutions to generate additional combat power. Longer shifts were employed on enduring tasks that enabled the temporary generation of combat power in the elections during the fall of 2005, but the lack of manpower proved to be a systemic problem throughout the deployment. This problem was addressed when 2/28's successor, 1/1, arrived in the summer of 2006 with two additional maneuver battalions and a reduction in the Topeka battle space.



**Figure 4-3**

*Source: Provided by General John Gronski to author*

As shown in Figure 4-3, the unit spread out over four main operating bases, separated by Lake Habbaniyah and Ramadi: Camp Taqqadum Air Base, Camp Ramadi, Camp Blue Diamond and Camp Habbaniyah. 2/28 faced important limitations on its ability to conduct sustained operations of any kind throughout the Topeka AOR. The brigade combat team of approximately 5,400 soldiers and marines was spread out over an

extremely wide area. Providing base security at Camp Blue Diamond, Camp Ramadi and Camp Taqqadum airfield and the Al Asad airfield represented a huge drain on 2/28's available manpower to mount sustained patrols throughout contested areas in Topeka's urban and rural areas. Gronski estimated that inherited tasks associated with base security and protecting the roads connecting his base areas absorbed 80 percent of 2/28's combat power.<sup>21</sup> The unit had deployed into theater with less combat power than its predecessor, 2/2 BCT, which had two additional battalion headquarters and four additional maneuver companies. Gronski estimated that 2/28's enduring tasks limited the ability of the unit to provide the continuous presence needed throughout the city.<sup>22</sup> Some parts of the city were rarely patrolled at all due to manpower shortages. Most of 2/28 remained in outposts outside the city center, with the exception of the embattled 3-8 Marines that occupied the government center and a few other facilities in downtown Ramadi. Establishing a continuous presence in Ramadi's insurgent-controlled neighborhoods proved impossible for 2/28.

In addition to limited combat power, the unit struggled throughout its deployment to overcome a shortage of transportation vehicles of all kinds: the unit lacked its own organic transportation equipment. Because it was a legacy organization, the logistics for the unit was supposed to be 'service provided,' but the Army never provided the main support battalion to source the BCT with equipment. Sometimes the unit had to wait a month to receive heavy equipment transporter (HET) support – a critical capability for the BCT – particularly its armored battalion.<sup>23</sup> Heavy equipment transporters were the only equipment capable of moving battle-damaged vehicles

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<sup>21</sup> Gronski interview with author.

<sup>22</sup> Ibid.

<sup>23</sup> As detailed by Major Mark D. Pike, 'BCT Logistics in Anbar Province', *Army Logistician* (May-June 2008), pp. 22-28.

from the battalion areas of operations to the repair and cannibalization depot at Camp Taqqadum. During its time in Iraq, IED attacks destroyed 94 of 2/28's vehicles: eight M1A1 Abrams tanks, 19 M2A2 Bradley Fighting Vehicles and 45 M114 and M1151 up-armored HMMWVs.<sup>24</sup> Removing destroyed equipment to base areas for repair and cannibalization represented a major challenge throughout the deployment.

The unit worked hard to overcome these limitations, devising its own transportation section – an ad hoc unit consisting of 25 soldiers split between Taqqadum Air Base and Camp Ramadi. The unit built its own transportation security detachment to protect convoys on Topeka's dangerous roads and established a quick reaction force to quickly move to attack sites to retrieve damaged or destroyed vehicles. These organizational changes resulted from individual initiative in the unit to meet the difficult logistical challenges of the environment. To counter persistent IED attacks on the main roads, the BCT built procedures to mount resupply operations at night in blackout conditions using night vision goggles. Since the insurgents lacked infrared night vision equipment, their attacks proved less effective during these operations. In the fall of 2005, the BCT's logistics support elements overcame these obstacles to erect 1,000 concrete barriers in Ramadi for the October referendum and the December elections. In the spring of 2006, the unit constructed six new Iraqi police stations and company-size outposts for the ISF in central Ramadi. None of the organizational changes or tactical adaptations introduced by 2/28's logistics elements were covered under existing doctrinal SOPs. As noted by the BCT's logistics officer, Major Mark Pike: 'Doctrine is only a guide. The operational environment ultimately dictates

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<sup>24</sup> Ibid., p. 26.



mission requirements. In combat leaders must be flexible and willing to break with doctrine to ensure mission success.’<sup>25</sup>

The task of securing MSR Mobile fell to 2/28 – one of the two largest roads (along with MSR Michigan) running from east to west through al Anbar. The six-lane highway received heavy use to keep the Iraqi and U.S. military bases resupplied throughout the province all the way to the Syrian border. Needless to say, the highway also received heavy use by the local population and the insurgents. Insurgent attacks using IEDs and gunmen mounting ambushes constituted a constant headache and source of casualties for 2/28 during its deployment. The unit also had no experience in joint operations with the Marine Corps and lacked experience in working with a higher Marine headquarters, which had control over the MNF-W area of operations. Midway through 2/28’s deployment, the unit was given responsibility for providing security of forward operating base Blue Diamond, the former headquarters of the 2<sup>nd</sup> Marine Division adjacent to Camp Ramadi. Last, but not least, 2/28 had to provide manpower for four military transition teams, or MiTT, teams (two of which were not in Topeka) to train the Iraqi Security Force. Over the course of its deployment, two additional ISF brigades deployed into the area for partnering operations. All of these myriad requirements reduced the tactical flexibility of 2/28.

2/28 faced a complex battlefield and challenging physical terrain. Ramadi was a densely populated urban environment intersected by the Euphrates River and various canals that divided the city and provided numerous ingress and egress routes for insurgents and their supplies. Insurgents mounted approximately three to five IED

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<sup>25</sup> Ibid., p. 24.



attacks each day. The unit successfully found and detonated another 1,100 IEDs during its deployment.<sup>26</sup> It also faced constant sniper fire, mortar attacks and RPG ambushes. The unit averaged 42 ‘significant activities’ per day in the form of IED attacks, complex insurgent attacks, sniper fire, attacks via indirect fire like mortars and rockets.<sup>27</sup> Major Brad Tippet, the operations officer for 3-8 Marines that patrolled central Ramadi summarized the general rule of operating in the city: ‘You can’t just walk down the street for a period of time and not expect to get shot at.’<sup>28</sup> The operational tempo of the brigade remained extremely high throughout the deployment.<sup>29</sup> During the December and January period, 2/28 mounted a series of what were called ‘cordon and knock’ operations throughout the sector, turning up numerous arms caches of insurgent weapons and equipment. On January 16, one operation discovered 11 arms caches that took two days to unearth. Nearly two tons of ordnance materials were blown up by the unit’s explosive ordnance disposal team.<sup>30</sup> A series of operations over the next several weeks uncovered a continuous stream of arms caches in and around the city. During *Operation Wadi Aljundi* in late January, the 22<sup>nd</sup> Marine Expeditionary Unit found 4,300 artillery and mortar rounds, rockets, and mines; 267 kilograms (590 pounds) of explosive powder, 10,000 rounds of various types of ammunition (ranging from small-arms to tank main gun rounds), 300

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<sup>26</sup> The cat and mouse game – with the exact roles of who was hunting whom – is captured in Sabrina Tavernise, ‘Unseen Enemy is at its Fiercest in a Sunni City’, *New York Times*, October 23, 2005, p. 1. Insurgents equipped with Russian-made Dragunov sniper rifles were particularly feared adversaries.

<sup>27</sup> Ibid.

<sup>28</sup> As quoted in Sabrina Tavernise, ‘U.S. Battles to Control Insurgents in Ramadi’, *The New York Times*, October 24, 2005, p. 6.

<sup>29</sup> Press reporting over the period chronicles the nearly continuous battles between insurgents and 2/28. See, for example: Steven Hurst, ‘Fighting in Ramadi as U.S. Reports Two More Deaths’, *Associated Press*, September 24, 2005; ‘New Offensive Begins in Anbar Capital’, *United Press International*, November 23, 2005; Sabrina Tavernise, ‘Scores Are Killed by American Airstrikes in Sunni Insurgent Stronghold West of Baghdad’, *New York Times*, October 18, 2005; Jonathan Finer, ‘Insurgent Attacks Repelled’, *Washington Post*, January 26, 2006, p. A18; Todd Pitman, ‘U.S., Iraqi Forces Fight Ramadi Insurgents’, *Associated Press*, April 22, 2006; Todd Pitman, ‘U.S., Iraqi Troops Frustrated by Insurgent Hunt in War-Ravaged City’, *Associated Press*, May 8, 2006.

<sup>30</sup> Press Release 6-08, Camp Blue Diamond, Ar Ramadi, Iraq, January 16, 2006.

blasting caps, approximately 100 feet of detonation cord, and several working machine guns and mortar systems.<sup>31</sup>

While 2/28 faced an adversary shooting at it every day, it also became quickly apparent that kinetic tools could only play one part – albeit a very important part – in applying combat power in that environment. The brigade quickly transitioned from a unit trained for a conventional battlefield to one working in a ‘full spectrum’ environment. The brigade needed to completely adjust its approach to the battlefield to take account of the complexity of the environment in which kinetic and non-kinetic tools would be applied simultaneously. In other words, conventionally-oriented, kinetic operations would be occurring at the same time as operations more suited to counterinsurgency missions. This required a change in the mindset of the entire unit. General Gronski described the intellectual evolution in his and the unit’s approach as follows:

When we first got to Iraq, we thought it was necessary to dominate our area of operation at the physical level and over the course of time realized that dominating at the moral level would be more decisive. That meant adjusting our approach in order to do our best at de-escalating situations, rather than escalating. I will admit, due to the violent nature of the insurgency, it was a challenge to de-escalate. Let me explain this further; we were keeping in touch with 2/2 ID when we were still at Camp Shelby via the secure internet protocol router network (SIPRNET) and we saw that things in that particular area of operation were very kinetic. So, we were going in with the mindset that we were going to have to maintain that level of operations tempo (OPTEMPO) and the training that we were getting at Camp Shelby was more oriented around kinetic operations rather than non-kinetic, as I already mentioned to you. And, by the way, no knock on 2/2 ID; but, they were not doing that much with leader

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<sup>31</sup> Press Release 06-011, Camp Blue Diamond, Ar Ramadi, January 23, 2006.

engagement before we got there just because of the way things had been evolving there. It was not that they didn't want to. There just weren't that many opportunities for them to engage the tribal leaders. So, when we got there, a level of tribal leader engagement was just beginning and I'm sure if 2/2 ID had stayed there longer that they would have evolved into more robust leader engagement. But, it was just the nature of the timing and evolution. So, and I think I told you this in the mission statement that we had, our mission statement that was given to us by 2d MARDIV was to neutralize the insurgency, which really put the onus on focus on killing and capturing insurgents. But, as we continued to conduct operations there, we came to realize that we had to transition more to securing the population.'<sup>32</sup>

The evolution in 2/28's approach on the battlefield in the apportioning of its resources between the kinetic and non-kinetic tools gathered momentum throughout the summer and fall of 2005 as the unit developed new capacities to operate in its environment. The brigade immediately recognized the importance of building local relationships, which had barely begun to be built during 2/2's time in and around Ramada. Gronski gradually reoriented his commander's intent priorities to reflect the need for non-kinetic tools. One of his initial principal changes featured an emphasis throughout the unit on the importance of 'first do no harm' as a governing philosophy for how 2/28 would operate in Topeka.<sup>33</sup> This first order principle constituted a significant departure from the initial commander's intent upon arriving in Ramadi. As noted by Gronski, 'When we first got to Iraq, we thought it was necessary to dominate our area of operations at the physical level and over the course of time realized that dominating at the moral level would be more decisive. That meant adjusting our approach to do our best at de-escalating situations, rather than escalating.'<sup>34</sup>

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<sup>32</sup> Gronski Fort Leavenworth interview by Contemporary Operations Study Team.

<sup>33</sup> Gronski interview with author.

<sup>34</sup> Gronski Fort Leavenworth interview.

In July and August, 2/28 initiated a plan of local leader engagement to try and draw the local tribal sheiks into a dialogue on how to improve local security. Working with the governor of Anbar who lived in Ramadi, Maamoun Sami Rashid al-Awani, Gronski and his staff struggled to set up a weekly meeting with the Sheiks in central Ramadi. The local tribal leadership in and around Ramadi had been disrupted by war – much of the leadership had either been killed or had fled the country and resided in Jordan. This had created a vacuum that AQI had exploited in entrenching itself in Ramadi and the surrounding villages. During the first meeting in mid-summer, tribal leaders complained bitterly about the checkpoints set up around the city and the disruptions it caused to the residents. The reality was that citizens in Ramadi could spend hours in traffic jams caused by the roadblocks. The local sheiks also objected to random searches of houses and what they regarded as petty harassment by the Iraqi Security Forces.<sup>35</sup> During the meetings, it became apparent that the sheiks strongly opposed the U.S. presence and wanted the U.S. to leave – quickly.<sup>36</sup> Gronski and his staff developed two information operations themes out of these meetings: (1) that the U.S. presence would be reduced when the violence subsided; and (2) that the U.S. would make every effort to limit collateral damage and the deaths of innocent civilians. Gronski noted that ‘many of the Sheiks that showed up at the government center once a week and that we engaged with were local insurgents. They had some level of control over these local insurgents and they could have cared less about Islamic law type government forming in al Anbar Province, like AQI wanted. What these nationalists wanted, what these local insurgents wanted, was simply the

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<sup>35</sup> Gronski interview with author.

<sup>36</sup> For details on the November 29, 2005 meeting in Ramadi’s city auditorium, see Ellen Knickmeyer, Jonathan Finer, and Omar Fekeiki, ‘U.S. Debate on Pullout Resonates As Troops Engage Sunnis in Talks’, *Washington Post*, November 30, 2005, p. A1.

American force to leave the city so that they could start to get back to some semblance of normalcy.’<sup>37</sup>

Following the weekly meetings, 2/28 gradually changed its procedures to address the sheiks’ concerns and the atmosphere in local interactions started improving. Checkpoint procedures changed so that the units conducted only random searches, improving the flow of traffic into and out of the city. The unit also abandoned the practice of random house searches in targeted neighborhoods and instead only searched houses based on intelligence gathered from local Iraqis. Another outcome from the meetings was that Gronski and his staff realized that that its indirect fire on insurgent positions was having a negative impact on the local populace. The brigade had a platoon of M109A5 Paladin howitzers at Camp Ramadi and another in Camp Habbaniyah that it used for ‘terrain denial’ and counter-fire in response to incoming mortar and rocket attacks. By the end of 2005, 2/28 greatly reduced both counter-battery and terrain denial fires by their artillery. Instead, the unit moved to more targeted indirect fire missions that used specific tactical intelligence on insurgent positions – intelligence that gradually improved over the year. During heavy fighting in April 2006, the 2/28 used the guided multiple launch rocket launcher system, which could deliver rounds from 40 miles away at Camp Fallujah into an area 15 by 15 feet.<sup>38</sup>

During the engagement meetings, Gronski and his staff pressed the local leadership to generate local recruits for the police force, emphasizing that the American presence (opposed by the sheiks) would decline as Iraqis took responsibility for local security.

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<sup>37</sup> Gronski Leavenworth interview.

<sup>38</sup> Ibid.

Throughout the fall of 2005, 2/28 sought to establish a system of local security to support the December 2005 parliamentary elections.

The contest of wills between 2/28 and the insurgents went back in forth in December 2005 as the unit prepared for the parliamentary elections. In an attempt to disrupt the elections, a hooded group of 300 insurgents seized control of the city center on December 1 and distributed leaflets stating that the city had been taken over by al Qaeda.<sup>39</sup> Undeterred, 2/28 kept pressing ahead with its program of local leader engagement, with some limited success. On December 9, angry local citizens turned over the so-called ‘Butcher of Ramadi,’ a senior AQI operative named Amir Khalaf Fanus, providing an indication of local splits among insurgent groups.<sup>40</sup> Progress continued in the non-kinetic sphere in the fall during the run-up to the December 15 elections in which 60 percent of eligible voters participated – a significant increase from the 2 percent of the population that voted in the January 2005 elections. The emphasis on building local relationships and re-constituting the internal police continued to gain momentum. At a widely publicized recruiting event held at the glass factory in Ramadi, hundreds of local residents appeared to join the police. The unit believed that the high turnout represented a turning point with the local leadership, which by this time had clearly decided to support 2/28’s efforts to reconstitute the police force.<sup>41</sup>

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<sup>39</sup> Catherine Philip, ‘Insurgents Stage Show of Strength on City Streets,’ *London Times*, December 2, 2005, p. 45.

<sup>40</sup> ‘Citizens Turn Over ‘Butcher of Ramadi’ to Iraqi, U.S. Troops’, *Armed Forces Press Service*, December 9, 2005. Fighting in Ramadi between insurgent groups was reported as early as the summer of 2005. See Ellen Knickmeyer and Jonathan Finer, ‘Iraqi Sunnis Battle to Defend Shiites’, *Washington Post*, August 14, 2005, p. A1. The piece provides the following quote from Sheik Ahmad Khanjor, leader of the Albu ali clan: ‘We have had enough of his nonsense. We don’t accept that a non-Iraqi [Zarqawi] should try to enforce his control over Iraqis, regardless of their sect – whether Sunnis, Shiites, Arabs or Kurds’.

<sup>41</sup> Interview by author with 2/28 public affairs officer Major Todd Poole, USMC, May 3, 2008.

While 2/28 gradually built relationships with the local leadership over the fall of 2005, AQI struck back with a vengeance in early 2006. While approximately 1,000 Iraqis stood in line to sign up for the police outside the Ramadi glass and ceramic factory, a suicide bomber attacked the site, killing 70 and wounding hundreds of the potential recruits. Also killed was Lieutenant Colonel Michael McLaughlin, leader of 2/28's local leader engagement programs, who had been instrumental in convincing local leaders to support the recruiting drive.<sup>42</sup> The recruiting continued during the day and the next week, and 200 recruits were later shipped to the Iraqi police training.<sup>43</sup> By the end of February 2006, the 2/28 had had screened and identified 1,586 recruits, and 379 had been shipped off for training. Following the successful recruiting efforts, 2/28 re-established the Iraqi Police Provincial Headquarters in Ramadi and built two additional police stations in the vicinity of Habbaniyah, located halfway between Ramadi and Fallujah.<sup>44</sup>

The glass factory attack and the halting steps towards reconstituting the local police represented the beginning of the deterioration in the relationship between AQI and local leaders.<sup>45</sup> In late January, an unattributed report appeared in the London-based newspaper *Al Hayat* asserting 'Tribal Popular Committees' had stopped operations against American forces and turned on AQI. Other Sunni organizations in Ramadi,

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<sup>42</sup> Details of the attack in Monte Morin, 'Suicide Bomb Kills Dozens of Iraqi Police Recruits, 2 Americans', *Stars and Stripes*, January 6, 2006, <http://www.stripes.com/article.asp?section=104&article=33278&archive=true>, accessed February 1, 2007; also see Morin, 'Officer Killed by Suicide Bomb Had High Hopes for Ramadi', *Stars and Stripes*, January 9, 2006, <http://www.stripes.com/article.asp?section=104&article=34193>, accessed February 1, 2007.

<sup>43</sup> Louise Roug, 'Iraq Sunnis Seek Police Jobs After Attack', *Los Angeles Times*, January 13, 2006.

<sup>44</sup> 'Homegrown Ramadi Police Prepare to Patrol Iraqi Streets', *Agence France Presse*, February 26, 2006.

<sup>45</sup> Tim McGirk, 'A Rebel Crack-Up?' *Time Magazine*, January 22, 2006, <http://www.time.com/time/magazine/article/0,9171,1151790,00.html>, accessed December 1, 2007.

however reported that they were engaged in warfare against the Iraqi government and AQI.<sup>46</sup> Sunni nationalist insurgent groups – the 1920 Brigades, the Anuman Brigade and the Islamic Mujahidin Army, were also reported to have formed a body known as the Advisory Council to combat AQI. The spring of 2006 saw AQI begin a temporarily successful brutal and extensive murder and intimidation campaign with the local sheiks and policemen to disrupt the reconstitution of the local police. On January 16, 2006, AQI assassinated Sheik Nasser al-Mukhlif, the leader of the Albu Fahad tribe and a former professor of Physics at Al Anbar University – one of the most powerful and influential tribal leaders in Ramadi.<sup>47</sup> Muklif had strongly condemned the glass factory attacks and had met with Iraqi Prime Minister Al Jafari and American ambassador Zalmay Khalilzad the day before his murder. The Albu Fahad had a long history in Ramadi dating back hundreds of years. It was one of the main sub-tribes of the Dulaym tribal confederation – the main Sunni tribal group in Anbar. Like many of the Sunni tribal groups, the Albu Fahad, while not ardent supporters of Saddam, opposed the coalition occupation and were strong Iraqi nationalists. While initially supportive of AQI, Muklif and the tribe grew disaffected with AQI during late 2005 and participated in meetings with 2/28 to establish local security for the parliamentary elections.<sup>48</sup> His death had a particularly chilling effect on the willingness of the local tribal leadership to cooperate with 2/28.

AQI also destroyed cell phone towers throughout the Ramadi area causing a disruption in the communication between sheiks, government officials, and American

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<sup>46</sup> 'Iraq's Sunni Tribes Fight to Expel Al Zarqawi Supporters', *BBC Worldwide Monitoring*, January 26, 2006.

<sup>47</sup> Hala Jaber, 'Sunni Leader Killed After Violence Talks', *The Australian*, February 7, 2006, p. 7.

<sup>48</sup> Anthony Lloyd, 'Murder of Sheikh Provokes Sunnis to Turn on Al Qaeda', *London Times*, February 10, 2006, p. 43.



military units. The murder and intimidation campaign on the part of AQI slowed the momentum of 2/28's local engagement efforts. Local leaders eventually stopped coming to the Provincial Government Center to meet with Colonel Gronski and his staff and the police recruiting efforts slowed after the initial successes of early January.<sup>49</sup> However, many of those who already had seats for police training classes did show up and ship to training. Through the early months of 2006, hundreds of Iraqis who had been processed did ship to police training. AQI then began to murder local Iraqi police once they had returned from training and began to work at local police stations. The battle with AQI continued through the spring of 2006. Anti-AQI local militias began appearing in March and April. One militia participant, a welder named Ahmed Abu Ilaf, seemed to capture the mood of the period in stating: 'We are a group of the Anbar people who want to get rid of Zarqawi . . . because this is the only way to make the Americans withdraw from Ramadi or Iraq in general.' One of the important militia leaders was said to be Ahmed Ftaikhan, a former intelligence officer in Saddam's disbanded army.<sup>50</sup>

Despite the growing opposition to AQI, there was still no question who was in charge of the city, however. One Sunni sheikh who declined to be quoted by name aptly summarized the dilemma for the local tribal leadership: 'We hope to get rid of al-Qaeda, which is a huge burden on the city. Unfortunately, Zarqawi's fist is stronger than the Americans....[In Ramadi] Zarqawi is the one who is in control. He kills anyone who goes in and out of the U.S. base. We have stopped meetings with the Americans, because, frankly speaking, we have lost confidence in the U.S. side, as

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<sup>49</sup> Ibid.

<sup>50</sup> As quoted in John Ward Anderson, 'Iraq Tribes Strike Back at Insurgents', *Washington Post*, March 7, 2006, p. A12.

they can't protect us.'<sup>51</sup> Another sheik, Bashir Abdul Qadir al-Kubaisi of the Kubaisat tribe in Ramadi, expressed similar views, noting: 'Today, there is no tribal sheik or a citizen who dares to go to the city hall or the U.S. base, because Zarqawi issued a statement ordering his men to kill anyone seen leaving the base or city hall.'<sup>52</sup>

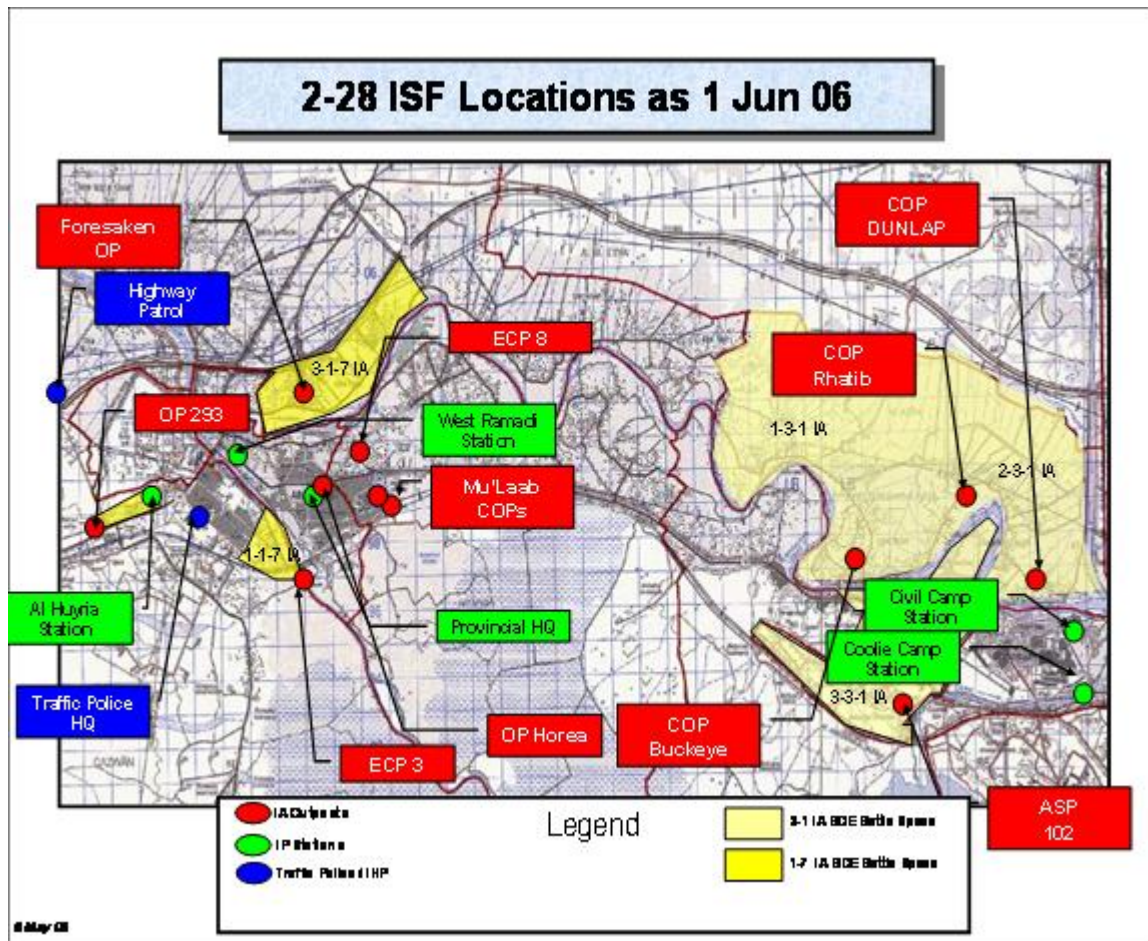
The halting improvement in standing up the local police force was accompanied by the establishment of a cordon of operating outposts outside the main BCT forward operating bases. As the ISF stood up additional units, the BCT gradually spread out its footprint into outposts surrounding the contested neighborhoods. The BCT established eleven combat outposts in the Topeka area, spread out between Ramadi and Habbaniyah. The outposts in Ramadi would form the cordon from which its successor unit, 1/1 combat team would then assault the contested city in summer and fall of 2006. While the ISF and Iraqi police were located in and around these outposts, neither organization had yet emerged as an effective instrument in improving local security.<sup>53</sup>

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<sup>51</sup> As quoted in Ellen Knickmeyer, 'U.S. Will Reinforce Troops in Western Iraq', *Washington Post*, May 30, 2006, p. A1.

<sup>52</sup> Ibid.

<sup>53</sup> Ramadi was extremely dangerous in the late spring 2006. See Michael Ware, 'The Most Dangerous Place', *Time Magazine*, May 29, 2006, p. 45, for a particularly harrowing account of the experiences of 3rd Battalion, 8th Marine Regiment in Ramadi in April-May 2006.



**Figure 4-4**

*Source: Provided by General John Gronski to author*

During the 2005-2006 period, General Casey sought to stand up the Iraqi Security Forces as quickly as possible to take over responsibility for fighting the insurgents. 2/28 encountered numerous hurdles as it struggled with the dual missions of fighting the insurgents and standing up the Iraqi Army. When 2/28 arrived in July 2005, there were few Iraqi Army units task organized to its predecessor unit, 2/2. Throughout its year in Iraq, 2/28 eventually gained the support of three Iraqi Army brigades and an Iraqi Special Commando Police Brigade. Although the unit gladly received these additional troops, 2/28 quickly discovered that the Iraqi Army units had limited combat capability that gradually improved over the year, but, just as important, had no

organic logistics capacity. The Iraqi Defense Ministry contracted much of the support requirements for its army. As 2/28 discovered, these arrangements were a disaster, since much of the contracted support never materialized or, if it did, was totally inadequate. It meant that the Iraqi Army effectively had no dedicated internal logistics support and its units received little if any basic sustainment needs for food and water. Iraqi units were delivered to the field and left on their own. During April 2006, for example, the eastern Ramadi Ministry of Defense contractor provided only four truckloads of food to sustain 1,200 Iraqi Army troops. The remaining food convoys either never arrived or arrived with rotten food that had to be thrown out. Once, an Iraqi contractor arrived at the brigade support area on Al Taqqadum Air Base and needed an escort to an Iraqi Army camp in eastern Ramadi. The contractor did not want to be observed by the insurgents as collaborating with CF or Iraqi Army units. Therefore, the 2/28 support battalion hid him and his vehicle and equipment in the back of a container and transported them to the Iraqi Army camp so that he could perform his contracted services.<sup>54</sup>

Lacking an organic support capacity meant the Iraqi forces had no trucks to move themselves and their supplies. As noted in the unit's after action report: 'The IA basically had an entire division in the 2/28 BCT [area of operations] with no transportation company to move their commodities.'<sup>55</sup> The result was the logistical requirements to support three new Iraqi brigades fell to the already stretched 2/28 BCT. To support Iraqi Army troop movements, the 2/28 support battalion up-armored the troop/cargo areas of its five-ton Cargo Trucks using ballistic armor plating to give the Iraqi troops some degree of safety from small arms fire. The Iraqi troops finally

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<sup>54</sup> Detail from author interview with Major Mark Pike.

<sup>55</sup> *After Action Review Report*, p. 6.

received their own up-armored vehicles from the Iraqi Defense Ministry in April 2006.<sup>56</sup> Gronski characterized the 2/28 attitude to this unanticipated mission:

We had to provide the logistical support to these Iraqi units, because if we did not, nobody else would. I understood the MNC-I and Division Commander's intent was to get the Iraqi Army more involved in the fight and for my BCT to mentor, coach, and train the Iraqi Army so they could get more involved and take on more and more responsibilities for themselves. So, in preparing to deploy to Iraq, we really were not aware of the role we were to have in providing logistical support to the IA. It simply became an operational reality.<sup>57</sup>

As indicated in Figure 4-4 on page 194, 2/28 redeployed out of its main forward operating bases over the course of its deployment, establishing combat outposts in and around central Ramadi, along the main roads and near the provincial headquarters. These outposts were jointly manned by U.S. and Iraqi troops. The unit established four rebuilt Iraqi police stations during its deployment.

During the spring of 2006, a change in the BCT's mindset and COIN-oriented procedures further developed as the organization broadened its approach to integrate non-kinetic tools on the battlefield. The unit launched an array of civil affairs projects as part of the 'do no harm' philosophy that came to govern the activities of 2/28. The BCT worked extensively with Marines from the 5<sup>th</sup>, 6<sup>th</sup>, and 3<sup>rd</sup> Civil Affairs Group to bring millions of dollars to al Anbar Province to start reconstruction projects focused

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<sup>56</sup> Todd Pitman, 'Iraqi Troops Start Rolling Out in Armored HMMWVs in Restive Iraqi City', *Associated Press*, April 10, 2006.

<sup>57</sup> Author interview with Gronski.

on sewage control, clean water, electricity, educational assistance, and basic sanitation infrastructure.<sup>58</sup> These projects included the following:

- Delivered over \$2 million in medical supplies and equipment to 22 hospitals and clinics.
- Purchased 150 transformers at a cost of \$800,000, improving the average availability of electricity from eight hours to twelve hours per day.
- Delivered supplies to 31 schools benefiting 15,000 children at a cost of \$305,000.
- Ramadi General Hospital and the Women's and Children's Hospital were provided electricity 24 hours a day, 7 days a week due to the delivery of two 1,000KVA generators.
- Completed the beautification of route Michigan road that included: trash cleanup, rubble removal, and Iraqi flags erected with the intent of fostering future economic activity.
- Paid \$900,000 in claims brought by Iraqis whose property had been damaged and/or destroyed by U.S. forces
- Civil Affairs distributed \$125,000 worth of humanitarian supplies to the local populace in AO TOPEKA during the month of February 2006 which included items such as: heaters, blankets, clothing, and personal hygiene supplies.
- al Anbar Provincial Government continued and functioned in the heart of the Sunni Triangle.
- The Provincial Reconstruction team in Ramadi was established.<sup>59</sup>

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<sup>58</sup> For example, see Corporal Jeremy Gadrow, '6th Civil Affairs Group Organized Delivery of \$500,000 in Medical Supplies', *Department of Defense Marine Corps News*, November 6, 2005; Captain Julianne Sohn, 'Reserve Marines Help Transform Electricity in Ramadi', *Department of Defense Marine Corps News*, August 17, 2005.

## Summary of Wartime Innovation by 2/28

This unit arrived in Iraq in the summer of 2005 organized, trained, and equipped for a conventionally-oriented battlefield – not for the COIN environment (even a very violent one) in and around Ramadi. The unit quickly realized that the skills practiced before its arrival would be of limited use in Ramadi. The 2/28 made numerous tactical adaptations in the field that flowed from a collective shift in the mindset of the brigade as it steadily gained an understanding of the environment. The unit built a complex mix of new organizational capacities during its deployment that did not exist prior to its arrival to meet the demands of the environment in Ramadi. The combination of the changed organizational mindset and the new organizational capacities make the 2/28 experience a textbook case of organically-generated wartime innovation.

Initially, the BCT focused on neutralizing the insurgency and trying to build up the ISF in accordance with the mission priorities handed down from the MEF headquarters. To be sure, the 2/28 continued aggressive actions against the insurgents throughout its deployment, killing and wounding an estimated 1,750 insurgents. Gradually and despite its systemic limitations, 2/28 BCT shifted its focus to protecting the population and evolved toward the philosophy of ‘first do no harm’ in its COIN operations. The 2/28 leadership worked hard to communicate this intent to small unit leaders and troops at all levels during battlefield circulation. The intent was consistently emphasized as documented in the fragmentary orders, or FRAGOs, and

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<sup>59</sup> List consolidated from Gronski Fort Leavenworth interview, which references *Final Report of 2BCT, 28th Infantry Division (Mechanized) Operations in Operation Iraqi Freedom 4 January 2005 to 24 June 2006*, 2 BCT Headquarters, 28th Infantry Division (Mechanized) 125 Goodridge Lane, Washington, PA 15301, 25 February 2008.

other communications from the brigade staff sent throughout the unit. Other steps taken to 'de-escalate' on the battlefield included efforts to integrate the growing ISF forces into its operations and in the spring of 2006. By March and April of 2006, 2/28 started mounting combined and dismounted patrols with the Iraqi Army. Lastly, 2/28 suspended most counter-fire and terrain denial missions to minimize collateral damage to the local population.

Some of the most significant innovation occurred in the herculean tasks of the 228<sup>th</sup> support battalion to overcome its systematic limitations in logistics support. The unit created new organizations from scratch to provide security for its logistics convoys and developed procedures to keep its forward operating bases supplied at night to avoid IED attacks. The brigade developed work-around procedures to keep logistics support flowing to the combat elements despite the lack of expected logistics support that never materialized from the Army. Operating in the irregular warfare environment, the 2/28's logisticians effectively became additional combat elements in their convoys and vehicle rescue operations.

Eventually, the BCT established eleven combat outposts outside the established main forward operating bases, which allowed joint Iraqi-American patrols in the contested areas. A number of police stations were created and manned by Iraqi police returning from training academies throughout Iraq. Due to this success, insurgents began a murder and intimidation campaign that eventually had a destructive backlash in the fall of 2006. The challenge of executing the mission to protect the population during 2/28 BCT's deployment was due primarily to the limited number of troops available



to conduct operations in an AO that was not only geographically large but also densely populated.

### **Wartime Innovation of 1/1 in Ramadi, 2006-2007**

The 1<sup>st</sup> Brigade Combat Team, 1<sup>st</sup> Armored Division (1/1) 'Ready First' combat team, or RFCT 1, replaced 2/28 in the Topeka area of operations in June 2006. During 1/1's deployment, the struggle with AQI and Iraqi nationalist insurgent groups reached its crescendo in Ramadi. The fight progressed week-by-week, block-by-block through the city's neighborhoods as 1/1 moved systematically through the entire city applying the kinetic and non-kinetic tools at its disposal in subduing the insurgent presence and effectively re-taking the city. The 1/1 campaign in Ramadi will go down as a textbook example of successful COIN operations that its commanding officer, Army Colonel Sean MacFarland, later referred to as a 'three dimensional game of chess.'<sup>60</sup> The deployment of 1/1 into Ramadi came before the co-called 'surge' increased the overall numbers of U.S. troops in Iraq by approximately 30,000 during the first six months of 2007. It also came as the Defense Department reported that insurgent violence throughout Iraq had reached its highest levels in nearly two years.<sup>61</sup>

The progress made by 1/1 in Ramadi in the fall of 2006 built on the steps taken by 2/28 in what could be called the 'setting the conditions' phase of the battle. Like 2/28, 1/1 demonstrated critical organizational capacities to cycle through a variety of TTPs to find a combination that worked on the battlefield. That process saw organizational

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<sup>60</sup> Author interview with MacFarland.

<sup>61</sup> Bryan Bender, 'Insurgent Attacks in Iraq at Highest Levels in 2 Years', *Boston Globe*, May 31, 2006, [http://www.boston.com/news/world/middleeast/articles/2006/05/31/insurgent\\_attacks\\_in\\_iraq\\_at\\_high\\_est\\_level\\_in\\_2\\_years/](http://www.boston.com/news/world/middleeast/articles/2006/05/31/insurgent_attacks_in_iraq_at_high_est_level_in_2_years/), accessed September 5, 2007.

adaptation evolve into innovation as the organization juggled and then eventually arrived at the right balance in applying its available kinetic and non-kinetic tools in the environment.<sup>62</sup> In the case of both 2/28 and 1/1, each unit moved through iterative phases in the process of tactical adaptation that, at its end, had fundamentally changed the way the units applied their kinetic and non-kinetic tools on the battlefield. The balancing process took part on a unit-by-unit basis, each of which received significant latitude in arriving at the right balance in its area of operations.

A legacy armored brigade based in Freiburg and Giessen, Germany, 1/1's organization normally consisted of two armor battalions, a mechanized infantry battalion, a headquarters company and a brigade reconnaissance troop. Six months before its deployment, the unit received its direct support field artillery, engineer, and forward support battalions. Prior to the deployment, the armored portion of the brigade was lightened as two tank companies and two field artillery batteries were transformed into 'motorized' formations. An additional two tank companies were 'dual purpose', and trained for motorized and tank pure configuration. The brigade's mechanized infantry retained all their Bradley Fighting Vehicles and also trained on motorized tasks.

The brigade deployed with a total of fifteen maneuver capable companies. This organization provided two tank companies, two 'dual-purpose' companies, four motorized companies, four mechanized infantry companies, the Brigade Reconnaissance Troop (BRT), and three combat engineer companies. Upon arrival in

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<sup>62</sup> The balancing process in 1st Brigade, 1st Armored Division, is described in *1st Brigade 1st Armored Division CAAT Initial Impressions Report*, undated, posted online at [http://209.85.141.104/search?q=cache:SL8sB1cBo8UJ:www.usm.edu/armyrotc/402classes/6a\\_FOUO\\_COP.pdf+Ramadi+CMO&hl=en&ct=clnk&cd=25](http://209.85.141.104/search?q=cache:SL8sB1cBo8UJ:www.usm.edu/armyrotc/402classes/6a_FOUO_COP.pdf+Ramadi+CMO&hl=en&ct=clnk&cd=25), accessed January 4, 2007.

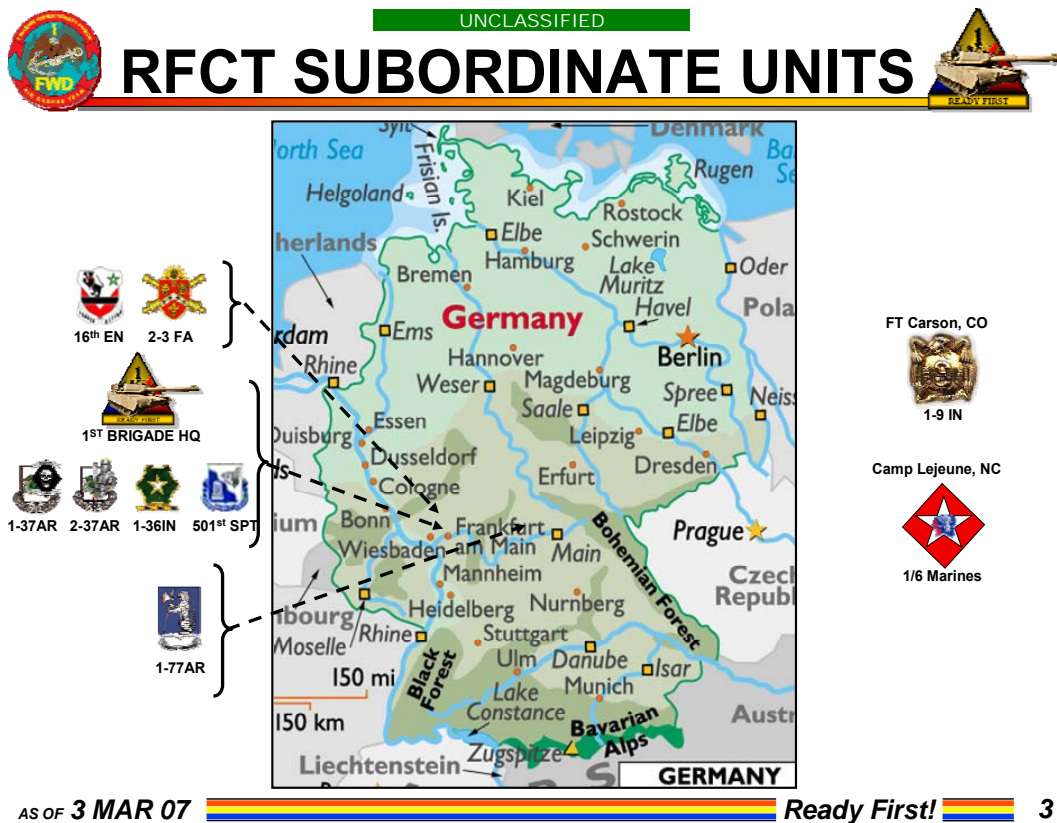
Ramadi in June, 1/1 integrated 1<sup>st</sup> Battalion, 6<sup>th</sup> Marine Regiment (1-6) out of Camp Lejeune and the 1<sup>st</sup> Battalion, 9<sup>th</sup> Army Regiment out of Fort Carson, Colorado as well as the 1<sup>st</sup> Battalion, 506<sup>th</sup> Infantry, 1<sup>st</sup> Battalion, 6<sup>th</sup> Infantry Regiment; and the 1<sup>st</sup> Battalion, 35<sup>th</sup> Armored Regiment. In the last summer, a series of routine unit rotations occurred; 1-6 Marines relieved the 3-8 Marines; 1-9 Infantry relieved the 1-506 Infantry; the 2-37 Armored relieved the 1-6 Infantry; the 1-77 Armored relieved 1-35 Armored. The 1/1 combat team unit structure is illustrated below in Figure 4-5. The 1/1 unit structure reflected the widespread structure of task organized combat teams that fought the Iraq war. These teams integrated disparate elements from a variety of sources into a single combat unit. In this case, the 1/1 added the 1-6 Marine battalion from Camp Lejeune and the Army's 1-9 from Fort Carson, Colorado. The RFCT also had a mechanized infantry company attached from the 2<sup>nd</sup> Brigade, 2<sup>nd</sup> Division Combat Team.

1/1 boasted important advantages over 2/28 when it deployed into Ramadi in June 2006. Much of the brigade combat team components and many of its senior officers had prior experience operating in Iraq, and the brigade – particularly the non-commissioned officer corps based in Germany – had spent significant time in the Balkans in the 1990s policing the Dayton accords. The brigade's experience in the Balkans and the emphasis on local security proved to be an important foundational component of the approach to its Iraq deployment in 2006-2007.<sup>63</sup> Many members of the brigade had spent 15 months in Baghdad and southern Iraq in 2003-2004 during the Shia rebellion. The brigade had three other important advantages over 2/28. The brigade spent four months in Tal Aar in Western Ninewa province from January to

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<sup>63</sup> Author interview with MacFarland.

May 2006 where it got acclimated to the counterinsurgency environment. The experiences in Tal Afar in executing the clear, hold and build approach to COIN proved instrumental in structuring 1/1's approach to operations in Ramadi.<sup>64</sup> Second, when 1/1 deployed into Ramadi in June 2006, MNF-I and MEF headquarters reduced the area of operations in Topeka by taking away responsibility for Habbaniyah from 1/1. Lastly, MEF headquarters gave 1/1 two additional maneuver battalions to further add to the unit's usable combat power. These steps combined to give 1/1 greater flexibility in structuring its operations in Ramadi.<sup>65</sup>



**Figure 4-5**

Source: PowerPoint Presentation titled 'Ready First Combat Team Orientation Briefing, March 3, 2007'.

<sup>64</sup> Ibid.

<sup>65</sup> Ibid.

The four months spent in Tal Afar proved to be an important phase of 1/1's deployment that helped prepare it for operations in Ramadi. The brigade arrived in Tal Afar in January 2006, relieving the 3<sup>rd</sup> Armored Cavalry Regiment that conducted a much publicized and somewhat successful COIN campaign masterminded by Army Colonel H.R. McMaster in the city. After clearing operations through the city in November 2004 and in September 2005, Colonel McMaster dispersed the 3<sup>rd</sup> ACR throughout the city in platoon and company-sized outposts in the fall of 2005. While overall security inside dramatically improved after the sweeps in late 2005, concentrations of insurgent resistance remained in the city.<sup>66</sup> The 1/1 deployment in the spring of 2006 saw its units spread widely throughout Ninewa province, ranging from the wide open spaces along the Syrian-Iraqi border to the urban areas of Tal Afar. During 1/1's deployment in Tal Afar, the unit focused extensively on building local relationships and mounting civil military operations to restore order in the city. 1/1 arrived in Tal Afar in January 2006, relieving the 3<sup>rd</sup> Armored Cavalry Regiment. The unit built on the momentum in the area generated by the 3<sup>rd</sup> ACR, developing and refining various TTPs that would be used in Ramadi several months later, such as operating out of combat outposts, local leader engagement and community relations, and civil-military operations, or CMO.

MacFarland received broad guidance from MEF headquarters when his unit deployed into Ramadi to relieve the 2/28. As recalled by MacFarland, he was told to 'fix Ramadi' and not destroy it as had happened in the pitched battles to wrest control of

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<sup>66</sup> As detailed by Major Niel Smith, 'Retaking Sa'ad: Successful Counterinsurgency in Tal Afar', *Armor Magazine* July-August 2007, pp. 26-35. Also see David R. McCone, Wilbur J. Scott, and George R. Mastroianni, 'The 3rd ACR in Tal'Afar: Challenges and Adaptations', Strategic Studies Institute, U.S. Army War College, Carlisle, PA, January 8, 2008; Lawrence Kaplan, 'Centripetal Force: The Case for Staying in Iraq', *The New Republic*, March 6, 2006, p. 19, for other details on the 3rd ACR operations in Tal Afar.

Fallujah from insurgent control in November of 2004 that had largely destroyed the city.<sup>67</sup> When 1/1 arrived in Ramadi in June, the local population believed that another Fallujah-type assault to re-take the city was imminent.<sup>68</sup> MacFarland's staff developed a plan to re-take the city, but sought to preserve it in the process. The unit's plan sought to slowly spread the brigade out through the contested areas of city in combat outposts to take on the insurgents directly in the areas where they were strongest. Within a month after arriving in Ramadi, 1/1 began dispersing out of the main forward operating bases at Camp Ramadi, Camp Corregidor, and Blue Diamond. Consistent with his guidance to save Ramadi, not destroy it, 1/1 started to re-take the city, block-by-block, establishing COPs jointly manned by Iraqi and U.S. troops throughout the city.<sup>69</sup>

MacFarland later referred to the 1/1 campaign as similar to the 'island hopping' campaign employed by the Marines in the Pacific: 'With new outposts established in an ever-tightening circle around the inner city, we wrested control of areas away from the insurgents. As areas became manageable, we handed them over to newly trained Iraqi police forces (whom we kept a watchful eye on), and used the relieved forces elsewhere to continue tightening the noose.'<sup>70</sup> The operation would first complete the isolation of the insurgents in the city, deny them the use of key infrastructure, and secure the major lines of communication across the city.<sup>71</sup> MacFarland's campaign minimized the use of close air support, tank and artillery fire in an effort to limit

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<sup>67</sup> As quoted in Jim Michaels, 'An Army Colonel's Gamble Pays Off in Iraq', *USA Today*, May 30, 2007, [http://www.usatoday.com/news/world/iraq/2007-04-30-ramadi-colonel\\_n.htm](http://www.usatoday.com/news/world/iraq/2007-04-30-ramadi-colonel_n.htm), accessed June 4, 2007.

<sup>68</sup> Megan K. Stack and Louise Roug, 'Fear of Big Battle Panics Iraqi City', *Los Angeles Times*, p. A1.

<sup>69</sup> 1/1's overall campaign plan also summarized in Major Niel Smith, USA, and Colonel Sean MacFarland, USA, 'Anbar Awakens: The Tipping Point', *Military Review*, March-April 2008, pp. 41-52; Alex Rodriguez, 'Retaking Ramadi, One District at a Time', *Chicago Tribune*, July 9, 2006.

<sup>70</sup> Smith and McFarland, 'Anbar Awakens', p. 46.

<sup>71</sup> Initial reporting of 1/1's campaign in Wade Zirkle, 'In Ramadi, A Test of Iraqi Forces', *Philadelphia Inquirer*, July 6, 2006, p. A17.

collateral damage that would alienate the local population. The battle in Ramadi would be fought on the American side primarily by company commanders and their rifle squads in tandem with special operations forces.<sup>72</sup>

The unit had actively trained to develop one of the critical SOPs that it would use during the Ramadi campaign – the building of combat outposts.<sup>73</sup> During the unit’s training in Germany, its mission essential task list, or METL, focused on a host of COIN-related competencies it would need in the campaign over the next year.<sup>74</sup> During the pre-deployment training period, the brigade clearly recognized it was deploying into a COIN environment and made extensive use of the latest available TTP’s from the Center for Army Lessons Learned and other sources such as the Battle Command Knowledge System (BCKS) websites. The skills built during training would find their way into new TTPs built by the unit and refined over the course of its deployment.<sup>75</sup>

One of the most important of the TTPs perfected by 1/1 was the construction of COPs, which was developed and refined in Tal Afar before the 1/1 arrived in Ramadi. The experience of the 1/1 with COPs was deemed so significant that the unit recommended that the Army integrate TTPs for COP design and use into formal doctrine.<sup>76</sup> The unit pointed to the importance of these facilities in employing both kinetic and non-kinetic tools in the environment.<sup>77</sup> By the end of 1/1’s deployment,

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<sup>72</sup> Special forces played an important role in the battle in support of the conventional forces as detailed by Dick Couch, *Sheriff of Ramadi* (Annapolis, MD: Naval Institute Press, 2008).

<sup>73</sup> Author interview with Colonel V.J. Tedesco III, commanding officer of TF 1-37 in Ramadi, May 17, 2008.

<sup>74</sup> Paper titled ‘Bandit Deployment METL [Mission Essential Task List] Kickstart Menu’, undated; PowerPoint Briefing titled ‘Proposed OIF Battalion METL’, undated.

<sup>75</sup> Author interviews with Tedesco and MacFarland.

<sup>76</sup> *1st Brigade 1st Armored Division CAAT Initial Impressions Report*.

<sup>77</sup> *Ibid*, 1-12.



MNF-I headquarters would release guidance to all units in Iraq urging the adoption of the COP planning and construction SOP developed by two of 1/1's units: the 1<sup>st</sup> Battalion, 37<sup>th</sup> Armored Regiment 'Bandits' and the 16<sup>th</sup> Engineer battalion.<sup>78</sup> As will be shown in the 1-37 case study, site selection and COP construction proceeded on what could only be described as a systematic basis during the unit's push into the contested neighborhoods of south-central Ramadi. To man the COPs, MacFarland increased available manpower for combat operations by reducing the personnel performing mission route security and by removing many of the static posts along the road network in and around Ramadi that had been established by 2/28.<sup>79</sup>

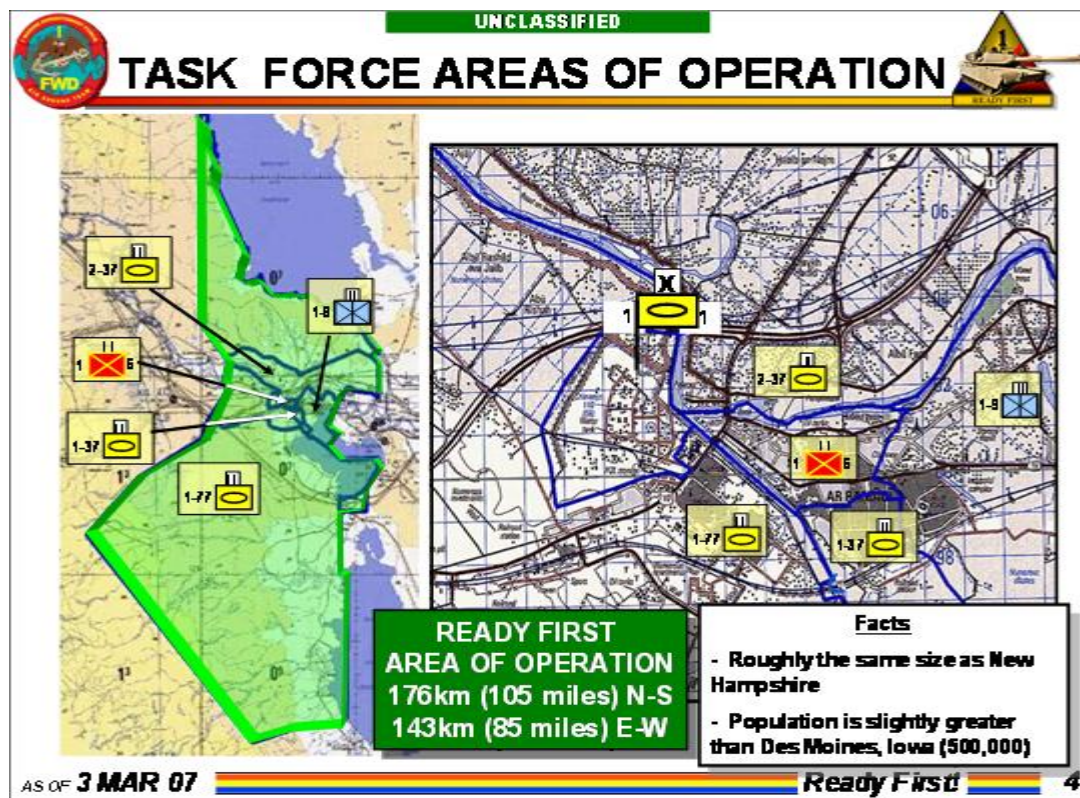


Figure 4-6

Source: PowerPoint Presentation titled 'Ready First Combat Team Orientation Briefing, March 3,

2007'

<sup>78</sup> Paper titled 'Combat Outposts', Multi-National Forces Iraq, Counterinsurgency Center for Excellence, Baghdad, Iraq, March 21, 2007.

<sup>79</sup> Author interview with MacFarland.



Importantly, as the ‘conductor’ of 1/1, MacFarland sought and received the authority from his higher headquarters at the MEF in Camp Fallujah and MNF-I in Baghdad to design his own campaign plan. As was the case in the Western Anbar campaign, higher headquarters freely delegated authority down to its executing units and made little attempt to micromanage the battle from afar, despite the political pressure that would follow from the casualties that would increase in the campaign’s initial phase. MacFarland commented to one journalist: ‘You name it, I tried it.... I had a lot of flexibility, so I ran with it.’<sup>80</sup> The fight for Ramadi would involve the simultaneous application of kinetic and non-kinetic tools over the length of 1/1’s deployment. MacFarland freely delegated responsibility to his battalion commanders for the initial kinetic ‘kick in the door’ phase of the campaign,<sup>81</sup> but he would be intimately involved in helping to rebuild and craft the local relationships that would help enlist the local tribal leadership in the fight against the AQI. When MacFarland arrived in Ramadi, he built on 2/28’s aggressive efforts to rebuild a local police force and enlist the local tribal leadership to split off the Sunni nationalist groups from the insurgency in the fight against AQI. The spring of 2006 had seen AQI aggressively striking back at 2/28, killing at least six tribal leaders and other locals it suspected of cooperating with coalition forces. When 1/1 arrived in Ramadi in July, the unit found a Ramadi Police Force that was virtually nonexistent, despite the efforts to 2/28 throughout the spring. The police claimed to have 420 active police officers out of 3,386 authorized, although only about 140 of these officers ever showed up to work, with less than 100 present for duty on a daily basis.<sup>82</sup>

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<sup>80</sup> As quoted in Jim Michaels, ‘An Army Colonel’s Gamble Pays Off in Iraq’.

<sup>81</sup> Author interviews with MacFarland and Tedesco.

<sup>82</sup> Smith and MacFarland, ‘Anbar Awakens’, p. 44.

When 1/1 arrived in Ramadi, much of the established local tribal leadership had either been killed or had fled to Jordan. Anbar's democratically elected governor, Maamoun Sami Rashid al Awani, exercised little authority outside his sand-bagged compound in central Ramadi guarded by the Marines. The deputy governor had been assassinated during the fall of 2005. One school of thought at MNF-I headquarters argued for conducting the local liaison through the leadership in Jordan, which claimed to exercise influence over the tribes still in Ramadi.<sup>83</sup> MacFarland argued that it made more sense to co-opt and empower the tribal leadership on the ground by offering them jobs in the local police force that would remain in their own neighborhoods and, simultaneously, a hand in desperately needed reconstruction projects.<sup>84</sup> As was the case in Al Qaim, Western Anbar, U.S. commanders adopted a lenient attitude toward the tribes' smuggling operations – so long as those operations didn't involve weapons and money that could be used against coalition forces. The MEF headquarters voiced two objections to this plan: (1) The official U.S. approach emphasized backing the national government in Baghdad and the establishment of local institutions through elections. Re-arming the traditional power elite ran counter to this approach; and (2) It had questions about the backgrounds of the local tribal leadership that was involved in what it regarded as criminal and smuggling networks that also undermined the government in Baghdad.<sup>85</sup> Just as important, reaching out to the local leadership meant engaging insurgent resistance figures that were responsible for the deaths of U.S. soldiers and Marines.<sup>86</sup> MacFarland won the argument with the MEF staff.<sup>87</sup>

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<sup>83</sup> Author interview with MacFarland. Also as summarized in Michaels, 'An Army Colonel's Gamble Pays Off in Iraq'.

<sup>84</sup> Ibid.

<sup>85</sup> Ibid.

<sup>86</sup> For a breakdown of the insurgent groups in Ramadi, see Lydia Khalil, 'Who's Who in Ramadi Among the Insurgent Groups', *Terrorism Focus* 3, 24 (June 20, 2006).

<sup>87</sup> For background on the halting efforts to engage Sunni tribal leaders in Anbar in 2004 and 2005 see David Rose, 'Heads in the Sand', *Vanity Fair* (May 12, 2009); posted online at <http://www.vanityfair.com/politics/features/2009/05/iraqi-insurgents200905>, accessed May 13, 2009.

Tragic events played into MacFarland's hand. On August 21, AQI murdered a local tribal leader, Albu Ali Jasim, mutilating his body and hiding it from his family – thereby denying the family a proper burial. The murder sparked outrage by members of the Jasim tribe.<sup>88</sup> The assassination of Albu Ali Jasim coincided with an assault of 100 to 200 AQI fighters on a newly-built Iraqi police station in the Jazirah area of western Ramadi near Camp Blue Diamond. The attack featured an explosive-laden dump truck detonated on the doorstep of the police station, directing channels of flames over the station's walls, spreading throughout the compound. Unlike previous attacks on the police, however, this time the Iraqi police stood and fought and refused to be driven from their base. The Iraqis asked for and received assistance from 1/1, which responded to the attack with reinforcements, medical attention for the burn victims, and air cover.<sup>89</sup> Within hours of the attack, the Iraqi police had resumed their patrols. Several weeks later, Colonel MacFarland and Lieutenant Colonel Tony Deane, commander of TF 1<sup>st</sup> Battalion, 35<sup>th</sup> Armored Regiment, called on a local Sheikh, Abdul Sattar Al Rishawi, only to find twenty to thirty tribal leaders stuffed into his compound. The Americans had stumbled into the beginnings of the Anbar awakening that would prove critical in their battle with AQI in and around the city.

The Al Rishawi's had crossed swords with AQI during 2006 in response to AQI's disruptions of the Rishawi's smuggling operations on the Baghdad-Amman highway,

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<sup>88</sup> Michael Fumento, 'Return to Ramadi', *The Weekly Standard*, November 27, 2006.

<sup>89</sup> Author interview with MacFarland.; Attack details drawn from Monte Morin, 'After Attack, Iraqi Police Stand Up to Insurgents', *Stars and Stripes*, September 3, 2006, <http://www.stripes.com/article.asp?section=104&article=38853&archive=true>, accessed November 1, 2007. Efforts of the engineers to stand up the outpost and repair it following the attack are detailed in Captain Samuel Dallas, Jr., 1st Lieutenant Jonathan E. Rushin, and 2nd Lieutenant Kevin W. Wooster, 'Construction Engineers: Committed to Making A Difference', *The Professional Bulletin of Army Engineers*, October-December 2006, pp. 10-11.

which had been an important source of revenue for the Rishawi tribe for many years. Sattar's father and two of his brothers had been killed by AQI in these clashes.<sup>90</sup> The meeting represented the beginnings of coordinated, armed tribal resistance to AQI by former soldiers in Saddam's army. The local sheikhs first called themselves the Jazeera Council in Ramadi – a group that expanded by September and then called itself the Sahawah Al Anbar, or the Awakening in al Anbar. On September 17, 25 of Anbar's 31 tribes announced a broad agreement to unite against AQI.<sup>91</sup> This group subsequently became the focus of 1/1's local engagement, with Sattar emerging as the leader of the anti-AQI tribal coalition. Sattar's group came to be called the Anbar Salvation Council. MacFarland immediately took steps to help provide security for the sheiks, authorizing the establishment of neighborhood watches consisting of internal tribal militias that 1/1 called 'provincial Iraqi police.' 1/1 provided the groups with uniforms and authorized them to carry weapons within their defined areas.<sup>92</sup> From June through December 2006, nearly 4,000 local residents joined Ramadi's police force, with 90 percent of this number coming from tribes supporting the awakening.<sup>93</sup> The unit's successful local engagement program owed much to Captain Travis Patriquin, an Arabic speaking former special forces soldier assigned to serve as the brigade's local engagements officer. Patriquin was later killed by an IED in December 2006.

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<sup>90</sup> As detailed in Steven Simon, 'The Price of the Surge: How U.S. Strategy is Hastening Iraq's Demise', *Foreign Affairs* 87, 3 (May/June 2008), p. 63. Also see Martin Fletcher, 'Fighting Back: The City Determined Not to Become Al Qaeda's Capital', *Times Online*, November 20, 2006, <http://www.timesonline.co.uk/tol/news/world/iraq/article642374.ece>.

<sup>91</sup> Khalid Al Ansary and Al Adeeb, 'Most Tribes in Anbar Agree to Unite Against Insurgents', *New York Times*, September 18, 2006; Peter Beaumont, 'Iraqi Tribes Launch Battle to Drive al-Qaida Out of Troubled Province', *The Guardian*, October 3, 2006; Smith and MacFarland, 'Anbar Awakens', p. 48, report Sattar reached agreement with tribal leaders on September 9, 2006; Some feared the consequences of the new militias; see Joshua Partlow, 'Sheik's Help Curb Violence in Iraq's West; Others See Peril in Tribal Confederation', *Washington Post*, January 27, 2007, p. A13.

<sup>92</sup> Smith and MacFarland, 'Anbar Awakens', p. 43.

<sup>93</sup> *Ibid.*, p. 44; Rowan Scarborough, 'Sunnis in Anbar Cooperate With Security Effort', *Washington Times*, January 30, 2007, p. A5.

While MacFarland refused Sattar's offer to deal directly with nationalist insurgent groups like the 1920s Revolutionary Brigade, he indicated a willingness to 'live and let live.' The 1920s Revolutionary Brigade was a prominent Sunni-nationalist insurgent group, made up largely of former Baathist military officers.<sup>94</sup> MacFarland rationalized his stance as follows: 'My view was that every saint had a past and every sinner has a future.'<sup>95</sup> The Sunni nationalist insurgents went after AQI in the fall of 2006, with Fridays being a preferred day for operations, since AQI cells were typically in local mosques for prayers on Fridays.<sup>96</sup> On November 25, AQI responded with a coordinated attack on the Albu Soda tribe to the east of Ramadi that had decided to join the awakening group. 1/1 quickly responded with close air support and by the next day had moved elements of the 1<sup>st</sup> Battalion, 9<sup>th</sup> Infantry Regiment into the area to help defend the tribe's area.<sup>97</sup> The 1-9 commanding officer, Lieutenant Colonel Chuck Ferry, quickly helped augment security for the Albu Soda after the attack. The successful response to the AQI attack provided additional momentum to 1/1's efforts to build local relationships. By the end of 2006, the local engagement initiative had significantly increased local support for the coalition. Support provided by the tribal leadership for local police proved extremely successful in improving security on the outskirts of the city. As indicated in Figure 4-7a and 4-7b, tribal cooperation expanded dramatically over the six month period following 1/1's arrival.

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<sup>94</sup> For background on this group see Lydia Khalil, 'Leader of 1920s Revolutionary Brigades Killed by Al Qaeda', *Terrorism Focus* 4, No. 9 (April 2007); Bill Roggio, '1920s Revolution Brigade Turns on al Qaeda in Diyala', *Long War Journal*, July 12, 2007. Both pieces report on the split between the 1920s Revolution Brigade and Al Qaeda, as well as fissures within the group itself, which led to the creation of Iraqi Hamas in March 2007.

<sup>95</sup> Author MacFarland interview.

<sup>96</sup> Ibid.

<sup>97</sup> Details in Smith and MacFarland, 'Anbar Awakens', 49-50; Also see Bill Roggio, 'Anbar: The Abu Soda Tribe. vs. al Qaeda', November 26, 2006, *The Long War Journal* at [http://www.longwarjournal.org/archives/2006/11/anbar\\_the\\_abu\\_soda\\_t.php](http://www.longwarjournal.org/archives/2006/11/anbar_the_abu_soda_t.php), accessed November 5, 2007.

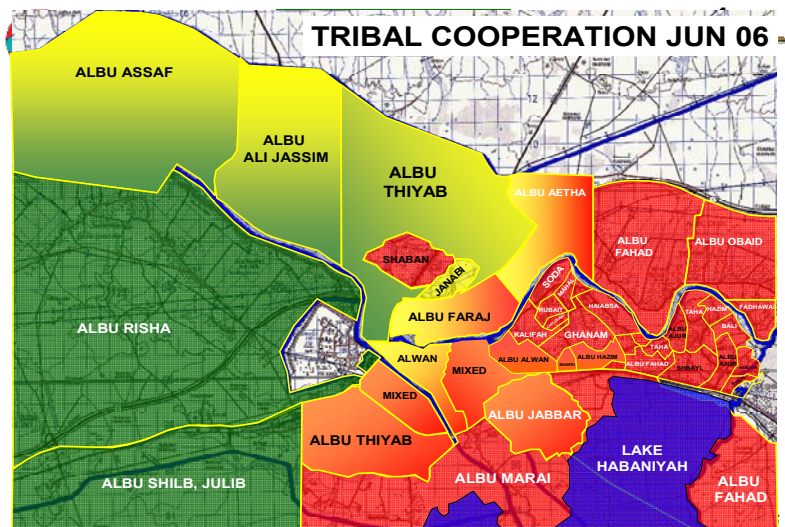


Figure 4-7a

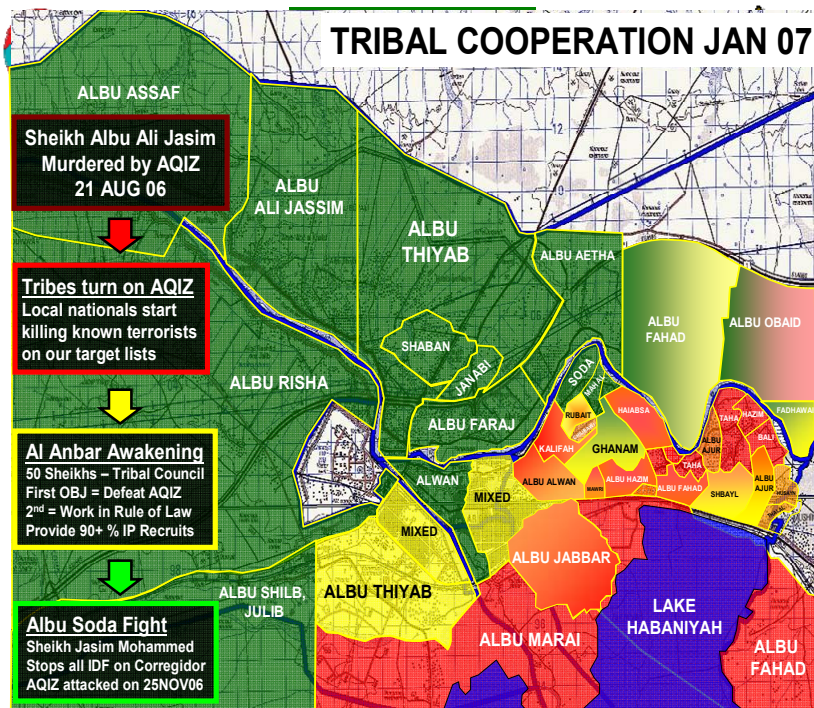


Figure 4-7b

Key to Figures 4-7a, b: Green areas represent tribal support; yellow partial support, and red non-supportive.

Source: PowerPoint Presentation titled 'Ready First Combat Team Orientation Briefing, March 3, 2007'

For the purposes of this analysis, the experiences of 1<sup>st</sup> Battalion, 37<sup>th</sup> Armored Regiment (1-37) and the 1<sup>st</sup> Battalion, 6<sup>th</sup> Marine Regiment (1-6) will highlight the process of tactical adaptation and innovation during the battle. These units were stationed in contiguous sectors of Ramadi: 1-37 in the south central section and 1-6 at the very center of the city. Figure 4-8 below illustrates shows the deployment of 1/1 in and around Ramadi from June 2006 through March 2007. The two units highlighted in this chapter, 1-37 and 1-6, operated in the epicenter of the fight in central Ramadi.

### **1/37 in South Central Ramadi**

The aggressive local engagement initiatives and police recruiting efforts proceeded simultaneously with sustained conventional military operations in the city that began in July 2006. The fight in Ramadi was extremely kinetic, particularly in its initial stages. Of note, like 2/28, 1/1 deployed into Ramadi as an armored regiment with equipment (M1A1 tanks and Bradley Fighting Vehicles) not traditionally thought of as relevant to successful COIN operations. The 1-37, however, found that its armored vehicles extremely useful in its battle with AQI in Ramadi. When the unit made contact with insurgents, it used its Bradley vehicles to maneuver troops with precise, direct fire support that could quickly finish insurgent forces in fixed locations. The vehicles also proved instrumental in securing the lines of communication and resupply between the COPs established over the course of the campaign. As noted by the 1-37 commanding officer, Lieutenant Colonel V.J. Tedesco: ‘A tank cannon or a Bradley TOW missile are very precise weapons in an urban fight. My tanks could kill AQI in a specific room and leave civilians in another room the small house shaken but



unhurt. In short, tanks and Bradleys gave us an advantage in the direct fire fight within the city that was a critical enabler to all our operations, from installing COPs to census patrols.’<sup>98</sup>

Only two weeks after arriving in Ramadi, Task Force 1<sup>st</sup> Battalion, 37<sup>th</sup> Armored Regiment (TF 1-37) had started what would be a systematic construction of COPs as it first isolated its sector by cutting off insurgent ingress and egress routes before pushing its way into its sector of south central Ramadi.<sup>99</sup> The unit had started developing what would become an expertise in COP construction when it rebuilt COP Remagen in late May 2006 after it had been destroyed by a VBIED. Lessons from this experience got applied early in the campaign with the construction of the two initial COPS – Iron and Spear and then further improved upon during the campaign.<sup>100</sup> The 1-37 unit quickly established COPs Iron, Spear and Falcon. Tedesco, commented that this part of the city previously had been ‘largely off-limits to coalition forces.’<sup>101</sup> The insurgents responded to establishment of the COPs with platoon-sized attacks on the outposts that 1-37 repulsed with heavy losses for the insurgents that crippled their ability to launch future large-scale assaults. The 1-37 campaign gradually pushed the insurgents to the western parts and northern parts of the city.

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<sup>98</sup> Author interview with Colonel V.J. Tedesco June 8, 2009.

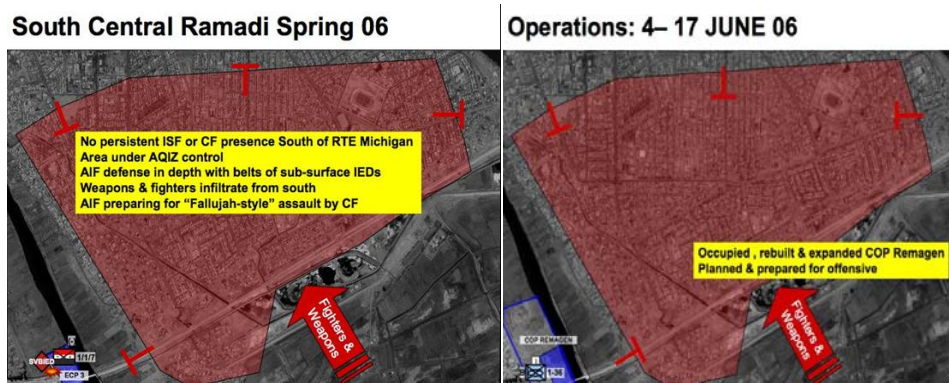
<sup>99</sup> Dexter Filkins, ‘U.S. and Iraq Retake Ramadi One Neighborhood at a Time’, *New York Times*, June 27, 2006; Monte Morin, ‘Taking Up Residence in Insurgent Havens’, *Stars and Stripes*, August 13, 2006; Monte Morin, ‘Unexpected Neighbors Bring Hope in Ramadi’, *Stars and Stripes*, August 24, 2006; Julian Barnes, ‘A Suspect Iraqi: Do You Fire?’ *Los Angeles Times*, August 15, 2006; Monte Morin, ‘Ramadi Checkpoints Allowing U.S. Troops to Isolate the Enemy’, *Stars and Stripes*, August 29, 2006.

<sup>100</sup> Author interviews with Tedesco.

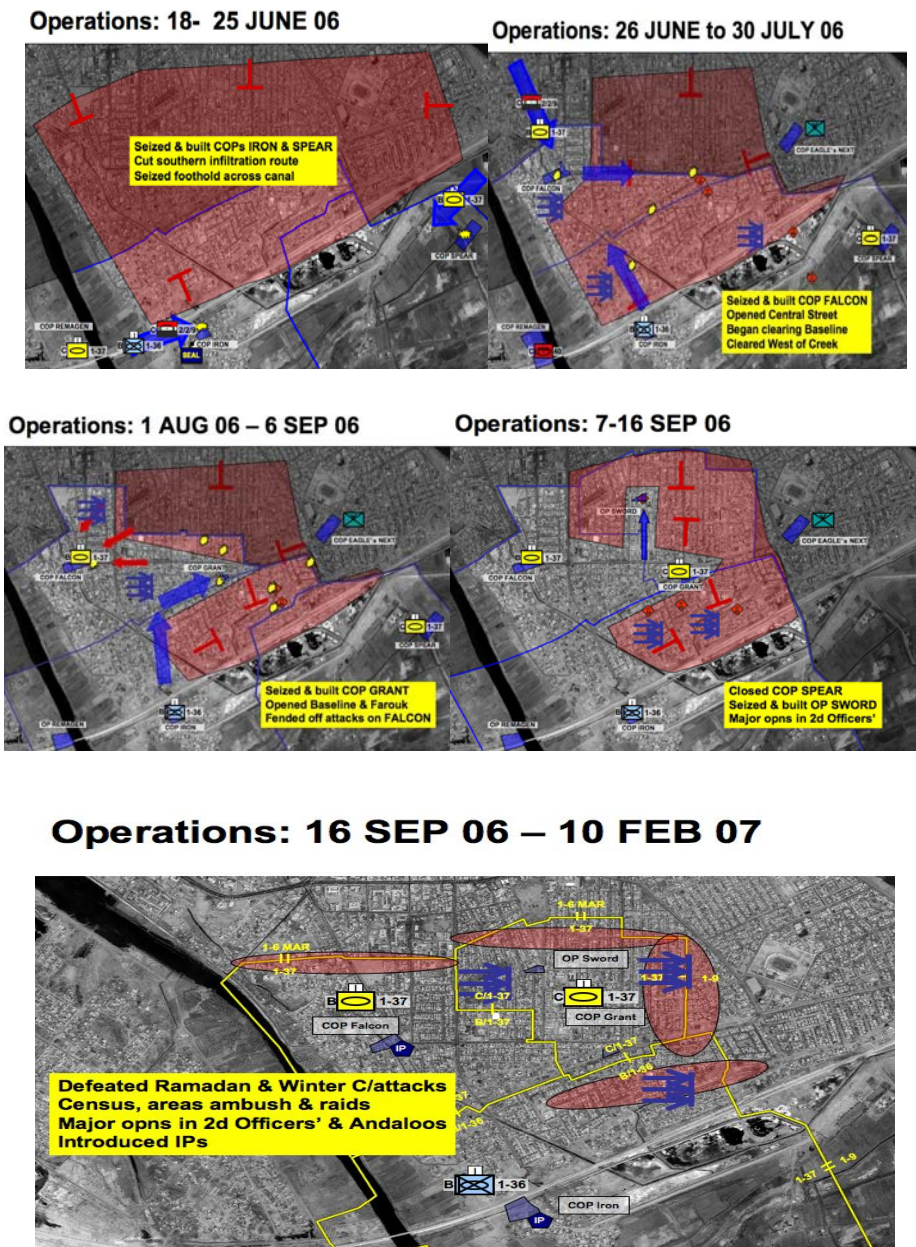
<sup>101</sup> As quoted in Michaels, ‘An Army Colonel’s Gamble Pays Off’.



Tedesco established three main priorities for the unit. First, he wanted to seize the physical terrain in order to gain access to the population and disrupt insurgent operations. Establishing the combat outposts would provide 1/37 with the ability to establish a constant presence through patrols in the contested neighborhoods. In short, building COPs would provide the unit with the means to begin seizing the physical terrain from the insurgents. The battalion would also need to seize and control the lines of communications to sustain the outposts and enable communications between them. His logisticians would need to get access to the COPS to keep them resupplied. Second, he planned to expand his unit's physical control over the terrain through clearing operations and aggressive area ambushes of insurgents. The control over the terrain supported through census operations that would move through each block, building the unit's database that detailed who was living in the neighborhoods and what cars they were driving. Third, Tedesco sought to build capacities in the Iraqi Security Forces so it could ultimately finish the fight against the insurgents.<sup>102</sup> Tedesco's priorities reflected the belief that the population of the city represented the critical terrain for the battalion's operations. He drew not on established doctrine to structure his operations, but instead developed his own plan on of how the unit could



<sup>102</sup> TF 1/37 'Bandits' Coin Operations in Ramadi PowerPoint Brief.



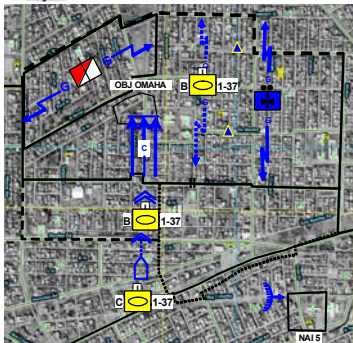
**Figure 4-8**

*Source: Graphics provided by Colonel V.J. Tedesco III*

best apply its kinetically-oriented capabilities and training into the COIN environment in Ramadi in ways that were consistent with MacFarland’s plan. TF-1-37’s systematic campaign that steadily expanded the unit’s control over its sector in south central Ramadi is reflected in Figure 4-8 above.<sup>103</sup>

<sup>103</sup> Graphics are adapted from PowerPoint briefing titled Task Force 1st Battalion 37th Armor in OIF, 05-07, Undated.

As shown in Figure 4-8, 1-37 executed its campaign from June 2006 through February 2007, steadily and inexorably expanding its area of control throughout south central Ramadi. The unit's plan saw each sector bitten off in successive chunks through the establishment of COPs from July through December, starting with the establishment of COPs Iron, Spear and Falcon in June. The 1/37 plan reflected the island-hopping approach sought by MacFarland. Each of the COPs provided bases from which to start patrols and the continuous presence as envisioned by MacFarland's campaign to wrest the neighborhoods from insurgent control.<sup>104</sup> During the battles surrounding the construction of COP Grant in late August and early September 2006, 1-37 mounted Operation Vicksburg to establish the COPs. MacFarland commented that 'Vicksburg also cut the Confederacy in half, and that's what we're doing right now is cutting the enemy's safe haven in half.'<sup>105</sup> The COPs represented instrumental tools that enabled 1/37 to initially seize the physical terrain from the insurgents.



**Decisive Point:** when barriers and fighting positions at the COP are complete enough to defeat a complex AIF attack.

**Key Tasks:**

- Seize the buildings that will comprise the COP
- Secure the area around the COP and the route to it IOT prevent AIF from disrupting construction. Maintain that security until the OP is capable of defeating a complex AIF attack without reinforcement.
- Rapidly move construction and barrier materials to the COP using multiple secure routes.
- Quickly emplace barriers and install life support required to sustain a PLT (+)

**Endstate:** TF has established a defensible COP with a secure

### Seize : COP Planning HPTs

- Reconnaissance & site selection
- Engineer estimate
- Transportation requirement estimate
- Prioritization of engineer effort
- Transportation & security plan
- Construction/transportation timeline
- Supervision of loading and download
- Construction
- Layered security & surveillance

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<sup>104</sup> Fighting around COP Falcon in early August 2006 is detailed in Monte Morin, '1st AD Units Hit Insurgents Hard In Largest Battle of New Campaign', *Stars and Stripes*, August 3, 2006, <http://www.stripes.com/article.asp?section=104&article=38138&archive=true>, accessed September 20, 2007.

<sup>105</sup> As quoted in Monte Morin, 'Unexpected Neighbors Bring Hope in Ramadi', *Stars and Stripes*, August 24, 2006.



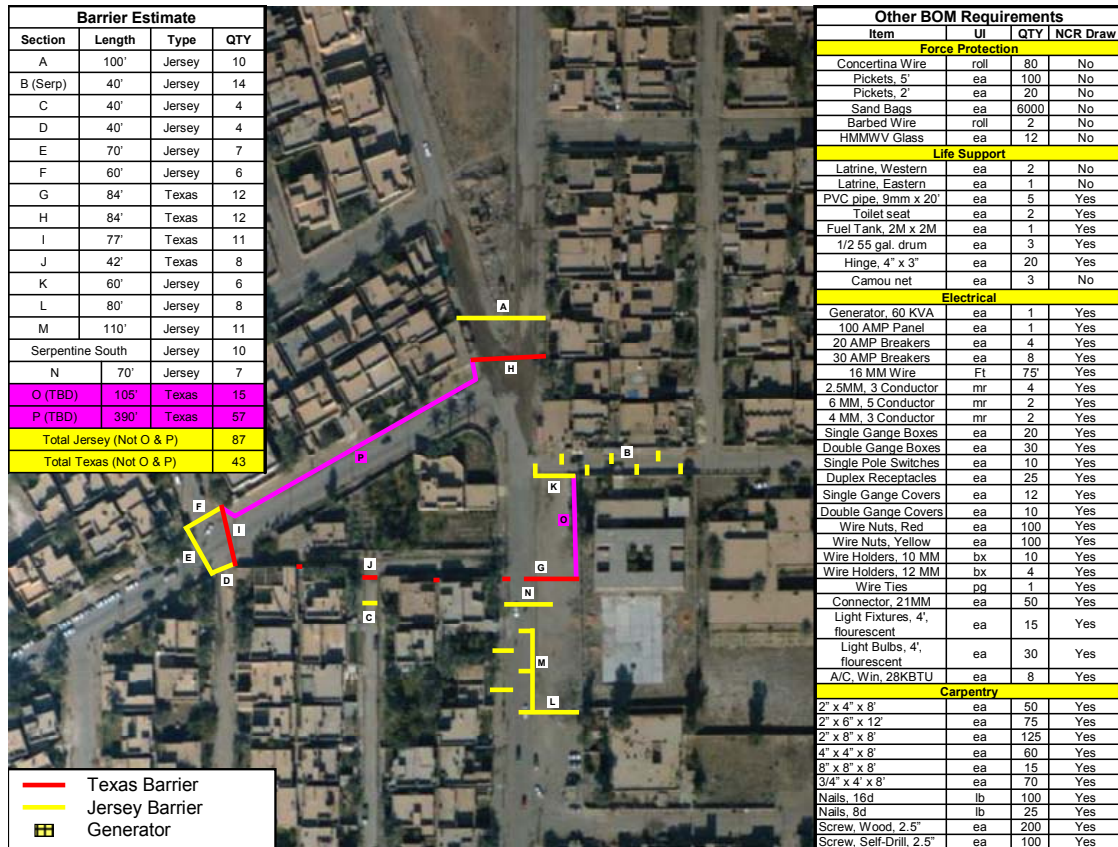


Figure 4-9

Source: PowerPoint Presentation titled "TF 1-37 COIN Operations in Ramadi" undated.

Seizing the physical terrain became the means for 1-37 to address the critical component of the battle – securing the population of each neighborhood on a block-by-block basis. Over the course of the nine-month campaign, 1-37 built six COPs and ten long-duration observation posts and secured the streets connecting these sites.<sup>106</sup>

The unit conducted an estimated 3,200 combat patrols and mounted 275 company-level operations, killing an estimated 480 insurgents.<sup>107</sup>

<sup>106</sup> A photo essay on COP construction by the 40th Engineer Battalion in Ramadi is detailed by Monte Morin, 'DIY Base Construction in Ramadi', *Stars and Stripes*, August 21, 2006, <http://www.stripes.com/article.asp?section=104&article=38545&archive=true>, accessed September 27, 2007.

<sup>107</sup> Ibid.

Over the course of its nine months in Ramadi, the unit continued to refine and develop its TTPs on COP construction, building complex procedures that coherently synchronized all the necessary tasks throughout the battalion. By the end of its deployment, 1-37 could construct a COP in less than 24 hours. The procedures developed by 1-37 and other units in 1/1 to build COPs were sent by the brigade to General Petraeus after he arrived in the spring of 2007. The procedures and materials used by 1/1 later became the basis for the ‘COP in the Box’ routines that got distributed throughout U.S. units in Iraq.<sup>108</sup> The so-called ‘COP Package’ consisted of 100 cement barriers, 100 sheets of plywood, 200 two-by-four beams, 40 four-by-four beams, eight air conditioners, 100 strands of concertina wire, a generator, wiring, florescent lights, and sand bags. Figure 4-9 above illustrates the precise planning and SOP-driven routines developed by the battalion over the course of its deployment to do COP construction.

The planning process involved virtually all members of the task force in developing criteria for site selection, ensuring that the site design could defeat a complex insurgent attack using IEDs, establishing a transportation plan to move the materials to the site, supervising the offloading of the materials, and the actual site construction. Figure 4-10 below shows pictures of completed COPs as well as the underway construction process.

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<sup>108</sup> Author interview with MacFarland.



**Figure 4-10**

Figure 4-10 presents three pictures showing (clockwise from top-left): COP Grant in November 2006; the construction of OP Sword in September; and the approach to COP Falcon in the same period.

*Source: Colonel V. J. Tedesco III*

While COP construction proved a critical component in 1-37's COIN campaign, a host of new procedures developed to help the unit establish and maintain control over its ever-widening swath of territory in the city. At the same time the COPs were being built, the unit concurrently developed and initiated a census plan and operations to improve their situational awareness of the neighborhoods into which they were

moving. Data derived from the census operations became critical to shaping many of the unit's daily operations as indicated in Figure 4-11.<sup>109</sup>

Tedesco's staff developed the 'census loop' in Figure 4-11 to demonstrate the linkages between the census activities and the unit's patrol activities through insurgent-controlled neighborhoods. Data gathered in the census would support patrolling activities, which in turn helped develop local human intelligence networks. The census patrols helped 1/37 peel back the complex layers of the social environment in their neighborhoods throughout south-central Ramadi. The idea to compile a census started with one of the unit's company commanders, Captain Greg Pavlichko.<sup>110</sup> Pavlichko's Company C deployed to the area of Ramadi around COP Spear at the outset of the campaign (see Figure 4-11). After standing up COP Spear, Pavlichko sent patrols out to knock on doors in the neighborhoods, taking pictures of the inhabitants and then linking the pictures to PowerPoint files with overhead pictures of the houses he had entered. In so doing, his unit slowly built an ad hoc database of the neighborhood near COP Spear. The utility of the data-gathering activity became apparent after an IED attack in Ramadi killed an Abrams tank gunner, Sgt. Mark R. Vecchione, on July 18. In trying to track down the IED cell that executed the attack, the battalion intelligence section had a source that provided names of cell members. Pavlichko's database contained not only the pictures of the cell members by name, but also identified the exact location of their residences.

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<sup>109</sup> Author interview with Colonel Tedesco.

<sup>110</sup> As recalled by COL Tedesco in author correspondence and confirmed by Captain Greg Pavlichko, USA, commanding officer of Company C, 1/37 in author interview May 13, 2008. Many units in Ramadi developed census patrols, building databases of the neighborhoods. See, for example, Monte Morin, 'Surveying The Situation in Volatile Ramadi', *Stars and Stripes*, August 16, 2006, <http://www.stripes.com/article.asp?section=104&article=38436&archive=true>, accessed September 15, 2007. Morin's article details the conduct of census patrols of 2nd Battalion, 6th Infantry Regiment, in Western Ramadi.

Within 24 hours of the meeting, 1-37 mounted an operation and detained eleven of the twelve members of the attack cell with a minimum use of force.<sup>111</sup>

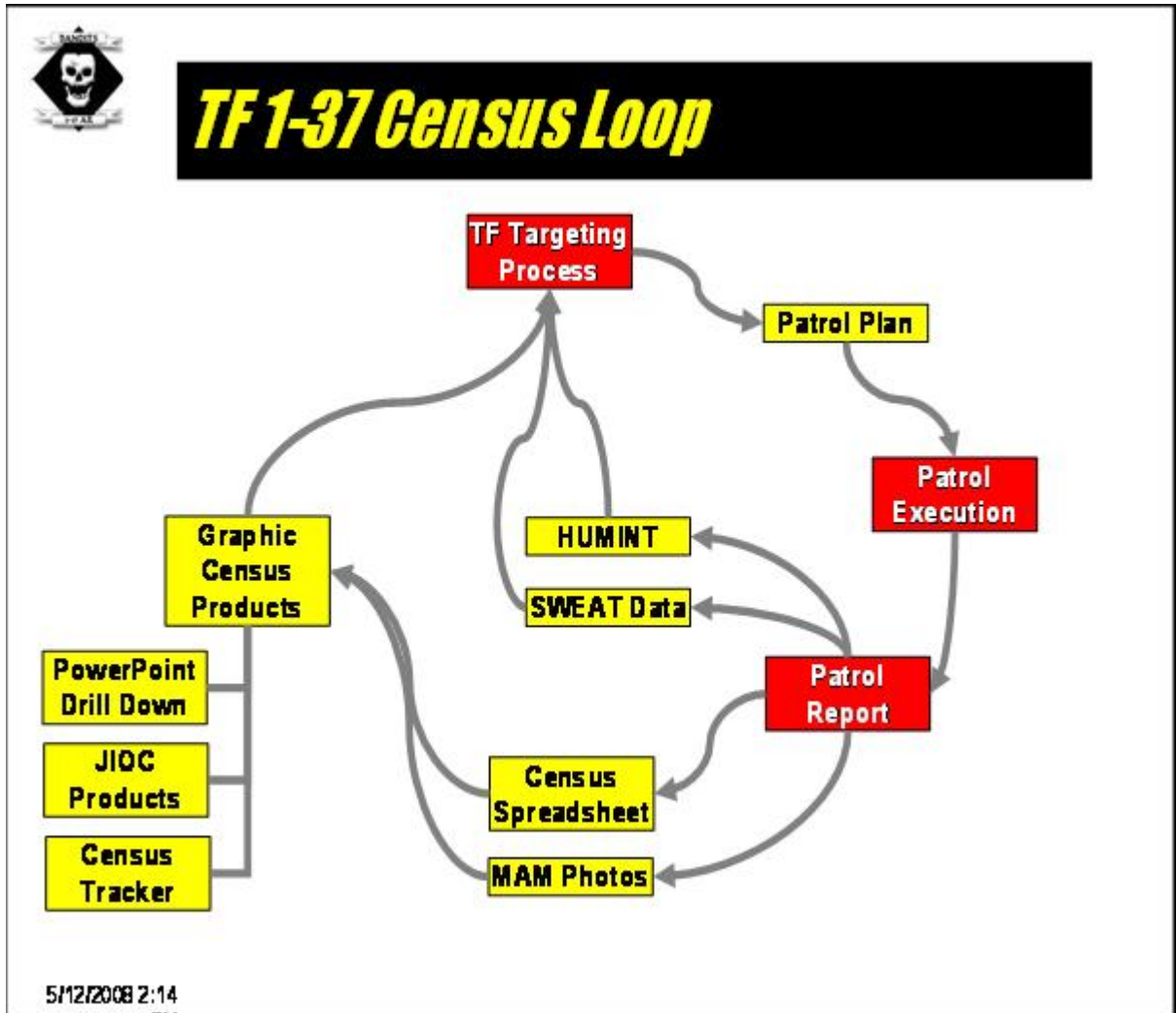
As the value of the initiative became obvious, Tedesco and his staff quickly spread the procedures for gathering census data throughout the battalion.<sup>112</sup> As a first step, the unit refined the Ramadi's street and house numbering system, which it distributed to all unit members to give everyone a common baseline understanding of the area. The unit created questionnaires to collect information, identified a Microsoft database to store and manage the information, and built new TTPs for the patrols that would conduct the census. The 'census patrols,' as they were called, consisted of fifteen to thirty soldiers. Each patrol tried to cover eight to ten houses per patrol, spending between ten and thirty minutes in each home.

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<sup>111</sup> Author interview with Captain Pavlichko.

<sup>112</sup> Ibid.





**Figure 4-11**

*Source: PowerPoint Presentation titled "TF 1-37 COIN Operations in Ramadi" undated*

The 1-37 staff developed a standardized, bilingual census questionnaire to be filled out either by the patrol leader's interpreter or the local residents. A completed questionnaire provided the patrol sector, building number, date visited, full name (including tribal affiliation), date of birth, occupation and location of work for each military age male in the household. It also listed the number of women and children living in the house along with the religion of the household, whether the house was owned, rented or if the residents were squatters. The form included the serial number for the household AK-47, and whether or not the house had power and water

available. The census questionnaire also collected the license plate number and description of any vehicle owned by the family. Upon completion, the census patrol photographed all military age males in the household with the subjects holding up their identification card and a placard with their name and house number.<sup>113</sup> The format of the census worksheets is shown below in Figure 4-12.

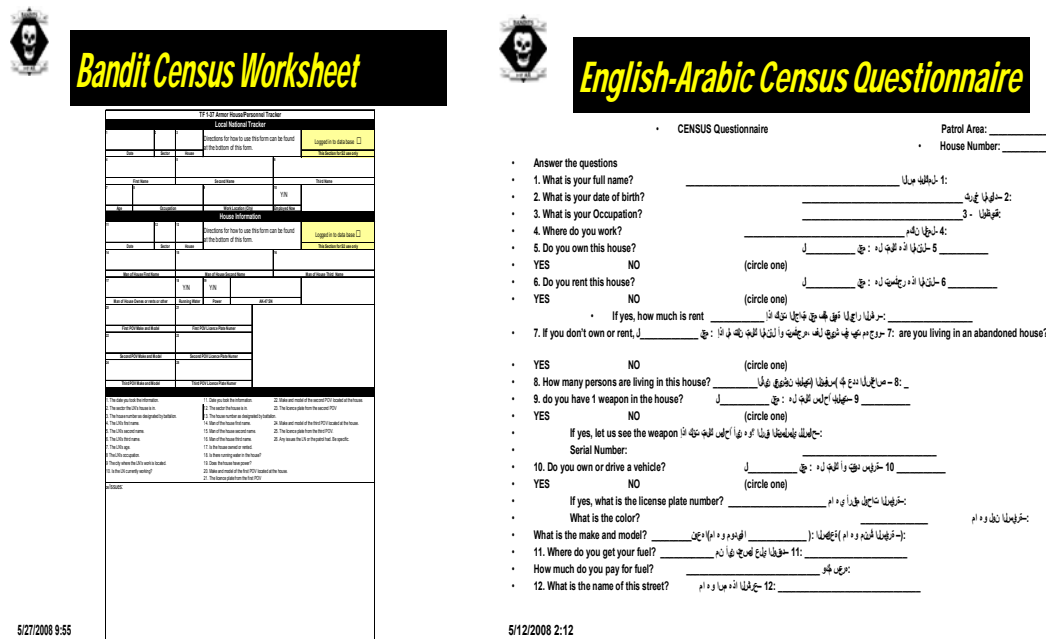


Figure 4-12: TF-1/37's Census Forms.

Source: PowerPoint Presentation titled "TF 1-37 COIN Operations in Ramadi" undated

Tedesco and his staff realized that the census patrols represented far more than typical reconnaissance operations, which conventionally-oriented Army training and doctrine viewed as tool to prepare the battlefield for larger kinetic operations. In Ramadi, 1-37 reversed this order, using larger scale cordon and searches as shaping operations for

<sup>113</sup> Information on TF 1/37's census activities was derived from a variety of different sources: (1) Author interview with COL Tedesco, op. cit.; (2) PowerPoint briefing titled *TF 1/37 COIN Operations in Ramadi*; (3) unpublished paper by Captain Dave Black, Captain Jon-Paul Hart and Lieutenant Colonel V.J. Tedesco III, 'Sun-Tzu and BeanieBabies: Census Operations in Urban Counterinsurgency.' Paper cited with permission of Colonel Tedesco; (4) author interview with Captain Greg Pavlichko, Commanding Officer, C Company, 1-37, May 13, 2008.

the census-reconnaissance patrols that would follow later.<sup>114</sup> The SOP for the unit typically focused on: (1) Planning and establishing the COP; (2) Ensuring route security so each outpost could be kept resupplied; (3) Clearing operations after the COP had been stood up to clear IEDs and find weapons caches; and (4) Census patrols to follow after the clearing operations to consolidate the position and gradually work its way into the human terrain of the area – the real target of MacFarland’s campaign.

The unit came to grasp that the census data and information potentially could contribute more to the long-term success of its operations than kinetically-oriented cordon and search operations. Eventually, TF 1-37 developed the right balance between these tools as demanded by the environment. Like the Marines in western Anbar, the census patrols in Ramadi increased the face-to-face contact between the U.S. forces, the ISF, and local communities and began to generate organically-driven intelligence on insurgent cells and weapons caches. The census also provided a structured way for local residents to file claims for any damage that might have occurred during the cordon operations. Patrol leaders provided a claims card to the family and instructed them to deliver the claim to one of the task force’s three Civil-Military Operations Centers for processing.<sup>115</sup>

As the patrols started collecting data, two final tools were developed. Tedesco’s staff developed a Microsoft Excel spreadsheet to compile the questionnaire data; one worksheet listed information about the house and a second worksheet compiled

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<sup>114</sup> TF 1/37 cordon and search operations are chronicled in Monte Morin’s photo essay, ‘Photo Gallery: Cordon and Search Operation in Ramadi’, *Stars and Stripes*, August 3, 2006, <http://www.stripes.com/article.asp?section=104&article=38139&archive=true>, accessed November 1, 2007.

<sup>115</sup> Ibid.

information specific to each military age male. The database refined Pavlichko's initial product built with Microsoft PowerPoint. A hyper-linked presentation allowed one to click on a patrol sector, then a building to show the pictures and names of all the military age males, vehicles or any additional pictures of importance (a suspicious hole in the wall, the observation from the rooftop, etc.). Each company team was augmented by an intelligence analyst to help properly compile the census products. Each company then briefed progress in filling out their census databases at the weekly battalion-level targeting meeting to ensure compliance and completion.<sup>116</sup>

In conjunction with the census patrols, 1-37 developed a 'small acts of kindness' initiative. Realizing the frightening effect a nocturnal visit by fifteen heavily-armed and armored foreign soldiers had on the residents of a home, each patrol carried an assortment of small toys, candy, and several two-pound packages of sugar. Patrol leaders discovered that these gifts helped reduce the tension of census visits and helped generate exchanges that increased their understanding of local dynamics. Patrols found that the bags of sugar – a scarce commodity in Ramadi – proved particularly effective in generating positive feedback from the home's residents.<sup>117</sup>

From the outset of 1-37's campaign in central Ramadi, Tedesco and his staff identified the population of their sector as the decisive terrain – as opposed to any particular geographical feature. The census patrols provided the battalion a critical tool to perform area reconnaissance of the human terrain. While the patrols started out as instruments to collect intelligence data to support counter-insurgent operations, they eventually became vehicles to also conduct civil-military operations, information

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<sup>116</sup> Ibid.

<sup>117</sup> Ibid.

operations and the development of human intelligence networks. In short, the census patrols evolved into the task force's main instrument of fighting the counterinsurgency. By the end of its deployment, 1-37 had censused 80 percent of the buildings in south central Ramadi (as indicated in Figure 4-13 below).



**Figure 4-13**

Figure 4-13 shows the areas of TF 1/37; the right hand side is an example of the block/house numbering system used in 1/37's database.

*Source: PowerPoint Presentation titled "TF 1/37 Operational Overview" undated.*

### **Summary of 1/37 Innovation**

It is worth repeating that 1/37 deployed into Ramadi as an armored battalion – a legacy unit organized and equipped for conventionally-oriented fire and maneuver missions. The unit demonstrated great adaptive flexibility and built what can only be described as sophisticated and systems-oriented COIN capacities in executing its part of MacFarland's campaign to retake Ramadi. While the Army is particularly noted for a rigid command hierarchy and a campaign-style approach to warfare, this unit clearly demonstrated its capacity for learning and searched for optimal solutions, accepted disparate sources of information, and constantly sought to build its understanding of

the operational environment. As demonstrated in the building of the census program and supporting series of COIN-related procedures that followed, initiative bubbled its way to the top of the organization and then back down again in the form of routinized procedures. This organizational characteristic allowed 1-37 to develop capacities and organizational structures that produced outputs that met the requirements of the complex environment.

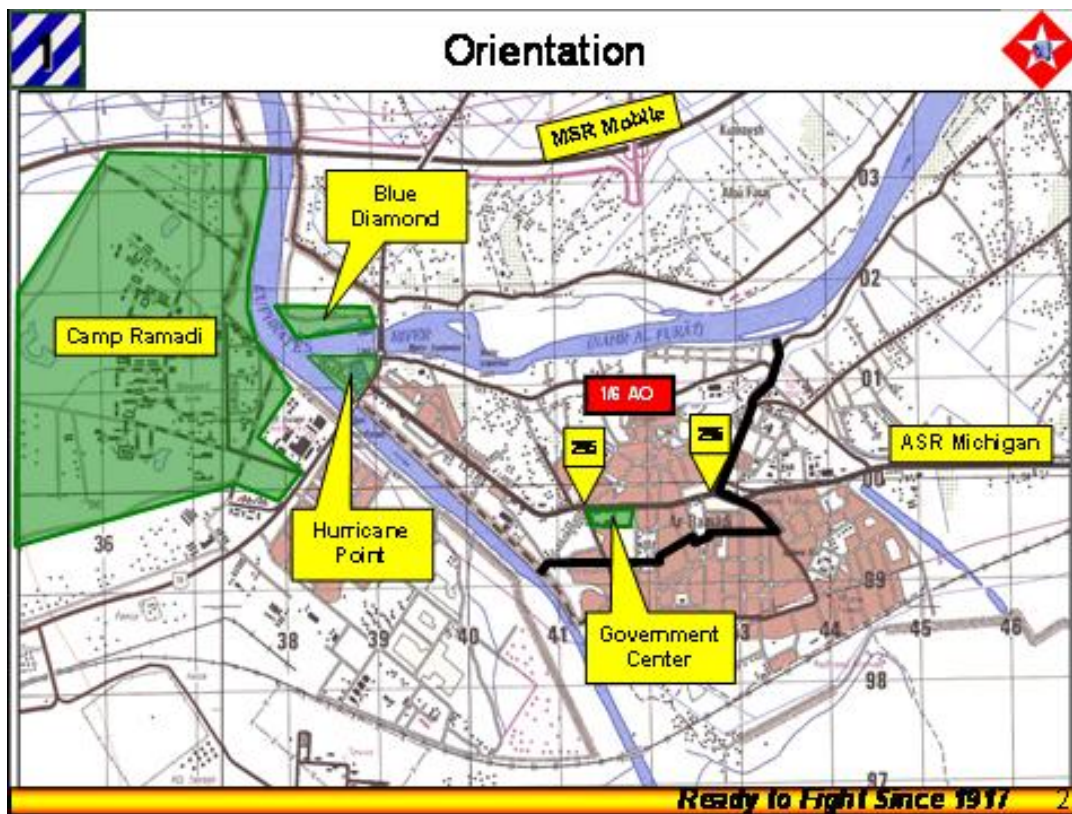
As was the case in the other units discussed in this dissertation, the unit realized the central role played by intelligence in building a successful COIN campaign. Development of census databases proved instrumental in prosecuting counterinsurgency operations against high value targets. The unit clearly grasped that the population represented the critical terrain in the campaign, which required the discriminate use of force. The use of intelligence in a tactical fusion cycle that drove high-value targeting raids helped minimize collateral damage. The city was not destroyed in the process.

COP construction techniques developed into a repeatable SOP as part of execution of MacFarland's campaign plan. 1-37 developed and refined its plans for COP construction, increasing its control over the physical terrain so it could seize the critical terrain – the people.

### **1<sup>st</sup> Battalion, 6<sup>th</sup> Marines in Ramadi, September 2006-March 2007**

1<sup>st</sup> Battalion, 6<sup>th</sup> Marine Regiment arrived in Ramadi in September of 2006 and folded in under 1/1. 1-6, commanded by Lieutenant Colonel William Journey took over

responsibility for clearing central Ramadi, the sector just to the north of 1-37's area (see Figure 4-14 below for 1-6's area of operation). 1-6 inherited the sector from 3<sup>rd</sup> Battalion, 8<sup>th</sup> Marine Regiment, commanded by Lieutenant Colonel Steven Neary, which was based in Hurricane point. Neary's battalion had established three outposts in the area of operations – the government center, another at the Iraqi veterans affairs building called observation post VA, and a third observation post known as Hawk, close to the government center.<sup>118</sup>



**Figure 4-14**

*Source: PowerPoint Presentation titled 'Task Force 1/6 'Quick Look': Where We Started, Where We Finished', undated.*

<sup>118</sup> As noted by Andrew Lubin, 'Ramadi From Caliphate to Capitalism', *Naval Institute Proceedings*, 134, April 2008, [http://www.usni.org/magazines/proceedings/story.asp?STORY\\_ID=1420](http://www.usni.org/magazines/proceedings/story.asp?STORY_ID=1420), accessed May 1, 2008.



In many ways, 1-6's overall approach as it deployed into central Ramadi reflected successful COIN campaigns of the past. Journey wanted to embed his Marines with their partnered host-nation units, rather than driving to see them periodically from military mega-bases.<sup>119</sup> The command mindset embraced the uncertainty and complexity of the environment and recognized that organizational capacities had to be tailored in ways that reflected those complexities. As noted by Marine Lieutenant Colonel Todd Desgrosseilliers, commanding officer of 3<sup>rd</sup> Marine Battalion, 2<sup>nd</sup> Marine Regiment stationed at Habbaniyah in 2006: 'The more unorthodox and unconventional we are, the more successful we're going to be.'<sup>120</sup> Journey shared this mindset. The building block of 1-6's approach would be the relationships between Marine units and their Iraqi counterparts. Journey demanded that the Marine and Iraqi units share the same comforts and hardships, all the while increasing the level of trust between them. The units subsequently built a web of mutual respect between the officers of 1-6 and the political and tribal leadership they engaged. The strategy would lean heavily on civil-military operations and information operations while aggressively building the capability of their partnered Iraqi Security Force (ISF) units. Through force of personality on the part of its commander, a belief in their leadership on the part of the officers of 1-6, and the support of their higher headquarters, the unit sidestepped several friction points and implemented its plan.<sup>121</sup>

As Journey and his staff confronted the environment in Ramadi during their pre-deployment site survey in the summer of 2006, they saw nothing that they had not

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<sup>119</sup> Mindset of the Marines in the campaign is discussed in Terry Boyd, 'For Marines in Anbar, The Key is To Patrol Often and Keep It Personal, *Stars and Stripes*, September 24, 2006, <http://www.stripes.com/article.asp?section=104&article=39339&archive=true>, accessed September 2, 2007.

<sup>120</sup> Ibid.

<sup>121</sup> 1-6 worked under RFCT 1 commanded by Colonel MacFarland.



encountered before either during their previous experience in Iraq or, in Journey's case, during his fifteen years of prior experience in places like Liberia, Haiti and Kosovo.<sup>122</sup> The unit had deployed into Fallujah in February 2005 in the aftermath of the pitched battle for the city in November 2004, and hence had extensive experience in Iraq and in building organizational SOPs to deal with the environment. Journey developed LOOs for Ramadi that were identical to the ones he had used in the spring of 2005 in Fallujah: (1) neutralize anti-Iraqi elements and criminal threats to improve security and stability; (2) train, employ, and operate in coordination with partnered Iraqi army and police; (3) conduct and support civil-military operations and information operations to develop the confidence and trust of the Iraqi people in their elected officials and the ISF. All three of these LOOs were to be conducted simultaneously.<sup>123</sup>

As battalion commander, Journey specifically sought to build an organization that could seamlessly and quickly transition between the three blocks in applying the tools at their disposal that matched the challenge of the environment.<sup>124</sup> The environment in Ramadi in the Fall of 2006 certainly reflected elements of all three blocks. As the executive officer of 1-6, Major Daniel Zappa, commented: 'It's a combination of improvised explosive devices, quick gun battles in the streets, and then handing out school supplies to the kids twenty minutes later.'<sup>125</sup> Journey took pains to emphasize the complex nature of the task facing his organization in achieving the right balance between kinetic and non-kinetic tools to match the environment. Journey emphasized that each phase of his plan to retake the sector had to have one civil-military project in

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<sup>122</sup> Author interview with Journey.

<sup>123</sup> Ibid.

<sup>124</sup> Ibid.

<sup>125</sup> As quoted in Andrew Lubin, 'With the Marines in Ramadi', *Military.com*, October 27, 2006, <http://www.military.com/forums/0,15240,117941,00.html>, accessed November 5, 2007.

process at all times, which, in turn, should be synchronized with information operations. Journey emphasized to the unit: ‘Do not forget we want to neutralize [the insurgents], we can ‘neutralize’ or at least make them less effective through kinetic and non-kinetic means... by doing those things which separate the [insurgents] from the people – we are having a neutralizing effect. CMO, IO and how our Marines treat the people and conduct themselves professionally can do more to neutralize the insurgency than any thing else we do.’<sup>126</sup> The battalion’s 120-day campaign would strive to build a complex mix of kinetic and non-kinetic effects that would be executed concurrently. There was no doctrine to guide the synchronization process, which depended above all on individual initiative supported by the command leadership.<sup>127</sup>

While preparing for the deployment at Camp Lejeune in the summer of 2006, Journey’s staff kept abreast of MacFarland’s campaign to retake Ramadi from the insurgents.<sup>128</sup> The day before the unit assumed responsibility for its sector, Journey’s staff briefed MacFarland on their plan to execute operations to carry out MacFarland’s commander’s intent to retake the city. Journey’s staff developed a time-benchmarked plan by week to disperse the battalion throughout their sector in jointly manned outposts with Iraqi police and military units. The environment throughout their sector was extremely violent, with a mix of insurgent activity that consisted or sniper attacks, coordinated insurgent unit attacks, suicide vehicle-borne improvised explosive devices (VBIED), IED attacks along the main supply routes, and indirect-fire mortar attacks. The battalion’s section of Ramadi was alive with insurgents that

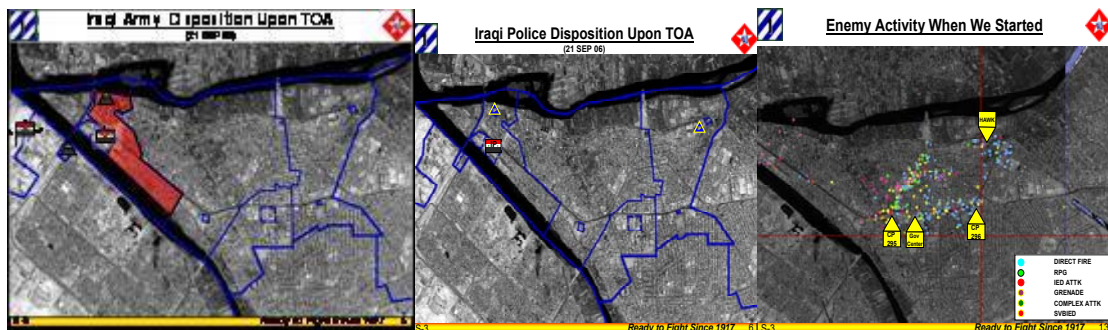
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<sup>126</sup> Ibid.

<sup>127</sup> Author interview with 3/6 Executive Officer, Major Dan Zappa, June 18, 2008.

<sup>128</sup> PowerPoint Brief titled ‘Commander’s Intent: TF 1/6 Making a Difference’, undated. This one-page document was widely disseminated throughout 1/6.

had driven off all but a few of the Iraqi police. The Iraqi Army remained a non-factor and rarely ventured outside its base in western Ramadi. As indicated in Figure 4-15 below, at the time of 1-6's beginning of operations, there were only two police stations located on the periphery of the sector, and the few police that remained did little active patrolling. As recalled by Journey, there was virtually no police presence in the central section of Ramadi, except for a contingent of provincial police stationed at the government center to provide security for Anbar Governor Mamoun.



**Figure 4-15**

Iraqi Police and Army Dispositions and Enemy Activity when 1-6 Arrived in Ramadi

*Source: PowerPoint Presentation titled 'Task Force 1/6 'Quick Look': Where We Started, Where We Finished', undated.*

Journey's plan to retake his sector of Ramadi consisted of four one-month blocks. Block 1 consisted of the four-week period from September 23 through October 20, with each successive block identifying tasks by the week to complete what Journey characterized as the 'Complete Gated Community' in central Ramadi.<sup>129</sup> The concept of the 'gated community' simply meant that 1-6 could construct a series of interlocking physical and human 'gates' throughout the sector that drive the

<sup>129</sup> Untitled paper provided to the author that conveyed the 1-6 plan throughout the unit for conducting operations starting on 23 September 2006 through January 2007.

insurgents from their havens and construct an environment to ensure that they couldn't easily re-establish themselves in the same kind of strength that was present in the Fall of 2006. The gated community plan layered together several different steps: (1) vehicle checkpoints and barriers to channel traffic through certain areas; (2) the construction of jointly-manned security stations that would push a 24-hour, 7-day patrol presence in their respective sector; (3) census patrols throughout the neighborhoods to build situational awareness of the neighborhood inhabitants; and (4) the concurrent application of civil-military operations and information operations throughout the sector.<sup>130</sup> The plan was to conduct a kind of 'island hopping' campaign through the sector via the security stations.<sup>131</sup>

The campaign began in late September 2006 when 1-6 seized what became known as intersection 295 just in front of the government center in central Ramadi as indicated in Figure 4-16. The government center, which had been a sand-bagged, shell-pocked outpost up until that point, had been subjected to frequent insurgent attacks throughout the year.<sup>132</sup> The facility housed the offices of Anbar governor Maamoun Sami Rashid al-Awani and a handful of employees who lived inside the building during the week. Insurgents had made 31 attempts on al-Awani's life in the months before 1-6's arrival.<sup>133</sup> After seizing the intersection, the battalion spread out from the government center, providing security so rubble could be cleared from around the center that had provided cover for snipers (see Figure 4-16 below). The rubble

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<sup>130</sup> Author interviews with Zappa and Journey.

<sup>131</sup> Author interview with Zappa.

<sup>132</sup> For reporting on the battles surrounding the government center, see Dexter Filkins, 'In Ramadi, Fetid Quarters and Unrelenting Battles', *New York Times*, July 6, 2006; Julian Barnes, 'A Summer of Discontent in Iraq', *Los Angeles Times*, August 12, 2006; 'US Troops Fend Off Coordinated Attacks on Sites in Ramadi', *Associated Press*, May 17, 2006; Fumento, 'Return to Ramadi'; Neil Shea, 'Ramadi Nights', *Virginia Quarterly Review*, Winter 2008, pp. 6-29, <http://www.vqronline.org/articles/2008/winter/shear-ramadi-nights/>, accessed January 1, 2009.

<sup>133</sup> Jim Michaels, 'In Ramadi, The Force Isn't Huge But the Task Is', *USA Today*, August 28, 2006.

removal by the Army's 16<sup>th</sup> Engineer Battalion and the Marine's 2<sup>nd</sup> Combat Engineer Battalion would be the start of a pattern in 1-6's sector in which the unit sought to drive out the insurgents and, concurrently, clean up the environment using Iraqi laborers employed through CMO contracts.<sup>134</sup>

After stabilizing the area around the government center, Journey sought to gradually expand the battalion's control over the sector by creating a series of what he called 'security stations' jointly manned by ISF (police and army) and Marines. The security stations would provide the basis for the battalion to wrest control over the physical terrain from the insurgents so the critical terrain of the fight could be addressed – the people.<sup>135</sup> The security stations would be used to re-establish government control and restore some semblance of normalcy to the neighborhoods. While Colonel MacFarland successfully rebuilt the police force in outlying neighborhoods of Ramadi in August and September, 1-6 had to recruit and build a local police force from scratch in its sector. The battalion established its first security station in October, a three-story building called 17<sup>th</sup> St. Station, directly north of the government center in a neighborhood known as Jumaiyah. The pitched battle to establish this station lasted nearly a week. As the battle for the 17<sup>th</sup> station concluded, Anbar governor al Awani provided Journey with a list of 125 volunteers for the police drawn from his own Abu Alwani tribe, which lived in 1-6's sector.<sup>136</sup> The volunteers represented the first of the tribal 'flips' in 1-6's area as a result of negotiations with Anbar's governor and Shiekh Sattar, who had thrown his allegiance to 1/1 several weeks earlier. The first volunteers – drawn from the neighborhoods – represented a victory for 1-6. The insurgents

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<sup>134</sup> Monte Morin, 'U.S. Troops Razing Ramadi Buildings to Renew Security', *Stars and Stripes*, September 2, 2006, <http://www.stripes.com/article.asp?section=104&article=38831&archive=true>, accessed November 4, 2007.

<sup>135</sup> Author interview with Journey.

<sup>136</sup> Details in Andrew Lubin, 'Ramadi from the Caliphate to Capitalism'.

immediately began a campaign of fear and intimidation against those that had volunteered for the police, mounting their own information operations and attacks against those that had volunteered for the police.<sup>137</sup>



**Figure 4-16**

*Source: PowerPoint Presentation titled 'Task Force 1/6 'Quick Look': Where We Started, Where We Finished', undated.*

Several weeks later, these police – many of whom had prior backgrounds in Saddam’s – were ready to start patrols from the Warrar station, which was initially commanded by the impressive Lieutenant Colonel Salaam al-Dalaimi, who was later assassinated by AQI. Over the next three months, 1-6 moved systematically through its sector establishing eleven security stations (see Figure 4-17 below) manned by locally-

<sup>137</sup> Author interview with Zappa.

recruited and trained Iraqi police.<sup>138</sup> By January 2007, the number of Iraqi police in Ramadi steadily increased to an estimated 4,000 deployed throughout the city.<sup>139</sup> In the spring of 2007, an influential leader in the city, Sheikh Jasim Swidawi, also threw his support behind the police recruiting efforts, which greatly increased the recruiting pool.<sup>140</sup> By February 2007, 1/1 also introduced emergency response units (ERUs) – or tribal militias – to further augment the police in Ramadi. The ERUs were considered provisional police until the members of the units went to formal police training.<sup>141</sup>

The stand up of the police force, however, represented only one component in the security LOO. The security leg of the strategy emphasized the preparation of Iraqi units to assume greater responsibility, and creating conditions for their expanded presence throughout the city. Jurney decided to co-locate his Marines with the ISF and leave the Iraqi units alongside the Marines in patrol sectors for extended periods – putting a stop to the previous practice of rotating out entire Iraqi Army companies every month for leave, only permitting platoons to rotate. Jurney also had formed a close relationship with the head of the Military Training Team, or MiTT, training the ISF unit in his area. Major Joe Jones had previously served as executive officer of 3-6 during the unit's prior deployment in Fallujah. While the MiTT team did not technically report to Jurney (it technically reported to MNF-W), the prior relationship

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<sup>138</sup> For a snapshot of life in the 17th Street Station in the spring of 2007, see Moni Basu, 'Bullets, Braves and Boiled Peanuts', *Atlanta Journal-Constitution*, April 18, 2007, [http://www.ajc.com/metro/content/shared-blogs/ajc/georgiansatwar/entries/2007/04/18/georgia\\_marines\\_bond\\_together.html](http://www.ajc.com/metro/content/shared-blogs/ajc/georgiansatwar/entries/2007/04/18/georgia_marines_bond_together.html), accessed September 15, 2007.

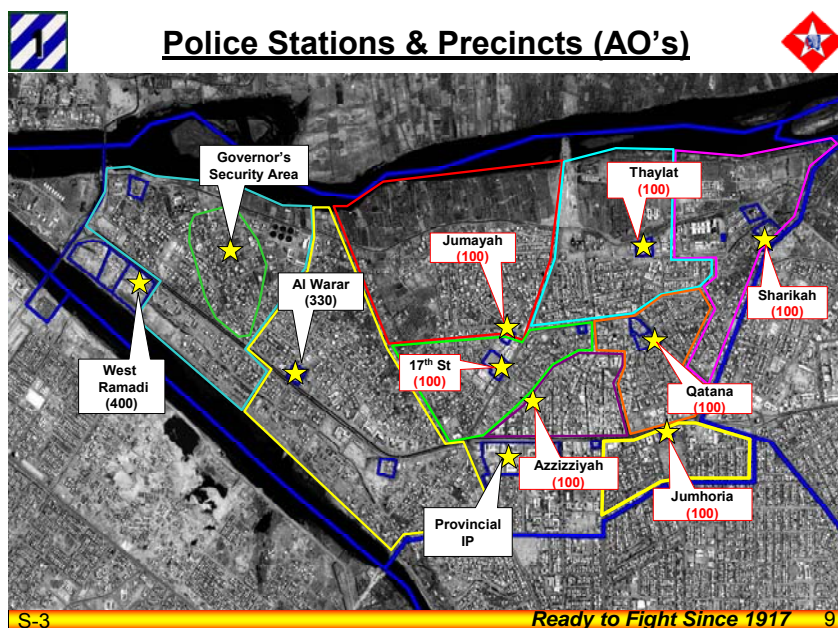
<sup>139</sup> Rick Jervis, 'Police in Iraq See Jump in Recruits', *USA Today*, January 14, 2007; Joint patrols in Ramadi's Albu Faraj neighborhood are described in Michelle Tan, 'On the Ground In Iraq: A Ride-Along with Soldiers Training Iraqi Police', *Army Times*, January 23, 2007.

<sup>140</sup> Andrew Lubin, 'The Tide Turns in Ramadi', *On Point, Military.com*, May 4, 2007, <http://www.military.com/forums/0,15240,134629,00.html>, accessed December 1, 2007.

<sup>141</sup> Pamela Hess, 'Tribal Militia Policing Ramadi', *UPI*, February 20, 2007.



proved vitally important to the integration of the ISF into 1-6's operations.<sup>142</sup> Jones and Jurney closely coordinated to reduce Iraqi Army unit turnover in the combat areas, building their core competencies and their relationships with the Marine stationed alongside.<sup>143</sup>



**Figure 4-17**

*Source: PowerPoint Presentation titled 'Task Force 1/6 'Quick Look': Where We Started, Where We Finished', undated.*

The ISF competencies became advanced enough so that 1-6 turned over independent operations in western Ramadi to 2<sup>nd</sup> Battalion, 1<sup>st</sup> Brigade, 7<sup>th</sup> Iraqi Army division on January 22, 2007.<sup>144</sup> All the security stations in 1-6's sector eventually housed Marines, Iraqi police and Iraqi Army units. As Jurney indicated in his commander's intent: 'Do not forget that we are here to get the ISF to stand on their own... we will

<sup>142</sup> Author interview with Zappa.

<sup>143</sup> Author interview with Jurney.

<sup>144</sup> Multi-National Force West Public Affairs Office, 'Transition of Authority Ceremony Marks Progress of Iraqi Battalion', January 22, 2007, Release No. 200702122-13.



not say ‘no’ to supporting the IA or IP unless there is a damn good reason for it. Anything you can do to support them is a Homerun!’<sup>145</sup>

Knowing this effort was critical, the battalion created augmentation teams of Marines taken from each company to augment police stations and substations as they were built throughout Ramadi.<sup>146</sup> This combined presence ensured the long term success of these stations. Journey and this staff took ownership of the Military and Police Training Teams (MiTTs and PiTTs) operating in their area, even though they did not work directly for the battalion. In this way he ensured that their actions were consistent with his concept of operations. The battalion made all the support provided to it by MacFarland’s 1/1 available to the security stations, including information, surveillance and reconnaissance, (or ISR), communications, intelligence. The battalion worked hard to synchronize operations out of the security stations with the other each other and with 1/1’s operations.<sup>147</sup>

When 1-6 arrived in Ramadi there was one police station in the western district. When the unit left in the summer of 2007, it had had built four police stations, eight substations, and 55 district police neighborhood watch observation posts. During Operation Okinawa in March 2007 (see Figure 4-18) the Iraqi Police (with considerable 1-6 support) spearheaded a ten-hour operation to clear North Central Ramadi from west to east, resulting in several weapons caches being found and the apprehension of 45 suspected insurgents. More importantly, Iraqi civilians responded

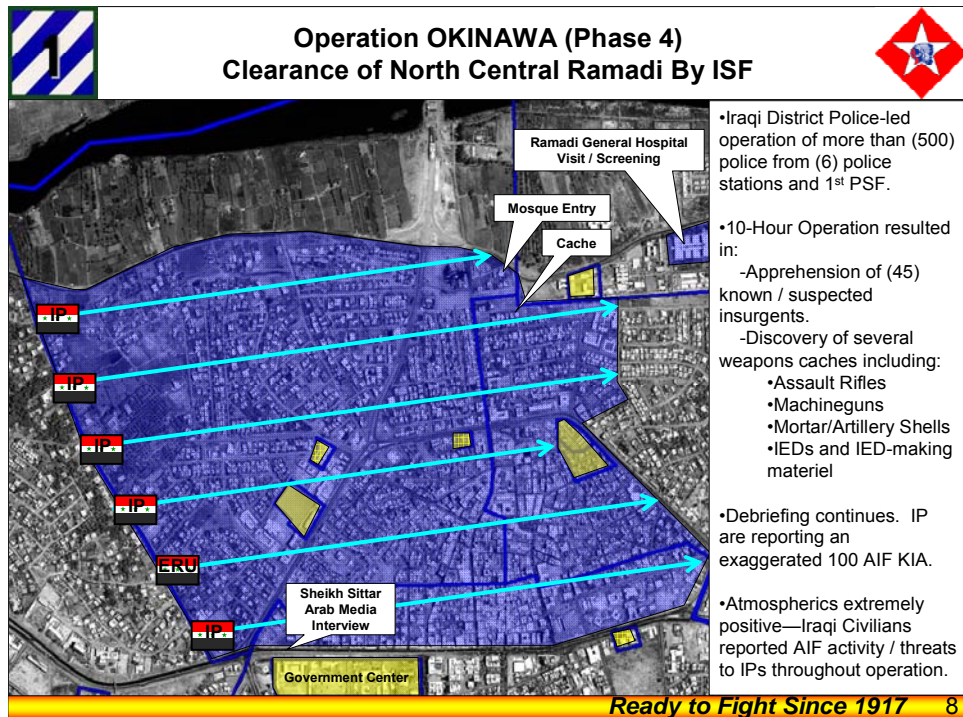
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<sup>145</sup>Taken from a statement of commander’s intent of Lieutenant Colonel William Journey, Commander of 1st Battalion, 6th Marine Regiment.

<sup>146</sup> Author interviews with Journey and Zappa.

<sup>147</sup> Ibid.

positively to the operation, reporting insurgent activity to the police as they cleared neighborhoods.<sup>148</sup>



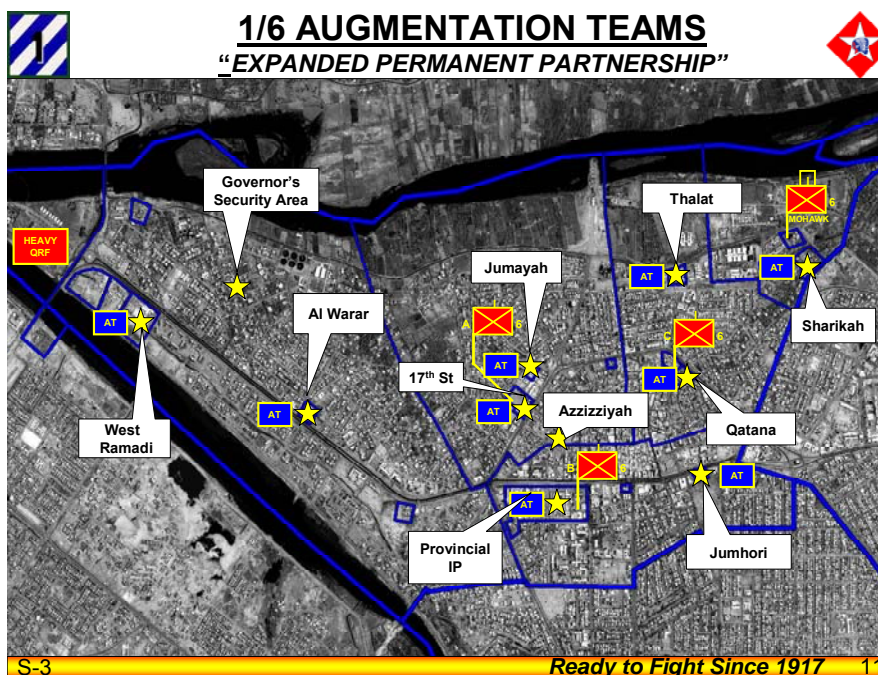
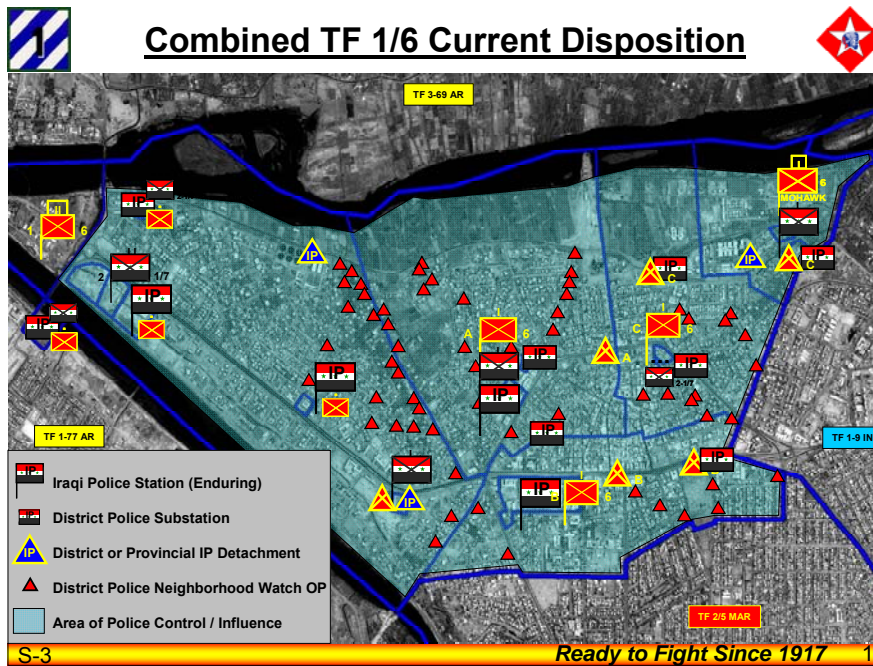
**Figure 4-18**

*Source: PowerPoint Presentation titled 'Task Force 1/6 'Quick Look': Where We Started, Where We Finished', undated.*

Once cleared, the layered approach to manning security stations provided a permanent police presence was established in these neighborhoods. As shown in Figure 4-19 below, security stations, observation posts and neighborhood watch units were established throughout their sector in the fall of 2006 and spring of 2007.<sup>149</sup>

<sup>148</sup> Author interview with Jurney.

<sup>149</sup> Summary of the stages of this process as told through the experiences of the Marines manning observation post Hawk near the Ramadi general hospital are detailed in Cpl. Paul Robbins, 'The Purpose and Effect of Observation Post Hawk', *Marine Corps News*, April 23, 2007.



**Figure 4-19**

*Source: PowerPoint Presentation titled 'Task Force 1/6 'Quick Look': Where We Started, Where We Finished', undated.*

Engagement with the local leadership proved critical to the 1/6's operations. As 1-6's area of operations included the government center, the battalion staff met regularly with Governor al-Awani as well as with the mayor of Ramadi, Latif Obaid Ayadah,

who arrived on the job in January 2007. The battalion executive officer, Major Dan Zappa, met several times per week with the mayor as well as Sheikh Sattar and with other tribal and political figures.<sup>150</sup> Neighborhood leaders also were engaged daily by captains, lieutenants, and sergeants. Many of these interactions in the neighborhoods took place as a result of census patrols in which the joint Iraqi-Marine units went door-to-door gathering information on neighborhood inhabitants.<sup>151</sup> Information from the patrols was entered into a database maintained at the local security stations.<sup>152</sup> Day-by-day, relationships developed that were based on trust and respect. 1/6 earned credibility and loyalty by responding quickly to the requests of the key power-brokers. In return, they would deliver insurgents that had long been on 1-6's target list, or assign CMO contracts to men that could fulfill them. These relationships – not without risk – were part of the bedrock foundation of the Ramadi COIN effort. One important aspect of these relationships was the lucrative contracts that were part of the battalion's larger CMO effort.<sup>153</sup>

The 1-6 experience in Ramadi is a classic case of a unit mastering battlefield competencies in its COIN campaign in which prior experience, common sense, and adaptation all factored into the process of organizational innovation. Most American units deploying to Iraq in the first couple of years after the invasion had no prior experience working CMO, and there was no doctrine on how it should be integrated with other battlefield tools.<sup>154</sup> Yet, 1-6 clearly regarded CMO efforts as important as any other enduring task in its sector, and CMO routinely took center stage in the

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<sup>150</sup> Author interview with Zappa.

<sup>151</sup> Lance Corporal David A. Weikle, 'Lejeune, Marines, Iraqis Work Together to Take Census in Ramadi', November 6, 2006, <http://www.munciefreepress.com/node/18111>, accessed December 1, 2007.

<sup>152</sup> Author interview with Lieutenant Colonel Jurney.

<sup>153</sup> Author interview with Lieutenant Colonel Jurney.

<sup>154</sup> Author interview with Zappa.

battalion's overall effort.<sup>155</sup> There was no ambiguity in the mind's of the commander's subordinates as to whether CMO was a priority – they needed only to review Journey's stated commander's intent: 'I want at least ONE focused CMO project [per every 4 week block] in your AO to support your non-kinetic effects... you will be actually executing at least one and planning / coordinating the next.' Journey emphasized to the unit that they should expect to start working CMO immediately upon arriving in the sector, which 'might be school supplies / backpacks... we might also start working a 'scrap metal' type clean up project as it helps our force [protection] to get all the burned out vehicles off the side streets and certainly starts making the city look like its time to get back to normal.'<sup>156</sup> He anticipated the need to distribute 'heat/blankets, generators, electricity, water etc. with cold and rain coming.' The battalion relied heavily on input of local residents to prioritize which CMO projects should go first, letting each neighborhood define its own requirements. Journey specifically called for 'bottom up input and initiative based on your population needs... you have to know the area and the people. Look for those 'gaps' where CMO/IO can gain you a tactical advantage.'<sup>157</sup> This statement indicated that CMO represented a critical organizational priority due to the impact it could have on separating the insurgents from their base of support.

Journey formed something called the 'Non Kinetic Effects Working Group,' headed by his executive officer, Major Dan Zappa, to work on integrating CMO and IO with the other activities in the sector.<sup>158</sup> That the executive officer was placed in charge of the group is noteworthy for two reasons. Zappa had no prior experience or formal training

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<sup>155</sup> Author interview with Journey.

<sup>156</sup> Statement of Commander's Intent.

<sup>157</sup> Ibid.

<sup>158</sup> Author interview with Journey.

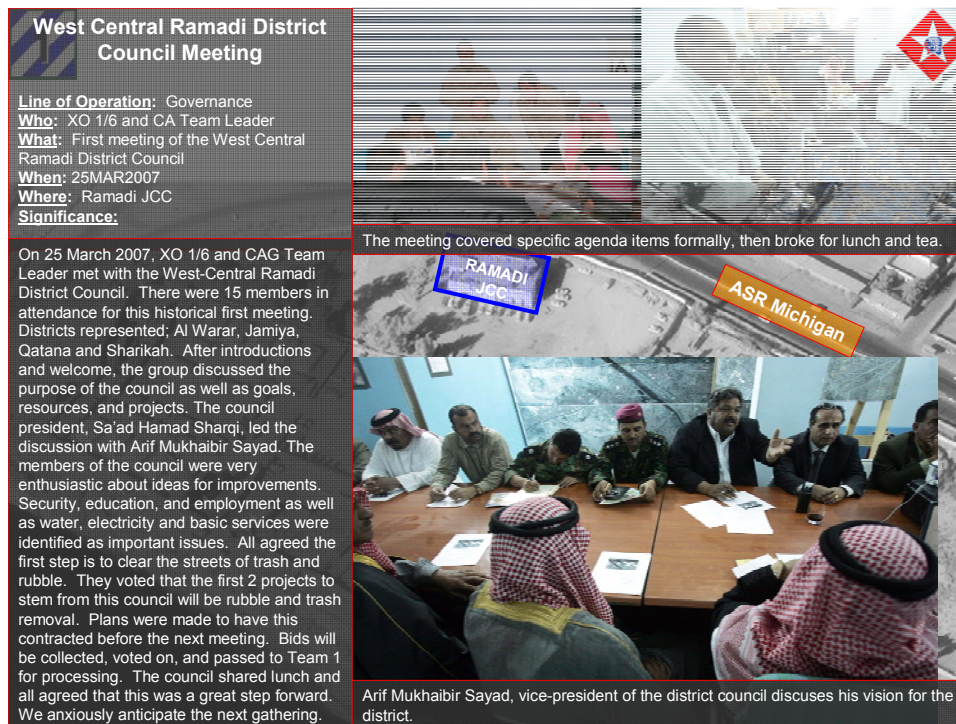
in that area, but he and several staff officers nonetheless melded together a powerful informal organizational structure comprised of a nine-man civil affairs detachment headed by Colonel Scott Kish with several other personnel working on psychological operations, or PSYOPS. Major Tiley Nunnick and the battalion's interpreter Adel worked closely with Zappa on the information operations side to mold a successful IO program in the sector. By placing Zappa in charge of the group, Journey signaled to the rest of the organization that the working group's initiatives would receive priority and not be sidelined in favor of kinetic operations.

The leadership at 1-6 expected CMO operations to be conducted at the lowest level possible, and this was consistent with the intent of higher headquarters. When Colonel MacFarland called for Commander's Emergency Response Program (CERP) payments to be given out at the company level, the commander of 1-6 called for squads to be directly involved in generating CMO projects. After all, those Marine sergeants would collectively cover much more territory than the officers would, and would see firsthand the needs of the communities they patrolled. They delivered generators and food, and they cleaned up streets. By pushing CMO to the lowest possible levels these Marines worked directly at the street level in the city blocks.

While the small units were improving Ramadi's neighborhoods, the commander and executive officer worked to provide a political structure to further engage local leadership in the city. In March 2007, Journey and Zappa convened the first meeting of the Western Ramadi District Council, which was composed of several of Ramadi's



prominent sheiks and business leader and other interested citizenry (see details in Figure 4-20 below).<sup>159</sup>



**Figure 4-20**

*Source: PowerPoint Presentation titled 'Task Force 1/6 'Quick Look': Where We Started, Where We Finished', undated.*

These meetings facilitated the airing of grievances, spurred competition for various contracts, and resulted in the dismantling of IEDs by members seeking to improve security in their area of the district. District members also attended meetings of the Mayor's city council.<sup>160</sup> The initiative became a template used throughout the area for U.S. forces working with local groups. In June 2007, commanders in Fallujah, adopted Journey's ideas of establishing district councils and using a system of

<sup>159</sup> Author interviews with Journey and Zappa, op. cit.

<sup>160</sup> Ibid.

neighborhood watch to supplement the police force's efforts to involve the citizenry in improving local security.<sup>161</sup>

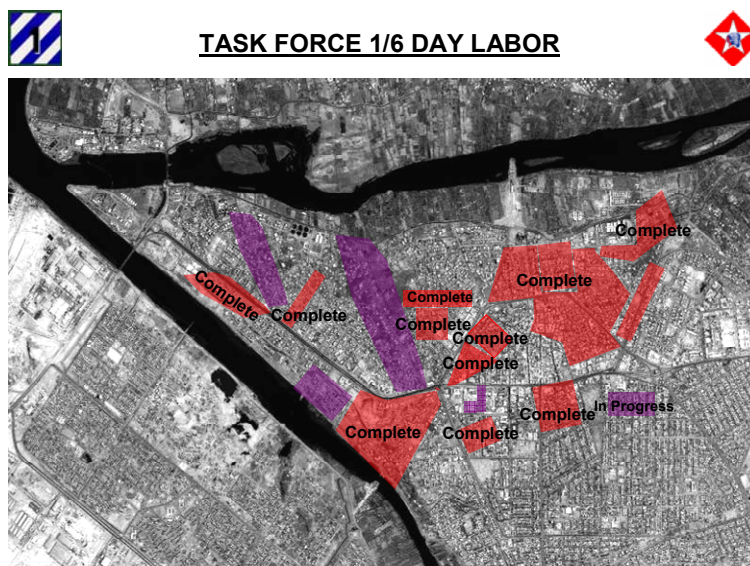
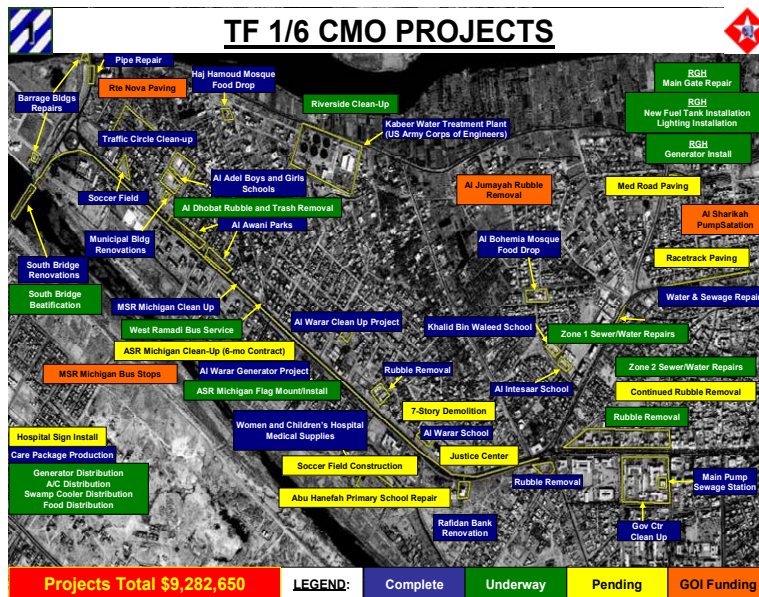
In executing operations consistent with the commander's intent, 1/6 initiated scores of CMO projects across their area of operations including paving roads, improving schools, rubble removal, food drops, water and sewage repair, re-establishing bus service, trash removal, providing medicines, and creating youth sports programs. Whenever possible, Iraqis did the work under the estimated \$9.2 million in reconstruction contracts (see Figure 4-21 below). As the battalion orchestrated the placing of contracts to reconstruct the city's destroyed infrastructure, the non-kinetic effects group in parallel developed a sector-wide plan to utilize Iraqi day labor to clean up the city. Needless to say, there was no shortage of labor in Ramadi given widespread unemployment in the city. Clean up operations began in earnest in March 2007.<sup>162</sup> The relationships that 1-6 painstakingly built with Ramadi's local leadership paid off as the CMO projects gained momentum. Ramadi's sheiks were only too happy to increase their own influence by farming out lucrative contracts, and the amounts of money involved generated excitement and competition for future ones.

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<sup>161</sup> Department of Defense Bloggers Roundtable with Colonel Richard Simcock, commander of Regimental Combat Team Six, June 13, 2007, [http://www.defendamerica.mil/specials/2007/blog/docs/Simcock\\_Transcript.pdf](http://www.defendamerica.mil/specials/2007/blog/docs/Simcock_Transcript.pdf), accessed September 18, 2007. Simcock, commander of RCT-6, noted that his unit had sent liaison officers to examine Journey's use of district councils and neighborhood watches and had decided to replicate these practices in Fallujah, see pages 1-15 of transcript. Also see Teri Weaver, 'Iraqi Town Grows Calm After Fed Up Citizens Form Informal Security Team', *Stars and Stripes*, May 24, 2007. The article details the stand up of neighborhood watch/local militia in Habbaniyah in the Spring of 2007.

<sup>162</sup> Teri Weaver, 'U.S. Stations Keeping Ramadi Calm', *Stars and Stripes*, May 17, 2007, <http://www.stripes.com/article.asp?section=104&article=53514&archive=true>, accessed September 1, 2007.





**Figure 4-21**

*Source: PowerPoint Presentation titled 'Task Force 1/6 'Quick Look': Where We Started, Where We Finished', undated.*

While it balanced the CMO portion of its portfolio, the non-kinetic effects working group assiduously worked on information operations – a neglected portion of the battalion’s portfolio that had been ceded to the area’s insurgents. As noted by the group’s head, Major Dan Zappa: ‘We were getting our clocks cleaned in the

information domain.’<sup>163</sup> Journey’s focus on the non-kinetic portions of their operations forced the battalion to rethink the role that IO and information management could play in prying the population out of the grip of the insurgents. The battalion was reluctant (despite considerable pressure) to provide public affairs officers stories on incidents within their battle space that would serve the insurgents’ cause. For example, 1/6 rarely agreed to generate press reports on insurgent sniper attacks, attacks on the Ramadi government center, friendly casualties, and the like. However they actively provided public affairs with stories on their progress with the Iraqi police or CMO projects. This also applied to visiting reporters, who were placed strategically by the battalion where they would see the things that were likely to keep them ‘on message.’<sup>164</sup> The battalion consciously sought to minimize stories that supported the insurgents. The second IO method (much to the chagrin of the brigade psychological operations officer) was to generate and disseminate their own IO messages.<sup>165</sup> This was done via handbills (see Figure 4-22 for one example), but the far more effective method were loudspeaker broadcasts that became commonplace throughout their sector. The non-kinetic effects cell developed the idea on all on its own. The group carefully crafted messages that would then be broadcast from the loudspeaker system of police stations all over the city for about 15 minutes per day.<sup>166</sup> The broadcasts comprised of popular music, news from the *BBC* and *Al Jazeera* and, most importantly, messages from local officials about developments in the neighborhoods.<sup>167</sup> The positioning of the loudspeakers allowed them to cover most of the sector with their messages. Very often the broadcaster would be a tribal leader, politician, or policeman that was working closely with the battalion. While the

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<sup>163</sup> Author interview with Zappa.

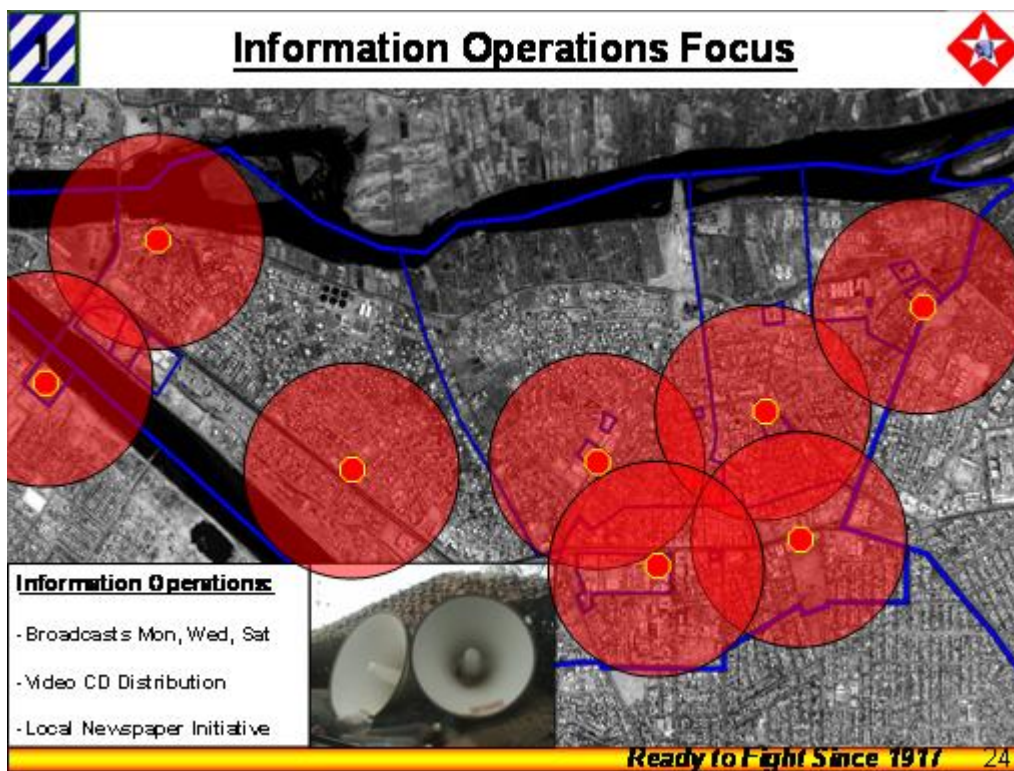
<sup>164</sup> Ibid.

<sup>165</sup> Ibid.

<sup>166</sup> Pamela Hess, ‘Loudspeaker Diplomacy Comes to Iraq’, *UPI*, February 17, 2007.

<sup>167</sup> Teri Weaver, ‘Voice of Ramadi Speaks for Police, City Leaders’, *Stars and Stripes*, May 13, 2007.

battalion had not realized it, the loudspeaker system of disseminating information to the populace had been commonplace in Saddam's era in Ramadi and became an important element in the battalion's attempt to create a sense of normalcy in the neighborhoods.<sup>168</sup> The system became a preferred venue for local leaders to distribute information to the local communities in 1-6's sector.<sup>169</sup> The battalion's PSYOPS team soon developed a lively business, working actively with local officials, coaching them on presentation style and helping to craft messages. The facility also recorded these messages, transferred them to CDs and passed them out at the vehicle checkpoints throughout the sector.<sup>170</sup> The information operation campaign was regarded by the unit's leadership as a critical part of its COIN strategy in the sector.



**Figure 4-22**

*Source: PowerPoint Presentation titled 'Task Force 1/6 'Quick Look': Where We Started, Where We Finished', undated.*

<sup>168</sup> Author interview with Journey.

<sup>169</sup> Author interviews with Journey and Zappa.

<sup>170</sup> Ibid.



Figure 4-23

Anbar’s Most Wanted Posters

Source: As posted on Michael J. Totten’s Middle East Journal, September 10, 2007, <http://www.michaeltotten.com/archives/001514.html>, accessed November 1 2008.

Summary of 1-6 Innovation

The COIN campaign of 1-6 saw the unit develop competencies across the full spectrum of capacities, ranging from high intensity conventionally-oriented warfare all the way to tailoring an information operation campaign that featured messages delivered via loudspeakers throughout its sector. In between, 1-6 simultaneously pursued civil-military operations, stood up jointly-manned security stations, developed the Iraqi Army to such an extent that it conducted independent operations, and built local political relationships that helped further isolate the population from

the insurgents. The 1-6 campaign in Ramadi has to be regarded as a textbook COIN campaign in which the organization clearly built capacities over the course the campaign tailored to the unique demands of the environment. The battalion organizational structure underwent many changes over the course of the deployment to accommodate the need for additional organizational capacities. As Journey had predicted, the non-kinetic effects working group repeatedly proved its worth in the sector, tailoring an innovative IO campaign and integrating CMO into the organization's daily operations.

## **Conclusion**

By March 2007, the security environment in Ramadi had improved dramatically. Insurgents no longer had free rein in the city. Data compiled by 1/1 document the reduction in violence over the period from July 2006 through January 2007. Over the period, monthly direct fire attacks by the insurgents had been cut by two-thirds and the number of IED attacks had been cut in half. By the spring of 2006, the ability of the insurgents to conduct combined, coordinated assaults had dwindled. While the IED attacks persisted, their effects had been reduced significantly on the battlefield. See Figure 5-24 below for a statistical summary. As the attack trends decreased, finds of insurgent arms caches increased significantly through the joint efforts of the Iraqi police and military.



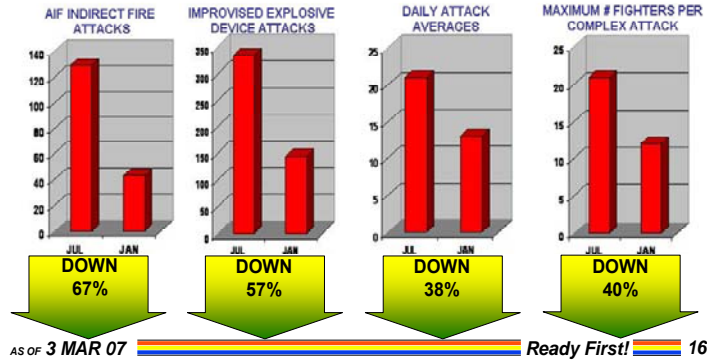


UNCLASSIFIED

## AIF ATTACK TRENDS IN AO TOPEKA



- IRAQI STUDY GROUP INDICATES SITUATION IN IRAQ IS "GRAVE AND DETERIORATING"; HOWEVER CONDITIONS IN RAMADI INDICATE OTHERWISE
- DIRECT CONTACT (COMPLEX) ATTACK CAPABILITY IS DWINDLING
- MOST COMMONLY USED WEAPON FOR AIF REMAINS IED ATTACKS. THESE, ALTHOUGH DISRUPTIVE, ARE ALSO MOSTLY INEFFECTIVE



UNCLASSIFIED

## RFCT CACHE FINDS



### REMOVING THE THREAT BEFORE IT CAN BE USED

- IRAQIS KNOW WHAT TO LOOK FOR WHEN SEARCHING FOR CACHES
- LOCALS WILL SHARE INFORMATION WITH IP BECAUSE IP ARE FROM THE LOCAL AREA
- THE INFORMANT WILL NOT BE MARKED AS A CF COLLABORATOR FOR TALKING TO IP.
- UNTRAINED IP INVESTIGATION IS MORE EFFECTIVE THAN CF INVESTIGATION BY VIRTUE OF LANGUAGE/ CUSTOM BARRIER ALONE

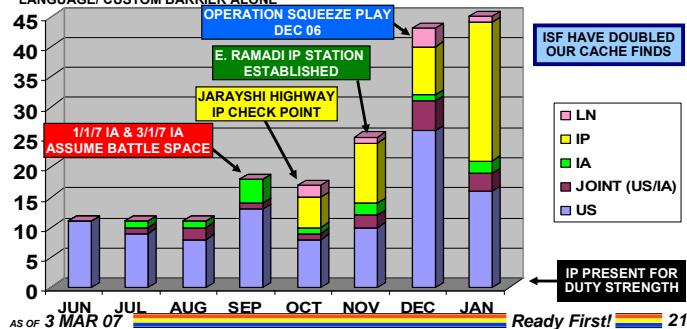


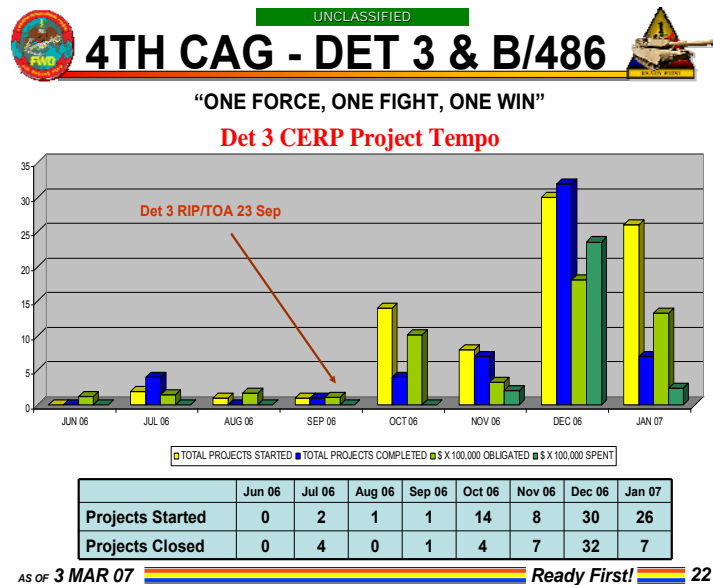
Figure 4-24

Source: PowerPoint Presentation titled 'Ready First Combat Team Orientation Briefing', March 3,

2007

The reduction in insurgent violence was accompanied by a parallel increase in the re-introduction of the Iraqi police force and the buildup in the Iraqi Army. As indicated in Figure 4-25, 1/1 and 2/28 recruited 3,000 new members of the police force during the period from April 2006 through January 2007. In early 2007, nearly 1,500 of these police were present for duty on a continuous basis. The brigade simultaneously

worked hard to integrate CMO into its operations, steadily building in more projects as the security situation grew more manageable. After wresting the Ramadi General Hospital from insurgent control in the summer of 2006, the brigade quickly returned it to operational status, providing power and medical supplies. Several other of the high-profile projects are highlighted below in Figure 4-25.



UNCLASSIFIED

## BRIGADE CMO EFFORT

### RAMADI GENERAL HOSPITAL

**Delivered:**


- Medical supplies (WHO)
- Fuel
- Oil

**In-work:**

- 2x1.25MW Gen inbound
- CME used to vector patients to RGH

Negotiating \$6.5million NGO rehabilitation project

Primary health care for Al Anbar (1.3 million Iraqis)



### GOVERNMENT CENTER


**Task**

- Level designated buildings
- Remove rubble
- Beautify area

**Purpose**

- Improve security around Government Center
- Demonstrates resolve of Provincial Government

Upon negotiation, will transition to contractor



### KABEER WTP


**POWER GENERATION**

- \$1.4 Million 2x1.25MW Generators: at TQ, install ETA 30 NOV

**WTP RENOVATION**

- \$1.5 Million rehabilitation
- \$2 Million Distribution BOM

Provide reliable water to ~80% of Ramadi



### RAMADI POWER GENERATION

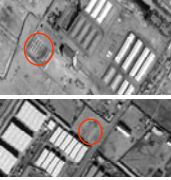
**POWER GENERATION**

- 16x1.25 MW generators repair and connection into the Ramadi power grid.

**POWER DISTRIBUTION**

- \$1.25 Million Electric Distribution BOM

Effectively doubles grid power available



AS OF 3 MAR 07 Ready First! 23

**Figure 4-25**

*Source: PowerPoint Presentation titled 'Ready First Combat Team Orientation Briefing', March 3,*

The 2/28 and 1/1 COIN campaigns in Ramadi did not win the war in Iraq, but it is clear that the retaking of the city broke the back of AQI in Anbar. To be sure, some criticized the re-empowerment of tribal leadership under the guise of the so-called ‘Awakening,’ and it is clear that the support of tribal leadership was critical to the success of the COIN campaign. Managing these delicate relationships, however, was no easy task. The efforts of soldiers and Marines like Sean MacFarland, William Journey, Vincent Tedesco, Travis Patriquin, Dan Zappa and Greg Pavlichko spoke to organizations that recognized and developed talent long before it appeared on the battlefields of Iraq. The building of organizational capacities in the Ramadi campaign – as it did in the Western Iraq campaigns – demonstrated that the ability of the organizations to learn and seek optimal solutions. The Ramadi campaign was so successful it became the model for COIN operations elsewhere in Iraq as the surge of American forces in 2007 began to bear fruit in reducing insurgent violence. As he exited Iraq when 1/1’s deployment ended, Colonel MacFarland was asked whether he had read the new COIN doctrine that was promulgated in December 2006. ‘I said no,’ he recalled, ‘but they told me I didn’t really need to read [it] since I had already done much of what the document said I was supposed to do.’<sup>171</sup>

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<sup>171</sup> Author interview with MacFarland.





## CHAPTER V

### WARTIME INNOVATION IN NINEWA PROVINCE:

#### COIN OPERATIONS IN MOSUL AND NORTHERN IRAQ, SEPTEMBER 2005– JULY 2006

The 172nd Stryker Brigade Combat Team, or 172nd SBCT, deployed into northern Iraq from August 2005 through July 2006 when the brigade was unexpectedly extended and re-deployed to Baghdad to quell violence in the city. The 172<sup>nd</sup>, commanded by Colonel Michael Shields, consisted of approximately 4,400 personnel – one of the first Army infantry units to convert to the new combat brigade structure under the transformation process initiated by then Army Chief of Staff General Shinseki in the late 1990s. A centerpiece of the 172<sup>nd</sup> SBCT is its eight-wheeled Stryker vehicle, designed to provide the brigade with combat power, mobility and flexibility to operate across the spectrum of combat operations. The 172nd received its complement of 312 Stryker wheeled vehicles several months before deployment. The Stryker brigades represented leading edge Army ‘transformational’ units as the service gradually re-orientes its force structure away from divisions to smaller, modular brigades. The Stryker brigades are designed to be more deployable on short notice, more mobile on the battlefield, and possess more organically-supported capabilities than their legacy force counterparts. As detailed in Chapter Four’s summary of the 4-14 Cavalry troop COIN operations in Anbar province, the Stryker brigades draw upon an integrated digital and satellite based communications infrastructure designed to support network-centric operations. At the time of the 172<sup>nd</sup> deployment, Stryker doctrine and training remained in their infancy relative to other

Army legacy units. While advertised as a unit capable of full spectrum operations, many of the Stryker doctrinal manuals written in the last five years reflect the belief that the Stryker units and their vehicles would operate in a fire and maneuver conventionally-oriented operational environment.

The 172<sup>nd</sup> represented one of the very first Army infantry units to convert to the new combat brigade structure. The 172<sup>nd</sup> and its sister Stryker brigades will eventually constitute the Army's dominant unit organizational structure. A recent iteration of this plan – called the Grow the Army plan announced in December 2007, calls for the Army to increase in active duty component from 42 brigade combat teams and 75 modular support brigades to 48 brigade combat teams and 83 modular support brigades by 2013.<sup>1</sup> The 172<sup>nd</sup> SBCT constituted a leading edge unit in another respect – it represented one of the first units to utilize the Army's 'unit manning system' that kept personnel in a dedicated unit for 36 months instead of rotating individual unit members according to their career plans. The objective of the plan is to stabilize the manning of combat units. The unit manning system helped immeasurably in building unit cohesion and a cross-trained work force for the Iraq deployment.<sup>2</sup>

This chapter details the wartime innovation process of the unit and its task force components while conducting COIN operations in northern Iraq in Ninewa Province prior to the unit's movement to Baghdad. The chapter opens with a description of the unit's unique characteristics as an Army 'transformational' unit. These characteristics provided important enablers to the process of adaptation and innovation that will be

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<sup>1</sup> Details of the plan are in *Posture of the United States Army 2007*, February 14, 2007, submitted by Honorable Francis J. Harvey and General Peter J. Schoomaker to the United States Senate and House of Representatives, 1<sup>st</sup> session, 110<sup>th</sup> Congress.

<sup>2</sup> The universal opinion of the brigade's senior staff in author interviews.

covered later in the chapter. Following this, the chapter will summarize the evolution of the insurgency in northern Iraq, which is important as a framing narrative to the description of tactical operations by the 172<sup>nd</sup>. The chapter will then cover the brigade-level approach to its COIN campaign, and then proceed to a more in-depth coverage of operations by several units: the 2<sup>nd</sup> Battalion, 1<sup>st</sup> Infantry Regiment, or 2-1, that operated in the northeastern section of Mosul and Company C from 1<sup>st</sup> Battalion, 17<sup>th</sup> Regiment operating in southwestern Mosul. The operations of 4<sup>th</sup> Battalion 11<sup>th</sup> Field Artillery Regiment in southern Ninewa will also be covered. Both the 2-1 and 1-17 operated in dense urban terrain, while the 4-11 operated in a more rural environment in the southwestern reaches of Ninewa. The case studies will chronicle the evolution of tactical adaptation into organizational innovation as the brigade oriented its COIN operations to the demands of the environment. The unit showed extraordinary organizational flexibility in its structuring its approach on the battlefield – an approach in part enabled by the brigade’s advanced digital backbone and by the tactical capabilities provided by the unit’s Stryker wheeled vehicles.

The 172<sup>nd</sup> arrived in northern Iraq in August 2005 and completed its handover from 1<sup>st</sup> Brigade, 25<sup>th</sup> Infantry Division, or 1/25 SBCT in September. The 172<sup>nd</sup> represented the third consecutive Stryker brigade that had been deployed into northern Iraq, following the 3<sup>rd</sup> Brigade, 2<sup>nd</sup> Infantry Division Stryker Brigade, or 3/2 SBCT (January 2004-October 2004) and 1/25 SBCT (October 2004-August 2005). The 172<sup>nd</sup> was relieved by the 3<sup>rd</sup> Brigade, 2<sup>nd</sup> Infantry Division in August 2006 – also a Stryker Brigade. By the end of its deployment in northern Iraq in July 2006, the 172<sup>nd</sup> exercised primary war fighting responsibility over a vast area of nearly 19,000 square miles and 3.85 million people (see Figure 5-1).

The two main urban centers in northern Iraq were Mosul and Tal Afar. Of these two cities – Mosul represented the main focus of effort for the 172<sup>nd</sup>. Mosul is the third largest city in Iraq with an estimated population of 1.8 million located approximately 250 miles north of Baghdad. Regarded as the ‘Pearl of the North’, Mosul had for centuries served as a vital regional trading center linking what are today are Turkey, Iran, Syria and Central Asia. The city has a centuries-old history as a cultural, ethnic and religious melting pot. In modern Iraq, Mosul sits astride an ethnic dividing line of sorts. To the north and east of the city all the way to the Iranian and Turkish border, Kurds constitute the major ethnic group. To the West, the population is primarily Sunni Arab, with Turcoman, Yezidi and other ethnic groups. Mosul had served as an important staging area for Baghdad’s armies in quelling repeated Kurdish uprisings in Iraq during the second half of the 20<sup>th</sup> century.<sup>3</sup> After 1996, backed by American security guarantees, the Patriotic Union of Kurdistan and the Kurdish Democratic Party administered Kurdish areas of northern Iraq without interference from Baghdad. The two major ethnic groups in Mosul are Sunni Arabs (60 percent), Kurds (30 percent), with significant Turcoman, Christian Assyrian, and Armenian minorities. The city is intersected by the Tigris River, which also served as a boundary to ethnic cleavages in the city, with significant Kurdish neighborhoods on the eastern side of the river and Sunni Arab neighborhoods on the western bank. While these populations had co-mingled and lived together for centuries, the aftermath of the invasion and the emergence of the insurgency in Mosul and the surrounding areas fueled tensions between these groups – particularly between the Sunni and Kurdish populations. The Sunni-Arab portion of the city’s population

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<sup>3</sup> Covered in David McDowall, *A Modern History of the Kurds*, 3<sup>rd</sup> Ed. (London: I.B. Taurus, 2004); Charles Tripp, *A History of Iraq* (Cambridge, Cambridge University Press, 2000); Phebe Marr, *The Modern History of Iraq*, 2<sup>nd</sup> Ed. (Boulder, CO, Westview Press, 2004).

believed that the Kurds sought to control the city and integrate it into the Kurdish administered areas that lay to the east of the city. Clashes between Sunni militias and Kurds erupted in the days following the surrender of the city in April 2003.<sup>4</sup> During Saddam’s reign, he purposefully resettled Sunni Arabs in the oil-rich area and expelled indigenous Kurds. After the start of the invasion, many transplanted Arab villagers hastily evacuated for fear of reprisals from the advancing Kurdish militias.<sup>5</sup>

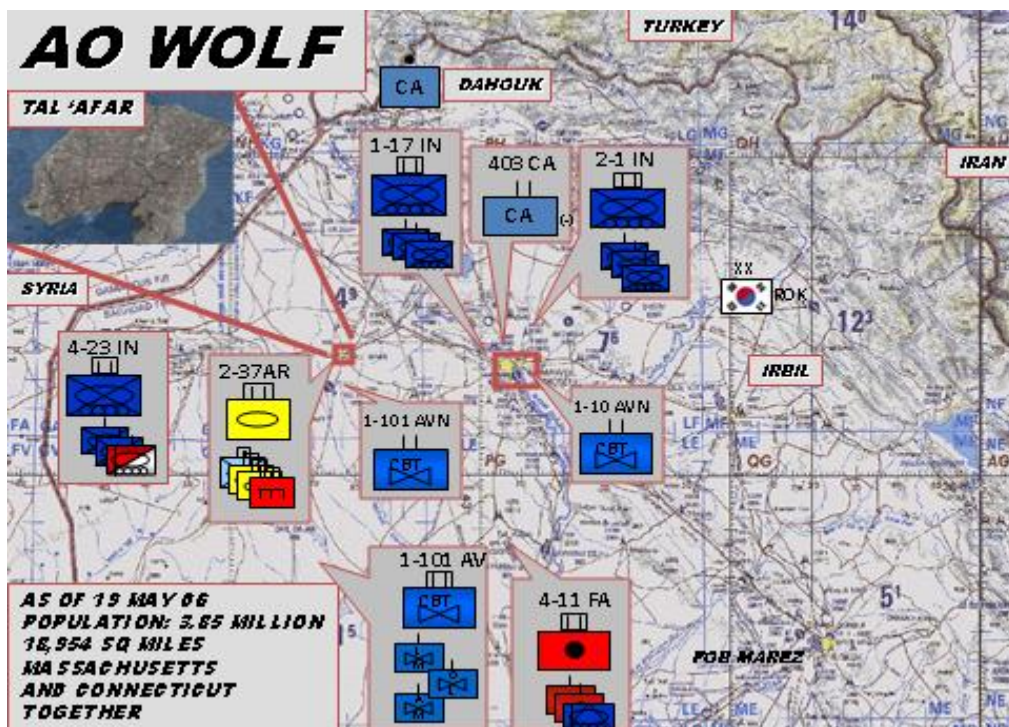


Figure 5-1

Source: PowerPoint presentation titled ‘172nd SBCT TF Disposition in Northern Iraq’, October 2006

Like its predecessor units in the north, the 172<sup>nd</sup> administratively fell under Multi-National Division-North, located 150 miles south of Mosul at Forward Operating

<sup>4</sup>‘Iraqi Arabs – Kurds Clash in Mosul’, *Middle East News Agency*, Cairo, April 12, 2003.

<sup>5</sup> Paul Salopek, ‘Ethnic Tensions in Mosul Could Trap U.S. Forces in a Crossfire’, *Chicago Tribune*, April 13, 2003.

Base Speicher located outside the city of Tikrit. It reported directly to Task Force Freedom based on FOB Courage in Mosul, which had been used by Saddam as his VIP presidential residence. The 2.2 square kilometer site had several palaces and was used by U.S. forces to host visiting dignitaries. In November 2005, the 101<sup>st</sup> Airborne Division assumed responsibility for MND-North; and in late December assumed responsibility for MND-Northwest, which included the 172<sup>nd</sup> area of operations in northern Iraq. Task Force Freedom was subsequently renamed as Task Force Band of Brothers. As indicated in Figure 5-1, the 172<sup>nd</sup> deployed its main combat elements principally around the province's urban centers in Mosul and Tal Afar: Two of the brigade's battalions (1<sup>st</sup> Battalion, 17<sup>th</sup> Infantry Regiment, 2<sup>nd</sup> Battalion, 1<sup>st</sup> Infantry Regiment) were deployed into different sections of Mosul, while the 4<sup>th</sup> Battalion, 23<sup>rd</sup> Regiment deployed near Tal Afar and the 4<sup>th</sup> Battalion, 11<sup>th</sup> Field Artillery operated in areas directly to the south of Mosul. The brigade support battalion, or BSB, operated out the main operating base called FOB Marez in southern Mosul. In April 2005, the combat strength of U.S. forces received a big boost when the 3<sup>rd</sup> Armored Cavalry Regiment and its 4,000 troops were deployed to Tal Afar to wrest control of the city from insurgent groups and deal with sectarian Sunni-Shia tensions. The 3<sup>rd</sup> ACR, then commanded by Colonel H.R. McMaster, went on to conduct a celebrated COIN campaign in the city over the next nine months.<sup>6</sup> The 3<sup>rd</sup> ACR operated independently from the 172<sup>nd</sup> and did not operate as part of its task force.

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<sup>6</sup> Details summarized in Thomas Ricks, 'The Lessons of Counterinsurgency: US Unit Praised for Tactics Against Iraqi Fighters, Treatment of Detainees', *Washington Post*, February 16, 2006, p. A14; Also see George Packer, 'The Lesson of Tal Afar', *The New Yorker*, April 10, 2006; David R. McCone, Wilbur J. Scott, and George R. Mastroianni, 'The 3<sup>rd</sup> ACR in Tal' Afar: Challenges and Adaptations', *Of Interest Series*, Strategic Studies Institute, U.S. Army War College, January 8, 2008; Lieutenant Colonel Chris Gibson, 'Battlefield Victories and Strategic Success: The Path Forward in Iraq', *Military Review* (September/October 2006), pp. 47-59.

Like other combat formations in Iraq during the war, the 172<sup>nd</sup> operated as a task force, integrating a variety of different units under its leadership. These units included the 3<sup>rd</sup> Air Support Squadron, the 709<sup>th</sup> and the 165<sup>th</sup> Military Police Battalions, the 2<sup>nd</sup> Battalion, 37<sup>th</sup> Armored Cavalry Regiment deployed near Tal Afar, 1<sup>st</sup> Battalion 101<sup>st</sup> Aviation Regiment, 1<sup>st</sup> Battalion 10<sup>th</sup> Aviation Regiment, the 401<sup>st</sup> and 403<sup>rd</sup> Civil Affairs Battalions, and the Military Training Teams, or MiTTs, deployed throughout the province. Also part of the effort was the 1<sup>st</sup> Battalion, 5<sup>th</sup> Special Forces group, which, like the MiTTs, provided training to Iraqi Army and police units. The complex series of organizations was never formally tied together by any single administrative action, but there was a general understanding in most units throughout the province that they all supported the primary owner of the battle space in northern Iraq – the 172<sup>nd</sup> SBCT. As recalled by the 172<sup>nd</sup> Operations Officer, Lieutenant Colonel Mitch Rambin, ‘Where there was no formal command and control directed, it was “handshakecon” and relationship building, especially with SOF [special operations forces] in zone.’<sup>7</sup>

The brigade itself was distributed in up to 25 different locations in the province, while the 900-odd soldiers of the 4-14 Cavalry group (nearly ¼ of the brigade end-strength) deployed to Rawah in Anbar province and served under the 2<sup>nd</sup> Marine Division that exercised overall command there.<sup>8</sup> Like units elsewhere in Iraq, the brigade employed a hub and spoke network approach to its basing infrastructure that linked forward operating bases, or FOBs (usually battalion headquarters), with a number of different combat outposts, or COPs, manned by anywhere from 100-250 troops. The distribution of U.S. forces in a hub and spoke network of bases played an important

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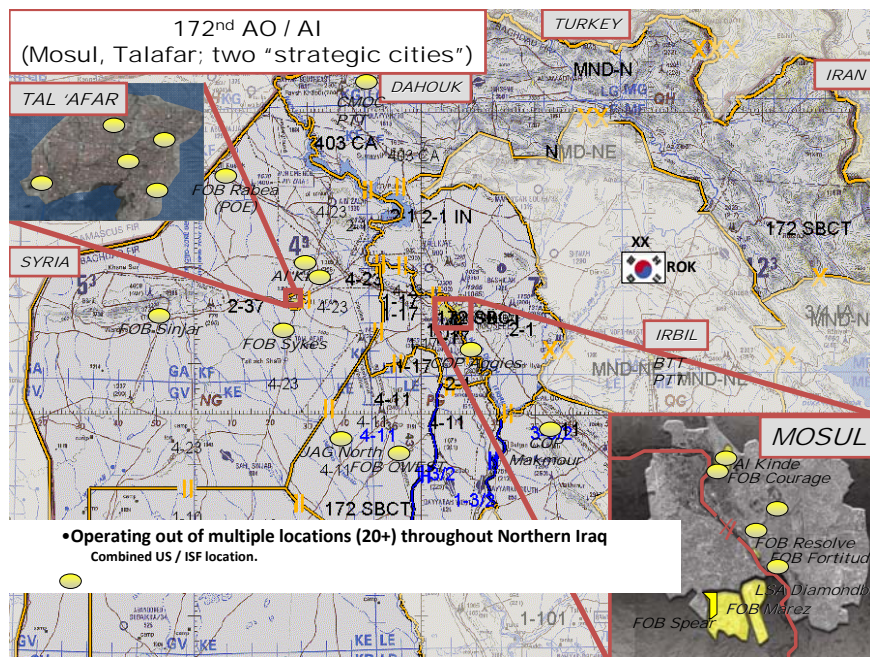
<sup>7</sup> Author e-mail exchange with Lieutenant Colonel Mitchell Rambin, then operations officer of the 172<sup>nd</sup> SBCT, March 23, 2009.

<sup>8</sup> The 4-14 COIN campaign in Rawah is covered in Chapter III.



role in the turnaround in the Anbar COIN campaign in 2005-2006. In northern Iraq (as in Anbar), the networked approach helped push the brigade presence into contested areas in such places as Mosul and Tal Afar and provided the means to establish a presence near the Iraq-Syrian border to disrupt insurgent supply lines. The dispersal of the unit over such a wide area ran the risk of diluting the brigade's limited combat power and created serious logistical challenges for the brigade's support battalion, or BSB, headquartered at FOB Marez in southern Mosul. The brigade's network of bases is shown in Figure 5-2:

- The 4-23 and its task force elements operated from FOB Sykes located five miles south of Tal Afar and 40 miles east of the Syrian border. The main base at Sykes supported three COPs at Tal Afar, COP Rabiah, and COP Sinjar.



**Figure 5-2: 172<sup>nd</sup> Deployment in Ninewa**

Note: the yellow dots represent U.S. and combined U.S./Iraqi Army locations. In Tal Afar, the yellow dots were company size elements.

Source: PowerPoint slide provided to author by Lieutenant Colonel Mitch Ramin, 172<sup>nd</sup> SBCT

- The 2-1 operated out of FOB Marez in southern Mosul. Its network of operating bases included FOB Courage, COP Maqloub, COP IMN (the local TV station), COP Al Kindi, FOB Resolve, and COP Fortitude all of which were spread throughout eastern Mosul and housed Iraqi troops, MiTTs, and battalion personnel. Like 4-23, 2-1 provided security to all the combat logistics patrols with Strykers and as well as up armored HMMWVs. COP Maqloub served as a communications site occupied by both 2-1 and elements of the 21st Signal Brigade. COP Al Kindi housed 80 soldiers that trained 200 Iraqi soldiers on a continuous basis. Also located adjacent to Al Kindi was India Base, which housed the U.S. Military Training Team for the 2<sup>nd</sup> Brigade/2 Iraqi Army Division. COP Resolve was occupied by a MiTT and IA force and 30 soldiers from 2-1.

- The 1-17 infantry operated from FOB Marez and supported four COPs: Gator, Eagle, Apache, and Aggies. Gator and Eagle were manned by Iraqi soldiers with MiTT team support and brigade company-elements. COP Aggies, a training site used by both the U.S. and Iraqi armies, was home to 30 U.S. and 400 Iraqi soldiers.

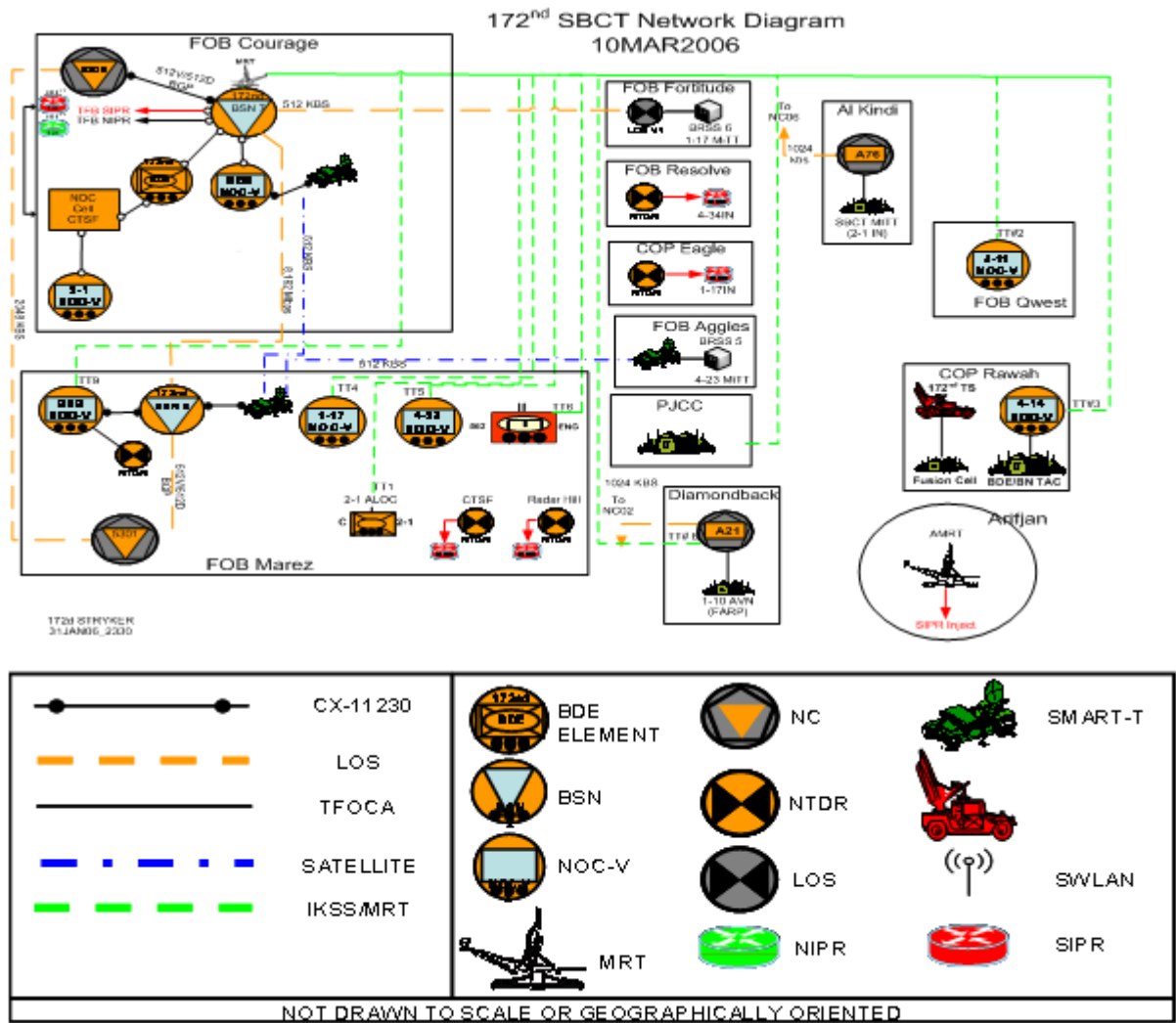
- 4-11 field artillery operated from FOB Q-West and supported three COPs: Mahkmur, Jaguar North, and Tallabath. An embedded logistics support element with 4-11 traveled to each of these sites with organic security.

- TF 4-14 CAV operated out of COP Rawah and supported COP North and COP Anah. This site was over 120 miles from the rest of the brigade in Anbar.

While TF 4-14 CAV was part of the 172nd SBCT, the unit had been administratively assigned to the 2nd Marine Division.

The brigade headquarters operated out of FOB Marez, co-located with the airfield in southern Mosul. The brigade headquarters was fully equipped to handle the Strykers' digital and satellite communications processing requirements. The headquarters also incorporated advanced signals intelligence equipment and a Remotely Operated Video Enhanced Receiver, or ROVER, that enabled ground units to view aerial images in real-time on their laptop computers. The main organizational elements of the 172<sup>nd</sup> and its supporting communications/digital infrastructure are illustrated in Figure 5-3.

Figure 5-3 illustrates the communications and digital backbone that helped enable the 172<sup>nd</sup> network-centric capability. Like other Stryker brigades, the 172<sup>nd</sup> could reach outside the brigade to higher-echelon military and civilian organizations while simultaneously ensuring that its own constituent elements remained connected to each other and to the information assets available in the brigade. These capabilities were technologically enabled by something called the SBCT network.



**Figure 5-3**

### 172<sup>nd</sup> Digital Network Architecture in Northern Iraq

*Source: Provided by Ron Moore, who served as chief warrant officer in the 172<sup>nd</sup> SBCT during 2005-2006. Elements of the network summarized below.*

The 172<sup>nd</sup> SBCT version is illustrated above. The brigade's network consisted of five sub networks: the wide-area network (WAN), a network connecting the brigade's tactical operations centers, a tactical encrypted internet (TI), the Command Net Radio network (CNR), and the Global Broadcast System (GBS). In addition to these subnets, various components of the SBCT used specialized communications equipment to reach back to national-level intelligence organizations and transmit

imagery from unmanned aerial vehicles. As will be detailed in this case, the 172<sup>nd</sup> used this network to its fullest – flattening the organizational structure that brought national-level intelligence and imagery support down to the tactical level. Each of the brigade sub networks helped connect unit elements with one another and with non-unit entities:

- WAN: A satellite-based network that connected the brigade to higher headquarters. The WAN is a high-bandwidth data network (1.5 Mps), and is available in the brigade at the Main Command Post (CP), the Forward CP, and the Brigade Support Battalion (BSB). Division and Corps assets typically utilize the WAN to make available such information as commander's guidance, operations and fragmentary orders, intelligence products, operations overlays (for use in ABCS systems at brigade and battalion levels), planning documents, and more.
- TOC-to-TOC: A low-bandwidth (28.8 kps) data network, carried by the Near-Term Digital Radio System (NTDRS), connecting the tactical operation centers of the RSTA squadron and the infantry battalions with each other and the brigade TOC. This network distributed commanders' guidance and orders, sharing planning and intelligence data, and exchanging digital overlays for use in ABCS systems.
- TI: A low-bandwidth (14.4 kps mean, 56.6 kps max), terrestrial network based on the Enhanced Position Location Radio System (EPLRS), that transmitted situational awareness data and a text messaging capability throughout the SBCT.
- CNR: A voice-only network utilizing FM voice and SINCGARS. CNR was organized into hierarchically structured sub networks that mirrored the

organizational structure of the brigade. Subnets existed at the squad, platoon, company, battalion, and brigade levels.

- GBS: A high-bandwidth (24 Mps per transponder) data broadcast network that delivered video, imagery, and other data feeds from national information assets to the brigade. Receivers for this information were located at the brigade headquarters and each of the main operating unit tactical operations centers, or TOCs.<sup>9</sup>

The preceding background illustrates several unique factors that make examination of 172<sup>nd</sup> SBCT COIN operations particularly relevant to this study. First, while the Stryker brigades were clearly designed for conventionally-oriented fire and maneuver operations, their first wartime deployments to Iraq occurred in a COIN contingency. Like the preceding SBCTs, the 172<sup>nd</sup> deployed into an operational environment at an extremely early stage of the Stryker Brigade's fielding plan in the Army – before the establishment of an extensive doctrine and training base. Second, the COIN environment in northern Iraq consisted of both urban and rural settings, requiring different competences and different operational schemes executed by units separated by significant physical distances. As noted above, the 172<sup>nd</sup> BSB performed the herculean task of keeping these units continuously supplied in ways that had never been envisioned in Stryker doctrine. Third, the technical capabilities of the Stryker brigade and their concept of network centric operations represented another unique feature of the 172<sup>nd</sup> deployment in Mosul, making it an interesting case to examine the impact of these technologies on the process of wartime innovation. These

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<sup>9</sup> The summaries of the Stryker brigade capabilities and its supporting digital/communications network is adapted from a PowerPoint briefing titled 'Network Centric Operations Case Study: Stryker Brigade Stability and Support Operations in Iraq', Office of Force Transformation, Department of Defense, 23 March 2006.

technologies functioned as ‘enablers’ for wartime innovation in the brigade across the full spectrum of combat operations. The 172<sup>nd</sup> COIN operations in Mosul provides an opportunity to analyze the impact played by these technologies on wartime operations. As will be detailed in this case study, it is clear that the 172<sup>nd</sup> SBCT wartime operations reflected the innovative use of its technical capabilities by a well-trained, extremely adaptive force that produced a variety of new organizational competencies on the battlefield over the course of the deployment. Last, the 172<sup>nd</sup> deployment into Iraq occurred at an extremely early phase in the history of the unit, which had only recently converted to the new brigade structure and which only received its full complement of Strykers several months prior to deployment. The unit thus perhaps had less of an established institutional identity than other units in the Army. Moreover, like its sister Stryker Brigades that had deployed before it, the unit leadership realized that its performance would be closely watched by senior Army leadership, and that there would be significant operational and doctrinal implications from the unit’s performance.

### **The Insurgency in Northern Iraq**

At the outset of the war, the Iraqi 5<sup>th</sup> Corps and its 30,000 troops defended Mosul, although press reports indicated that some 120,000 Iraqi troops were deployed across a 250-mile front in the Mosul-Kirkuk area. The United States had intended to move troops into northern Iraq through Turkey in the spring of 2003 as part of the invasion – a plan subsequently thwarted when the Turkish Parliament denied the U.S. request to transit through Turkey. The United States subsequently opened the so-called ‘northern front’ in March 2003 soon after the invasion of the south began when

special forces were airlifted into Sulaimaniya in northern Iraq. Operating with Kurdish Peshmerga militia, these special forces advanced on Mosul and Kirkuk aided by air strikes on Iraqi Army positions. On April 11, 2003, the Iraqi 5<sup>th</sup> Corps surrendered to Kurdish forces. The next day American special forces and the Kurds entered the city unopposed. Most of the Iraqi soldiers simply discarded their uniforms and went home. As was the case in Baghdad, looters quickly went to work, raiding banks and the Mosul Museum, stealing among other things, a 2,000-year-old statue of King Saqnatroq II – a long forgotten Iraqi monarch. Looters found the University of Mosul to be a lucrative hunting ground. The university computer center had its computers ripped from their sockets, and cars were seen packed with office furniture and scientific equipment exiting the campus in the days following the surrender of the city.<sup>10</sup> The first American conventional military units arriving in the city on April 14<sup>th</sup> were met with protests and gunfire after Marines tried to raise an American flag over the governor's office in downtown Mosul. Ten Iraqis were killed in the confused melee surrounding the incident – an inauspicious beginning to the U.S. occupation. By the end of April elements of the 101<sup>st</sup> Airborne finally arrived in Kirkuk and Mosul.

The 101<sup>st</sup> Airborne Division, commanded by General David Petraeus, administered northern Iraq through January 2004. The 101<sup>st</sup> was structured as a legacy Army unit consisting of three combat brigades, two aviation brigades, one artillery brigade, three engineering battalions and an attached military police battalion. The unit boasted an end strength of approximately 17,000 soldiers and its additional task force members added another 2,000 personnel to the unit. The city's population

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<sup>10</sup> Luke Harding, 'War in the Gulf: Mosul Descends into Chaos As Even the Museum is Looted of Treasures', *The Guardian*, April 12, 2003.



exhibited a mixed reaction to the arrival of the occupation force. While Kurds living primarily in eastern Mosul enthusiastically welcomed the Americans, Sunni-Baathist Iraqis in western neighborhoods appeared more apprehensive. Mosul had an established, large Sunni – Baathist population that served as home to as many as 100,000 Iraqi Army personnel and 1,000 retired generals and other high ranking officers. One city resident presciently commented to a journalist immediately following the occupation of the city: ‘The Baath, the Special Republican Guards, the Fedayeen, they are sitting at home, waiting.’<sup>11</sup> The first reported attacks on U.S. troops came in late April, when positions on the western bank of the river came under sustained machine gun and small arms fire. Four insurgents were reported killed in the encounter.<sup>12</sup>

The 101<sup>st</sup> Airborne hit the ground running and worked hard to defuse local tensions, enlisting former Iraqi Army leaders in engagement activities and even held a special election in early May to appoint a 24-member town council to take over administrative duties in Mosul. It established a police academy to rebuild a local police force as well as an employment office for former Iraqi military personnel. In June, however, clashes broke out in the city center between U.S. units and unemployed Iraqi soldiers in a sign of what was to come. Ambushes of American convoys south of Mosul were reported in early July by insurgents armed with RPG’s and Kalashnikov assault rifles.<sup>13</sup> Despite these episodic attacks, however, some saw northern Iraq as the exception to an otherwise badly bungled post invasion period in the rest of the country. Cross border trade between the north and Turkey was quickly

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<sup>11</sup> A resident named Ahad, quoted in Daniel Williams, ‘Rampant Looting Sweeps Iraq’, *Washington Post*, April 11, 2003, p. A1.

<sup>12</sup> Margaret Neighbor, ‘U.S. Troops Kill Four Fighters in Mosul Gun Battle’, *The Scotsman*, April 29, 2003, p. 12.

<sup>13</sup> Richard Opiel, ‘3 U.S. Soldiers Killed in Attack Near Mosul’, *The New York Times*, July 25, 2003.

re-established, and local Iraqis had been installed in many governmental posts. Nearly \$17 million in reconstruction funds were disbursed by the 101<sup>st</sup> in the first several months of their deployment in northern Iraq, further contributing to the stabilization effort.<sup>14</sup>

Whatever successes the 101<sup>st</sup> experienced in its stabilization mission, however, the unit could not stem the inexorable increase in violence that steadily grew in Mosul as it did elsewhere in the country for the remainder of 2003. In September, insurgents killed Sana Toma Suleiman, deputy director of the oil products department in Nineveh Province for the North Oil Company, as he got into his car to go to work. In October, the head of an Iraqi military training center was killed. Other attacks also came against Kurdish political party offices in Mosul. Insurgents mounted the first reported IED attacks on American convoys in November 2003.<sup>15</sup> That fall, insurgents unveiled the same brutal tactics used elsewhere in Iraq: the targeted assassination and intimidation of Iraqis cooperating with the occupation. Interpreters helping the United States and journalists believed to be providing favorable coverage became particularly favored targets. As many as 50 interpreters were killed by insurgents through the spring of 2006.<sup>16</sup> In early November 2003, gunmen assassinated the president of the Mosul Magistrate Court, Judge Isma'il Yusuf and seriously wounded the director of the Mosul Northern Oil Company, Muhammad Zebari. Insurgents also beheaded the dean of the Mosul law school. In a sign of their growing capabilities, in late November insurgents shot down two Black Hawk helicopters operating over

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<sup>14</sup> Michael R. Gordon, 'The Struggle for Iraq: Reconstruction; 101<sup>st</sup> Scores Success in Northern Iraq', *New York Times*, September 4, 2003, p. A1.

<sup>15</sup> Reported by Kurdish Satellite TV in Salah-al-Din, November 5, 2003.

<sup>16</sup> Charles Levinson, 'Iraq's 'Terps' Face Suspicion From Both Sides', *Christian Science Monitor*, April 17, 2006.

Mosul, killing 17 U.S. soldiers.<sup>17</sup> The first suicide bombings occurred as the 101<sup>st</sup> prepared to depart in early 2004. In January, insurgents attacked the 101<sup>st</sup> base near the city of Tal Afar with a suicide attack, injuring 60 soldiers in the attack.<sup>18</sup> In early February, as the 3/2 Stryker brigade took over from the 101<sup>st</sup>, a suicide bomber smashed through a protective barrier at an Iraqi police station in Mosul, killing nine and injuring 45.<sup>19</sup> The pattern of attacks continued throughout the rest of the year, with attacks against U.S. forces and any Iraqis deemed to be aiding in the occupation. The drastic reduction of U.S. forces from 19,000 to approximately 5,000 in 2004 provided the insurgency with breathing space to consolidate, organize, and mount aggressive and increasingly deadly operations.

During the fall of 2003, the outlines of several insurgent organizational structures emerged in and around Mosul that would remain through the 172<sup>nd</sup> deployment (and remain so as of this writing). In interviews with journalists, the 101<sup>st</sup> Division's chief intelligence officer Lieutenant Colonel Daryl Reyes identified several groups operating throughout the area. Baathists had created at least two insurgent groups: al-Rifah ('Prosperity'), composed of high-ranking military officers and a second, called, al-Awdah ('The Return'), consisting of former Baath Party members.<sup>20</sup> Islamist militant groups had also organized themselves. One called Mohammed's Army had been detected in the city, and an offshoot of the Muslim Brotherhood had been found in a poor suburb of Mosul called Hamman al Alil.<sup>21</sup> A Muslim preacher who had been jailed by Saddam for sedition told a journalist that Islamists in Hamman

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<sup>17</sup> Seb Walker, 'Black Hawk Attack Kills 17 Soldiers', *Washington Post*, November 17, 2003, p. A6.

<sup>18</sup> Rory McCarthy, 'Bombs Shatter Iraq's Brief Calm', *Guardian Online*.

<sup>19</sup> Jason Burke, 'Nine Killed in Attack on Iraqi Police', *The Observer*, February 1, 2004.

<sup>20</sup> As quoted in Daniel Williams, 'Violence in Iraq Overtakes an Oasis of Relative Calm', *Washington Post*, 16 November 16 2003, p. A24.

<sup>21</sup> *Ibid*.

al Alil were stirring anti-American sentiment. ‘The longer it takes to bring Iraq to its feet, the harder it will be’ for the United States, he said. ‘It is those who lost jobs who are conducting operations against the Americans. Mosul is like a little Baghdad.’<sup>22</sup> One of the most vicious groups that appeared in late 2003 was the group Ansar al-Islam (also called Ansar al-Sunna, or AAS), which had long been operating in the remote regions of northeastern Iraq. The 101<sup>st</sup> detected efforts by Ansar to establish command and control units in the city in late 2003.<sup>23</sup> AAS would later achieve notoriety by claiming credit for two gruesome attacks in Mosul: a December 2004 suicide bombing attack in the mess hall of the US base at FOB Marez, killing 22 and wounding 72; and the beheading of 12 twelve Nepalese contract workers in August 2004. Ansar triumphantly posted gruesome videos of the killings of the Nepalese workers on a website along with a statement that the Nepalese were ‘fighting the Muslims and serving the Jews and Christians’ and ‘believing in Buddha as their God.’<sup>24</sup> The involvement of Islamist groups in the insurgency also reflected itself in increased attacks on Christian churches and those of other denominations in the city. In another tactic practiced elsewhere in Iraq, an Islamic fundamentalist group called the Islamic Council of Mosul distributed ‘Brides for Jihad’ letters from mosques in the Sunni sections in the Western part of the city urging women to marry foreign-born jihadists – and demanded that names of marriageable women be placed on a list and provided to the council.<sup>25</sup>

Violence in Mosul reached a crescendo in November 2004 as American troops carried out the assault on Fallujah in Anbar province. On November 11, an estimated 500-

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<sup>22</sup> Ibid.

<sup>23</sup> Ibid.

<sup>24</sup> <http://www.globalsecurity.org/military/world/para/ansar-al-sunna.htm>, accessed Mar 4, 2009.

<sup>25</sup> Aqeel Hussein, ‘Militants Force Women to Wed Local Jihadists’, *The Sunday Telegraph*, October 10, 2004.

1000 insurgents stormed police stations in Mosul and laid siege to Kurdish political offices, effectively ending the police presence throughout much of the city. U.S. officials were stunned by the scale of the attacks. Some observers asserted that many of the police had joined with the insurgents. Indeed, as many as 3,200 of the 4,000 police in Mosul effectively left their posts in the attacks. Militants looted and emptied at least six police stations of arms, and trucks full of armed insurgents had free rein in the city for several days.<sup>26</sup> Kurdish Peshmerga militias fought running gunbattles with the insurgents on the bridges over the Tigris River to keep them out of the Kurdish neighborhoods in eastern section of the city. American troops from 1/25 SBCT and Iraqi Army commandos fought pitched battles with insurgent groups numbering as high as 50 fighters – killing many insurgents in these encounters. By November 17, U.S. forces and Kurdish Peshmerga militia units had pushed back into the seized areas. In late November, Kurdish forces arrested Mosul's former police chief, Muhammad Kheiri Barhawi on suspicions of collaborating with the insurgents. Kurdish militia apprehended Barhawi with \$600,000 in cash in the trunk of his car.<sup>27</sup> In the aftermath of the attacks, it became apparent that groups affiliated with Abu Musab al Zarqawi had arrived in Mosul. Some press reports indicated that Zarqawi himself had arrived in the city to escape the U.S. offensive in Fallujah. In the weeks following the fighting, bound and gagged bodies that clearly had been executed began appearing in public places – a favored tactic of Zarqawi's groups. Websites affiliated with Zarqawi began publicly taking credit for the gruesome executions and beheadings in and around the city in late 2004.<sup>28</sup>

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<sup>26</sup> Edward Wong, 'Insurgents Attack Fiercely in the North, Storming Police Stations in Mosul', *The New York Times*, November 12, 2004.

<sup>27</sup> Richard Opiel and James Glanz, 'More Iraqi Army Found Dead, Two Clerics Slain', *The New York Times*, November 23, 2004.

<sup>28</sup> Developments covered in C. Mark Brinkley, 'Mosul's Militants Fight Mostly From the Shadows', *Army Times*, November 29, 2004.

After the battles of Fallujah and the resultant 'Awakening Movement' in Anbar Province many Sunni fighters turned to Mosul as a new base of operations.<sup>29</sup> An estimated 500-700 of Zarqawi's fighters gravitated to Mosul in late 2004. The evolution of the insurgency in Mosul over the period in some ways mirrored the trends in elsewhere as Sunni Islamist extremists and Baathists initially united over their opposition to the occupation. Their objectives diverged after this, although in Mosul the tactical alliance between the groups endured. In late 2004, Ansar al Sunna had emerged as a dominant jihadist group in Mosul. The main leader Mohammed Sharkawa was said to direct several hundred insurgents. Sharkawa favored the creation of a Taliban-like state in northern Iraq that reflected his Salafist beliefs. Sharkawa was finally captured by U.S. forces in July 2005.<sup>30</sup> The other side of the insurgency in Mosul was overwhelmingly secular and comprised of former Baathists. Both groups took advantage of the steady stream of cash that arrived from Syria to pay for operations.<sup>31</sup> In late 2004, these insurgent groups mounted complex, coordinated unit-sized attacks against U.S. forces.<sup>32</sup> By early 2005, Ansar al-Sunna was reported to be increasing its influence in the city, gradually overshadowing the Baathist groups involved in the insurgency.<sup>33</sup> Other reports indicated that ex-Baathists had established a command apparatus in Syria to direct a growing number

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<sup>29</sup> Michael Knights, 'Northern Iraq Faces Increased Instability in 2005', *Jane's Intelligence Review*, (Feb 2005), p. 31.

<sup>30</sup> Richard Opiel, 'U.S. and Iraqi Troops Capture a Top Militant Leader in Mosul', *The New York Times*, June 17, 2005; Eric Hamilton, 'The Fight for Mosul', Backgrounder No. 31, Institute for the Study of War, April 2008.

<sup>31</sup> Richard Opiel, 'In Northern Iraq, the Insurgency Has Two Faces, Secular and Jihad but A Common Goal,' *The New York Times*, December 19, 2004.

<sup>32</sup> As noted by Colonel Robert Brown, commanding officer in 1/25 SBCT in Mosul, 'Special Defense Department Operational Update Briefing on Operations in Northwest Iraq', Department of Defense, Washington, DC, September 14, 2005.

<sup>33</sup> Edward Wong, 'Attacks by Militant Groups Rise in Mosul', *The New York Times*, February 22, 2005;

of cells in Mosul and Tal Afar.<sup>34</sup> In some cases, local families were divided – with different members of the same family joining different insurgent groups.<sup>35</sup> Unlike the case in Anbar, however, relationships between the Baathist and Islamist insurgent groups did not break apart as they had in late 2006 during the battle for Ramadi, although some U.S. commanders reported Baathist disaffection with the Islamist/Zarqawi/Ansar Al-Sunna elements in early 2005.<sup>36</sup> Still, there were few public reports indicating confrontations between these groups like those that had unfolded in Anbar province in 2006. The character of the insurgency in Mosul changed in the spring of 2005, with U.S. forces seeing many more foreign fighters from such places as Algeria, Libya, Yemen and Saudi Arabia. These fighters were less well trained than the Baathists and the foreign fighters that initially appeared on the battlefield in late 2003 and 2004.<sup>37</sup> Suicide vehicle and suicide bomber attacks became the preferred insurgent attack in the last spring and summer of 2005.

Mosul's location near the Syrian border and its traditional role in smuggling and trade clearly represented one reason why the city became a favored location. The terrain represented another attractive feature. Mosul's urban landscape and the topography around the city provided a rich environment for the insurgents. The urban environment featured an extremely dense population and a warren of winding streets and ancient buildings. The area around Mosul contains many forests and groves as well as marsh lands on both sides of the Tigris. These features provided plenty of cover to hide training areas and insurgent compounds. The size alone allowed space for the various

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<sup>34</sup> 'Ba'athists Reportedly Direct Attacks from Syrian Border Town', Elaph Website, March 8, 2005. The report identified Muhammad Yunis al-Ahmad as a key Baathist leader directing operations from the Syrian border town of Al-Qamishli.

<sup>35</sup> 'Two Brothers in Arms: Two Faces of the Same Uprising', *Irish Times*, May 26, 2005.

<sup>36</sup> Brown, Defense Department Briefing, September 14, 2005.

<sup>37</sup> Brown, Defense Department Briefing, September 14, 2005.

insurgent groups to act independently of each other, in cooperation with each other, and in direct confrontation of each other, depending on the conditions of the region and the overall political landscape.<sup>38</sup> Insurgents mounted a series of vicious suicide attacks in early 2005 against Shi-ite mosques in Mosul, suggesting Sunni Islamist groups sought to stoke sectarian violence there as they had elsewhere in Iraq.<sup>39</sup>

Like everywhere else in Iraq, U.S. efforts to control the violence and provide local security clearly were hampered by the lack of troops. The sheer size of the area greatly complicated COIN efforts by U.S. and Iraqi forces after the departure the 101<sup>st</sup> in January 2004 and its replacement by 3<sup>rd</sup> Brigade, 2<sup>nd</sup> Infantry Division, or 3/2 Stryker Brigade – a force 1/3 the size of the 101<sup>st</sup>. Insurgents clearly exploited the reduction in U.S. troop strength – exacerbated by 3/2's deployment to several operations outside the province during its deployment. In late 2003, insurgents mounted an average of 15 to 20 attacks per week on U.S. forces. Insurgent violence steadily increased in early 2004 following the departure of the 101<sup>st</sup>. In early 2004, the average number of attacks doubled and reached 150 per week by the end of 2004.<sup>40</sup> In January 2005, U.S. commanders lamented the lack of troops in northern Iraq that had hamstrung their ability to control the insurgency.<sup>41</sup> During late 2004, American troop strength nearly doubled in northern Iraq to approximately 11,000 as the U.S. struggled to scrape forces together to provide security for the January 2005 elections.

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<sup>38</sup> Annia Ciezadlo, 'Fragmented Leadership of the Iraqi Insurgency', *Christian Science Monitor*, December 21, 2004.

<sup>39</sup> Robert Enders and Edward Wong, 'Bombing at Shiite Mosque in Mosul Leaves 30 Dead', *New York Times*, March 11, 2005; Also see David Enders, 'Suicide Bomber Kills 36 at Shiite Funeral', *The Independent*, March 11, 2005.

<sup>40</sup> Drawn from Lieutenant Colonel Robert Hulslander, 'The Operations of Task Force Freedom in Mosul, Iraq: A Best Practice in Joint Operations', *JCOA Journal*, September 2007, p. 18.

<sup>41</sup> Tom Lasseter, 'Hard Lessons for High Tech Force: Some Stryker Brigade Soldiers Blame Violence in Mosul on Insufficient Numbers of U.S. Troops', *Philadelphia Inquirer*, January 23, 2005



The environment throughout 1/25 was extremely violent as the the unit struggled to restore order. The summer of 2005 saw other vicious attacks. In late June, a series of four coordinated suicide bomber attacks over 16 hours left 38 dead.<sup>42</sup> At the end of July, a another suicide bomber killed 25 potential army recruits at an enlistment station.<sup>43</sup> Over 2005, however, 1/25 unquestionably made enormous strides in its COIN campaign and worked hard to re-introduce the Iraqi police force and train the Iraqi Army to start taking more responsibility for combating the insurgency.<sup>44</sup> By mid-2005, elements of the the 1<sup>st</sup> Iraqi Army Division actively patrolled the center of Mosul.

When 1/25 arrived in September 2004, the unit received 300 mortar attacks a month. By the time it departed., these attacks had been reduced to an average of six a month.<sup>45</sup> Nearly 9,000 Iraqi police had been brought back and the number of intelligence tips called in by the local population had risen from 40 to 400 per month.<sup>46</sup> In September 2005, U.S. military commanders reported that they had disrupted 80 percent of the Al-Qaeda network in northern Iraq.<sup>47</sup> Levels of violence had peaked in 2004 with nearly 20 per day and steadily dropped in 2005 to between seven to nine attacks per day when the 172<sup>nd</sup> arrived in August.

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<sup>42</sup> Richard Opiel and Eric Schmitt, 'Bombing Attacks on Iraqi Forces Leave 38 Dead in North', *The New York Times*, June 27, 2005.

<sup>43</sup> Dlovan Brwari and Ellen Knickmeyer, 'Suicide Bomber Targets Army Recruits', *Washington Post*, July 31, 2005.

<sup>44</sup> David Axe, 'U.S. Forces Rebuild Ragged Police Force', *Washington Times*, April 13, 2005; Steve Fainaru, 'Handoff to Iraqi Forces Being Tested in Mosul', *Washington Post*, April 7, 2005. Details of 1/25's COIN campaign also summarized in Ren Angeles, 'Examining the SBCT Concept and Insurgency in Mosul, Iraq', *Infantry Magazine*, May 1, 2005; Also see Major David M. Hamilton and Captain Ryan C. Gist, 'Synchronizing Lethal and Nonlethal Effects in 1/25 SBCT', *Field Artillery Journal*, July/August 2004, pp. 17-23.

<sup>45</sup> Brown, Defense Department Briefing, September 14, 2005.

<sup>46</sup> Ibid. Also Noted in Robert Kaplan, 'The Coming Normalcy', *The Atlantic* (April 2006), pp. 72-81.

<sup>47</sup> Brown, Defense Department Briefing, September 14, 2005.

## **Pre-Deployment Training**

The 172<sup>nd</sup> was well aware that it was deploying into a complex political environment and a persistent, violent counterinsurgency. It maintained a situational awareness of events in Mosul and northern Iraq through numerous secure video teleconferences with the 1/25 SBCT and the numerous intelligence products available on the Defense Department-wide secure internet protocol router, or SIPRnet. The unit tailored its training using lessons learned from 1/25 to build pre-deployment COIN capacities for which there was no formal SBCT doctrinal preparation. The brigade leadership fully grasped that it could not necessarily rely on existing Stryker doctrine to provide it with guidance on how to fight the battles that awaited the brigade in northern Iraq.<sup>48</sup> Like many wartime commanders before him, Shields grasped the obvious: ‘you’ve got to fight the fight you got, not the one you wanted and you know maybe in a future fight doctrine catches up with you.’<sup>49</sup> The brigade leadership consciously sought out expertise and background that would help prepare the organization for the coming fight. Battalion commanders encouraged professional reading programs for their unit leaders all the way down to the squad level to promote a general familiarity with COIN theory and practice. Books and articles by authors such as David Galula, John Nagl, David Kilcullen and others were shared throughout the brigade, and extensive information on lessons learned in Iraq was gleaned from the Army’s Center for Lessons Learned, or CALL, website. The CALL website and its supporting component called Strykernet came to represent an alternative to established doctrine as units from the war posted voluminous after action reports detailing their experiences and listing SOPs that worked on the battlefield. Just as important, units

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<sup>48</sup> See *FM 3-21.31 Stryker Brigade Combat Team (SBCT) Operations Doctrine Field Manual*

<sup>49</sup> Author interview with Colonel Michael Shields, 172<sup>nd</sup> SBCT commanding officer, June 10, 2008. Shields was subsequently promoted to brigadier general.

preparing to deploy to Iraq voraciously consumed the CALL products to get ready for their deployment – the 172<sup>nd</sup> clearly was no exception to this rule. In addition to educating his organization about COIN, Shields sought to build a mindset throughout the organization that he characterized as ‘a warrior ethos with the mindset that we’re the hunters not the hunted.’<sup>50</sup>

The unit constructed a pre-deployment training program that emphasized five critical skills sets for all members of the unit – ranging from the cooks and supply clerks all the way up to the senior leadership: marksmanship, medical training, small unit battle tactics, physical fitness training, and digital communications competencies.<sup>51</sup> Having an organization with such a system-wide training base helped stretch the combat power of the brigade over the wide areas of northern Iraq. During the deployment, cooks became rifleman and prison guards, artillerymen became infantrymen and civil affairs officers, fire support officers managed information operations, and mechanics protected their own convoys from insurgent attacks. To further squeeze combat power from the organization, the brigade instituted organizational changes to de-emphasize those conventional warfare capacities that wouldn’t be needed in northern Iraq. In recognition that large-caliber, long-range artillery would not be of much use in the COIN campaign, the brigade’s 4-11<sup>th</sup> Field Artillery battalion converted itself to an infantry-type maneuver battalion while simultaneously maintaining its core artillery skill sets. Each Stryker brigade has its own indigenous artillery battalion with a complement of M198 155mm howitzers and mortars mounted inside the Stryker vehicles. The 4-11<sup>th</sup> changed its training program to build maneuver competencies and developed a whole new series of unit TTPs for use around Mosul.

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<sup>50</sup> Ibid.

<sup>51</sup> Ibid.

The battalion subsequently deployed into an area south of Mosul, conducting successful COIN operations in a 5,000 square mile area, partnering with an Iraqi brigade and 21 police stations.

The brigade consciously embraced the concept of distributed operations, which leveraged the Stryker's mobility and digital communications capabilities. During pre-deployment training, Shields established a junior leader development program to build decision-making skills and empower the platoon and squad leaders that would be directly engaged with the enemy, using the varieties of different competencies they would need on the battlefield. The brigade conducted numerous and varied mission related exercises designed to strengthen the decision-making skills of its junior leaders in a variety of combat and non-combat related areas. Outreach classes were conducted with the unit's local municipality organizations in Fairbanks, Alaska, where the unit received classes on trash removal, power generation, sewer maintenance and other municipal-type services.<sup>52</sup> The unit worked with the Fairbanks police to receive training classes in crime scene exploitation and evidentiary procedures. These outreach classes included classroom lectures from the Defense Language Institute on Iraqi culture and basic communications skills.<sup>53</sup> At the tactical level, the brigade knew that it would be conducting dismounted patrols on a 24/7 basis to generate local contact and tailored its TTPs prior to deployment accordingly. The brigade also realized that it would be conducting extensive partnering and training relationships with the Iraqi police and Army and worked hard to be ready to assume these partnerships. The scale of these relationships, however, was not

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<sup>52</sup> This preparation proved its worth in the field, see Tataboline Brant, 'Alaskans' Tour Passes Midpoint: Brigade Loses 14 While Training Iraqi Troops to Battle Insurgents', *Anchorage Daily News*, May 15, 2006.

<sup>53</sup> Margaret Friedenauer, 'Stryker Soldiers Get Battlefield, Cultural Training', *Fairbanks Daily News-Miner*, June 6, 2005.

anticipated – but the unit reoriented systematically its capacities in early 2006 to assume the additional burdens associated with training over 15,000 Iraqi soldiers. All these preparations sought to produce an adaptive organization and a flexible work force capable of handling decisions-making that reflected the demands of full-spectrum operations. As noted by Colonel Shields: ‘The squad leader and above need to read, need to be experts on counterinsurgency theory cause you’ve got soldiers and leaders everyday that are making tactical decisions with strategic consequences.’<sup>54</sup>

Upon its arrival in September 2005, the 172<sup>nd</sup> mission was stated as: ‘172<sup>nd</sup> SBCT builds capable ISF and conducts counterinsurgency operations to neutralize AIF [anti-Iraq forces] in order to transition the security lead for defeating the insurgency to the ISF and the Nineveh government.’<sup>55</sup> Like many units deploying to Iraq in this period, the 172<sup>nd</sup> initially arrived ready to defeat the insurgents and then gradually re-oriented its organizational mindset to embrace the range of kinetic and non-kinetic effects it sought to bring to the environment. By November, the 172<sup>nd</sup> mission statement had been expanded to include: partner and build Iraqi Security Force capability – both Iraqi Police and Iraqi Army; progressively transition battle space to the 2<sup>nd</sup> Iraqi Army; neutralize AIF leadership; provide perception of security in the populace, deny enemy freedom of movement/sanctuary, secure the national and provincial and electoral process, develop, execute spheres of influence engagement, protect the force, treat all Iraqi people with dignity and respect.<sup>56</sup> The brigade established a series of logical lines of operations to address security, training the ISF, civil-military

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<sup>54</sup> Ibid.

<sup>55</sup> PowerPoint Presentation titled ‘172<sup>nd</sup> SBCT Operations’, dated November 26, 2006.

<sup>56</sup> PowerPoint Presentation titled, ‘Fighting COIN: ‘It’s All Connected’: TF 2-1 Leader Assessment’, Mosul Iraq, undated. The brief specifically references the 172<sup>nd</sup> campaign plan as documented in 172<sup>nd</sup> Fragmentary Order 63 and Operational Order 05-101 (Campaign SOVEREIGN QUEST), November 9, 2005.

operations, and governance. The expansion in the unit's campaign plan reflected the unit's ability to adapt in the environment and build new organizational competencies that addressed the complexities of the battle space. The unit sought to create a series of end-states that reflected its mission priorities:

1. The 2nd Iraqi Army Division has assumed battle space and is capable of conducting independent COIN operations;
2. Anti-Iraq Forces, or AIF, leadership is unable to exercise effective control of the insurgency within Mosul and the broader area of operations;
3. The population has a perception of physical security and provides security forces with information from local sources;
4. The Iraqi police function within the rule of law and are effective in providing law and order in urban areas;
5. Conditions are set for a more limited coalition troop presence;
6. Coalition forces are in a tactical over watch to support Iraqi Security Forces (police and army) with key enablers, such as command, control, computers, communications, intelligence, and combat support when necessary;
7. The provincial leadership in Nineveh is perceived as legitimate and responsive to public needs, providing hope of a better quality of life for the people;
8. Popular support for the insurgency has eroded, the duly elected leadership enjoys public consent and is able to exercise both security control and enforce the rule of law;
9. Government systems are transparent and accountable.<sup>57</sup>

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<sup>57</sup> PowerPoint Briefing, 'Fighting COIN: 'It's All Connected': TF 2-1 Leader Assessment', Mosul Iraq, undated, with author adaptations.

When the brigade arrived, it primarily focused on neutralizing the insurgency to create favorable conditions for voting in the national referendum in October 2005 and the national elections in December. Only 11 percent of eligible voters had participated in the January 2005 elections. That number increased to 56 percent in the October referendum and 61 percent in the December national elections. This represented an increase from 200,000 in January 2005 to over 800,000 in the December 2005 elections. Insurgents mounted no successful attacks that significantly disrupted the December elections. As the brigade saw steadily improving security and increased the readiness of the ISF, the percentage of kinetic operations significantly shifted to a ratio of 80 percent non kinetic, 20 percent kinetic. As the security environment became less violent, the brigade systematically shifted to a building up the capacities of the ISF.<sup>58</sup>

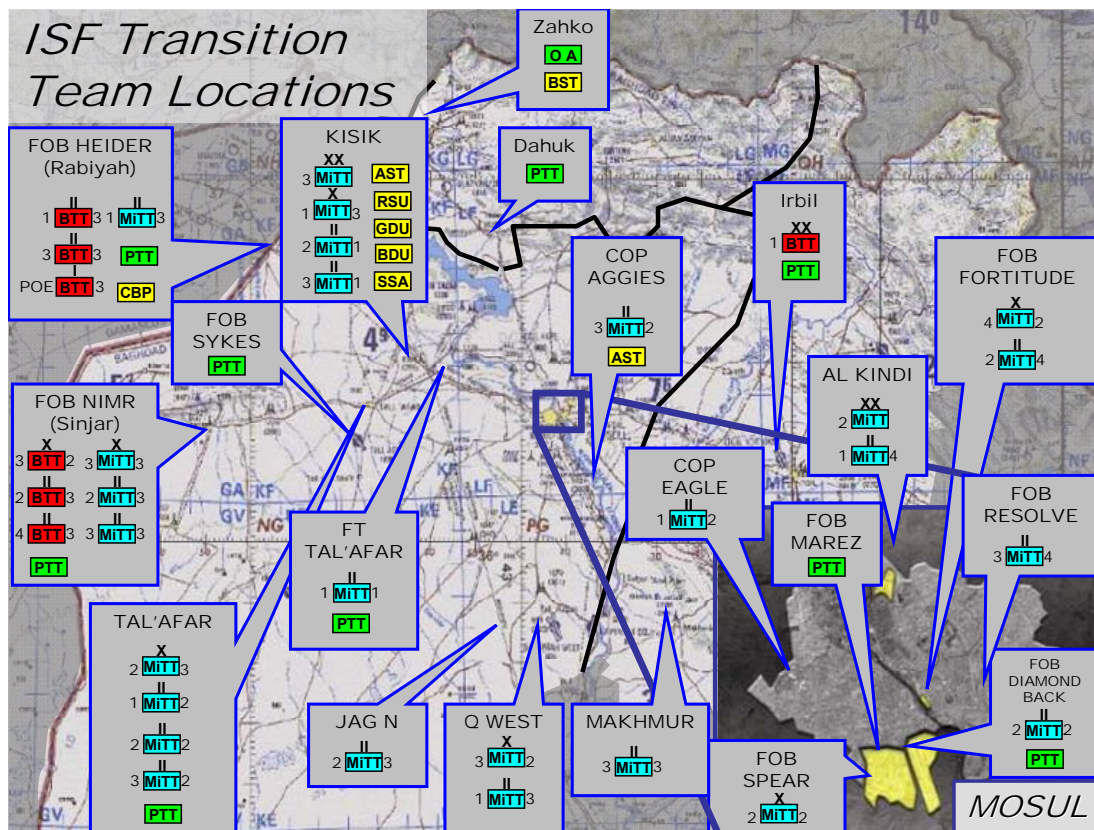
### **172<sup>nd</sup> TF Partnering Activities**

In late October 2005, Shields changed the number one priority from neutralizing the insurgency to increasing the readiness of the ISF – police and Army and border police. This represented an enormous task on a scale that had not been contemplated prior to the deployment. The brigade partnered with the 2<sup>nd</sup> Iraqi Army Division totaling 11,000 troops and the 3<sup>rd</sup> Iraqi Army Division of about 7,000 troops. These units were divided into seven brigades, 22 battalions and three emergency response battalions. The police force in the province totaled approximately 18,000, with 8,000 in Mosul and 2,000 in Tal Afar. The police force was divided between 17 different districts and 114 different police stations. Much progress had been made by 1/25

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<sup>58</sup> Evolution of the brigade's mission is covered in Nelson Hernandez, 'Mosul Makes Gains Against Chaos', *Washington Post*, February 2, 2006.

SBCT in reconstituting the police force after the insurgents took over Mosul in November 2004. Numerous new police stations had been built and destroyed stations rebuilt during its deployment. The 172<sup>nd</sup> built on the momentum of 1/25 in rebuilding the police during 2005. The brigade's partnering arrangements were executed through the 'coalition company,' which partnered with an Iraqi Army Battalion, a Police district and their corresponding MiTT or special forces unit. The distribution of the units partnered with the ISF is detailed in Figure 5-4.



**Figure 5-4**

Distribution of Teams Partnered with Iraqi Police and Army in 2005-2006

Source: PowerPoint presentation titled '172<sup>nd</sup> SBCT Operation' dated November 26, 2006

As was the case in much of Iraq in 2005 and 2006, while there were vast numbers of Iraqi troops identified on briefing slides passed around offices in Washington D.C.,



their combat capacities were at best limited, or, in most cases, nonexistent. The troops lacked equipment and training and suffered from the previous experiences in an Iraqi Army that featured centralized control, no junior leader development and a non-commissioned officer corps that had no background or experience in small unit leadership and tactics. Many Iraqi units had never fired their weapons – if they had any weapons at all. While there were a few competent units in northern Iraq mostly comprised of Kurdish troops, most of the Iraqi Army in the north during this period existed in name only. Many had poor or absentee senior leadership that evinced more interest in taking a paycheck and going on leave than in training and conducting dangerous COIN operations. The training effort in northern Iraq to stand up an Army and police force from scratch fell to the 172<sup>nd</sup>, a collection of 11-man Military Transition Teams, or MiTTs, and Special Forces trainers from the 1<sup>st</sup> Battalion, 5<sup>th</sup> Special Forces Group that had arrived in Iraq in May 2005.<sup>59</sup>

While the police were on the road to recovering from their collapse in Mosul in November 2004, the 172<sup>nd</sup> needed to increase the numbers of available trained police that were graduating from the police academies in Mosul and Amman, Jordan. The throughput from these academies simply did not meet the demand. To solve the problem the 172<sup>nd</sup> helped create a training and education infrastructure to build and maintain core competencies in both the police and the Army. The brigade leadership decided on these specific steps on its own initiative after arriving in theater.<sup>60</sup> The 172<sup>nd</sup> and its task force participants designed a comprehensive program to address the deficiencies in Army and police forces. Each unit of the brigade actively participated in the partnering efforts. A centerpiece of the program was the Northern Iraqi

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<sup>59</sup> For background on this effort in 2006-2007, see *SFA Case Study – Mosul, Iraq*, Joint Center for International Security Force Assistance, Joint Chiefs of Staff, Washington DC, undated.

<sup>60</sup> Author interview with Colonel Michael Shields, June 10, 2008.

Regional Training Center at Hamam al Alil – a facility that housed the Army training course and an Iraqi Police Basic Skills Academy.<sup>61</sup> The 4<sup>th</sup> Battalion, 23<sup>rd</sup> Regiment and a team from the Multi-National Security Transition Command-Iraq, or MNSTC-I, helped stand up the center in Hamam al-Alil in southern Mosul. The two Iraqi Army divisions enthusiastically supported the idea and immediately sent students to the multi-faceted training program that delivered a junior officer development course and a non-commissioned officer academy. The NCO academy put Iraqi NCOs through courses in squad leader’s tactics, platoon sergeant responsibilities and combat medical training. The brigade’s 4<sup>th</sup> Battalion, 11<sup>th</sup> Field Artillery Regiment played an instrumental role in establishing the center’s police training facility along with the 709<sup>th</sup> Military Police Battalion. The province’s police director, General Wathiq, strongly supported the idea and worked with both units to develop the program of instruction. Under the plan, Iraqi police received; (1) firearms training with the host battalion (4-11<sup>th</sup>) at a firing range; (2) law and order training from the 709<sup>th</sup>; (3) proper search and patrol procedures. After the first three months of operation, the police training curriculum was turned over to trained Iraqi policemen. The 1-17<sup>th</sup> set up a course to ‘train the trainers’ with a basic and advanced marksmanship academy at FOB Marez in the south of Mosul. These trainers then went back to their Iraqi Army units to administer the course. The brigade’s 2-1 Infantry administered a training center at Al Kindi (see Figure 5-4) to the north of Mosul. It stood up two advisory teams that cycled through platoons from the 4<sup>th</sup> Iraqi Army Brigade to train in maintenance, logistics, driver training, and small unit battle drills.

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<sup>61</sup> Details of the NIRTC opening are in Margaret Friedenauer, ‘Officer Training Center Rises From Former Terrorist Stronghold’, *Fairbanks Daily News-Miner*, December 17, 2005.

The 172<sup>nd</sup> leveraged these ongoing courses with the training program conducted by 1st Battalion, 5th Special Forces Group (Airborne) that had arrived northern Iraq several months prior. The 1-5 executed what became known as the ‘BATT’ mission (Battalion Augmentation Training Team) in Ninewa from May 2005-Jan 2006. The 1-5, commanded by Colonel Mark Mitchell, provided Special Forces Operational Detachments Alpha (‘SFODA’ or A Teams) to train battalions of the 2nd and 3rd Iraqi Army Divisions. The battalion initially deployed to northern Iraq when it became apparent that the 1/25 could not provide personnel to cover the training requirement. The arrival of 1-5 in northern Iraq came as part of the ‘Special Forces Surge’ in mid 2005 came after significant interagency debate, but the dire situation in the north eventually convinced military leadership to invigorate the attempt to build ISF capacities.<sup>62</sup> The deployment of 1-5 required a substantial increase (nearly 40%) in the total SF ‘footprint’ in Iraq and 300% increase (5 SFODAs to 20 SFODAs) in the special forces presence in Northern Iraq. The deployment of special forces was deemed necessary because the U.S. Army MiTT program remained in its infancy and the existing transition teams with the Iraqi Army were unable to handle the massive training requirements of 18,000 Iraqi Army personnel in northern Iraq. The special forces deployment provided the targeted Iraqi Army units with dedicated, properly resourced trainers whose special forces background and training had prepared them for the mission. By contrast, the Army’s MiTT program had not yet gathered internal momentum and did not draw from an established professional cadre that had long experience in the training foreign militaries. At that stage of the war, many Army officers viewed assignment to a MiTT team in Iraq as a career limiting assignment. One of the special forces’ core competencies was development of foreign internal

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<sup>62</sup> Author interview with Colonel Mark Mitchell, commanding officer of the 1<sup>st</sup> Battalion, 5<sup>th</sup> Regiment, March 24, 2009.

defense, or FID. While the unit's orders directed that it conduct training at the company level, 1-5 also assisted with organizing, training, and equipping local Iraqi Police forces and established professional development courses for Iraqi officers and NCOs. These efforts further leveraged the 172<sup>nd</sup> training program throughout the province.

The SFODAs helped feed reliable and timely intelligence to the brigade task force members. The intelligence developed from the special forces was routinely and directly shared with the conventional forces at all levels and vice versa. Both the conventional and special forces participated in the joint targeting process at all levels of command. The HUMINT networks developed by the Special Forces helped provide a detailed picture of many insurgent activities beyond the borders of Northern Iraq. This resulted in the disruption of multiple insurgent cells and networks and a reduction in their operational capabilities.<sup>63</sup>

While the 172<sup>nd</sup> realized it would be partnering with Iraqi Army and Police units, it did not realize the scale of the effort that would be required. Soon after its arrival in theater, the unit realigned its approach to place these partnership activities at the center of its COIN campaign. As noted by Shields, 'We knew we'd partner with the ISF, but partnering and really taking on advising, training, increasing the readiness was not something we spent any resources on in the train up. We just embraced it as an organization and everybody bought in and understood.' When the brigade arrived in August 2005, none of the Iraqi Army units had transitioned to assuming the lead in combined operations. Only 1,500 Iraqi police had been put through a training

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<sup>63</sup> Author interview with Mitchell.

program. By August 2006, 14 Iraqi Army battalions and two Army brigades had assumed the lead for COIN operations in the province – reaching a ‘level 2’ readiness proficiency – meaning they were capable of platoon-level actions in the field. That did not mean they could conduct independent operations, but their capabilities had increased significantly.<sup>64</sup> Setting aside the issue of actual combat capabilities, most Iraqi Army units throughout the country lacked a logistics system to support sustained operations. The Iraqi government had contracted out much of its Army’s logistics requirements, which meant that logistical support appeared sporadically or not at all.<sup>65</sup> Over the same period, 9,540 Iraqi policemen had graduated from the training academies. Twenty police stations had been rebuilt and 12 remodeled over the course of the deployment.

## **Intelligence**

The brigade made organizational changes to its intelligence support structure before it arrived in northern Iraq and made still more changes on arrival after it arrived in theater to address shortfalls once operations commenced. The relationships and procedures surrounding the collection, dissemination and analysis of all source intelligence at Task Force Freedom, the Joint Special Operations Task Force, the 172<sup>nd</sup> SBCT TF as well as its predecessor 1/25 SBCT should serve as models for the possibilities that can arise when organizational barriers come down and information flows horizontally throughout organizations involved in the fight. A series of seamless relationships were built between a wide variety of U.S. government agencies and various operating components (both conventional and special forces) that enabled

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<sup>64</sup> U.S. Federal News, ‘Iraqi Security Forces Take on the Insurgency in Nineveh’, July 21, 2006

<sup>65</sup> Also common problem in the ISF units being trained in Anbar in 2005-2006 as detailed in Chapter Three and Four.

Stryker units in northern Iraq during the period to feed all source intelligence from many different sources into an integrated planning and operational cycle that drove tactical operations. The 172<sup>nd</sup> greatly benefited from a series of ‘best practices’ that had been built during 1/25’s deployment that had flattened the organizational architecture for intelligence supporting units and built extraordinary inter and intra-agency coordination in organizational communities known in peacetime for behaving in just the opposite way. In northern Iraq, many traditional procedures that stove-piped the usual hierarchical-vertical flow of intelligence information disappeared in the support to the war fighter. In this theater of the Iraq COIN campaign, at least, it is clear that task-organized groups of technical and substantive experts from different agencies freely cooperated in their support for tactical operations, leveraging an already well-trained, adaptive military force into becoming even more proficient on the battlefield. While these relationships were based on trust and cooperation between professionals, the information flow to the tactical units was helped immeasurably by the Stryker’s digital and satellite communications backbone that provided commanders with the bandwidth and encryption capabilities to pass information freely throughout the network – a network that in this case stretched all the way back to a wide variety of agencies headquartered in the United States. The flattened intelligence architecture served as an instrumental component in the 172<sup>nd</sup>’s embrace of distributed operations that drove authority down to the company- and squad level. Robert Kaplan described the phenomenon as it had developed during the 1/25 deployment, but he could just as equally have described the phenomenon in the 172<sup>nd</sup>:

Autonomy is further encouraged by the flat ‘intelligence architecture’ of the Stryker brigades. Information now comes to captains less and less from battalion headquarters, and

more and more from other junior officers in other battalions, via informal e-mail networks, as well as directly from Iraqi units. The lieutenant colonel who commands an infantry battalion, and the major who is the captain's executive officer, do not always have to be consulted. Given the results, the commanding officers like it that way. One evening in March of 2005, a captain acting on a tip from an Iraqi source – and seeking no permission from above – carried out six raids in Mosul over a few hours, netting fourteen out of twenty members of an insurgent cell, plus large numbers of weapons and several vehicles. In August, a tip that the insurgent leader Abu Zubayr was planning to assassinate a local police chief led a company captain to develop a plan to trap Abu Zubayr by using the tipster as bait. The captain had Abu Zubayr's movements tracked by means of an unmanned surveillance plane. Abu Zubayr was cornered and killed, along with two other key area insurgents.<sup>66</sup>

In northern Iraq as elsewhere in the country, a wide variety of intelligence agencies and their personnel supported military forces: the National Security Agency deployed communications specialists and equipment directly with field operating units; career professionals from the Central Intelligence Agency developed HUMINT source networks that proved extremely robust particularly early in the 172<sup>nd</sup> deployment; the National Image and Mapping Agency helped provide detailed overhead imagery to all units to create common situational awareness of complex urban environments; the National Ground Intelligence Center deployed teams of analysts and help gather and analyze information on insurgent networks; the United States Army Intelligence and Security Command deployed teams to help in the collection and analysis process. Each of these national-level agencies and others, such as the Defense Intelligence Agency, supported deployed forces and vice versa. During the 172<sup>nd</sup> deployment,

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<sup>66</sup> Kaplan, 'The Coming Normalcy', pp. 72-81.

these agencies worked seamlessly in informal task groups to directly support military operations.

The organizational changes made by 1/25, the 172<sup>nd</sup>, and special operations forces operating in the area observed three main principles: (1) the cross-organization and cross echelon integration of intelligence sharing in the field and integration of national-level collection capacities; (2) the evolution of procedures where ‘need to share’ overrode ‘need to know.’ This philosophy encouraged the horizontal integration of collection, analysis and operations; (3) the lowering of the threshold of what constituted ‘actionable’ intelligence to enable rapid action in the field.<sup>67</sup> Task Force Freedom ensured the continuity of these best practices when the 172<sup>nd</sup> arrived in September 2005, and the brigade embraced the established procedures and relationships that had been established by its predecessor. For its part, Task Force Freedom facilitated the process by obtaining the necessary equipment to gain access to national-level intelligence and stood up its own mini joint interagency task force, or JIATF, that gave its members access to the many different elements in the vast U.S. intelligence community.<sup>68</sup> Members from the agencies in northern Iraq worked with the JIATF to support operations in the field, effectively constituting a national-level organization working in direct support of tactical operations.<sup>69</sup> One of the products developed by the JIATF was a province-wide joint targeting list that got shared with all operational components throughout the province. The effort was facilitated by the

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<sup>67</sup> Principles summarized by Lieutenant Colonel Robert Hulslander, ‘The Operations of Task Force Freedom in Mosul, Iraq: A Best Practice in Joint Operations’, *Joint Center for Operational Analysis Journal*, Joint Forces Command, Norfolk, Va., (September 2007), pp. 18-21.

<sup>68</sup> The JIATF had been initially stood up by the 101<sup>st</sup> Airborne division immediately after the invasion. See Donald P. Wright and Colonel Timothy R. Reese with the Contemporary Operations Study Team, *On Point II - Transition to the New Campaign: The United States Army in Operation Iraqi Freedom May 2003 to January 2005* (Combat Studies Institute Press: Fort Leavenworth, KS, 2008), <http://www.globalsecurity.org/military/library/report/2008/onpoint/index.html>, accessed February 1, 2009. Details in Chapter 5, Intelligence and High Value Target Operations.

<sup>69</sup> Hulslander, p. 19.



development of a series of new intelligence databases employed throughout Iraq that greatly assisted in creating common situational awareness in the intelligence sections of units deployed in the field. The list proved extremely useful in the 172<sup>nd</sup> information operations campaign as will be detailed later.

The 172<sup>nd</sup> fully recognized the importance of Tactical Humint Teams, or THTs, before it deployed and took additional steps to build its THT expertise upon arriving in Iraq. When the 4-14 Cavalry Group got stripped from the brigade as it deployed into Iraq, the unit's THTs got redistributed throughout the brigade's other battalions to boost their THT capacities. In return, the 4-14 received additional infantry components to allow it to do cordon and search operations and establish flash control points on the road network around Rawah.<sup>70</sup> It became clear early in the 172<sup>nd</sup>'s deployment that its THT at the battalion level lacked the experience to build local source networks and to gather relevant information during detainee questioning. These deficiencies were not unique to the 172<sup>nd</sup> – they plagued most units at the beginning of their deployment cycles before personnel gained experience and built expertise. The 172<sup>nd</sup> leadership recognized this systemic problem and formed a non-doctrinal working group to address the issue. The brigade subsequently beefed up its THT expertise by reaching out to the Joint Special Operations Task Force at Task Force Freedom that had vast experience in building and managing HUMINT networks.<sup>71</sup> The special forces personnel helped the 172<sup>nd</sup>'s THT's get up to speed, and intelligence collection from detainee questioning and HUMINT sources greatly increased in the first several months of the deployment. In addition to help from special forces, the brigade plussed up their battalion THTs and designed new

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<sup>70</sup> Author interview with Colonel Michael Shields, June 10, 2008.

<sup>71</sup> Hulslander, pp. 18-21.

interrogation strategies based on inputs from a variety of sources. Early in the deployment, the brigade drew upon and successfully leveraged the capacities of resident Central Intelligence Agency personnel that had vast experiences in building HUMINT networks.<sup>72</sup> The use of so-called ‘OGAs’, or other government agencies, proved instrumental in helping the brigade begin developing the local source networks that would prove critical to their COIN campaign. Later in the process, Iraqi Army and Iraqi police were brought into the THT process to help guide detainee interrogations. The partnering efforts enabled through the brigade working group dramatically improved the 172<sup>nd</sup>’s intelligence collection effort and, as will be detailed in the 2-1 section of this chapter drove successful COIN operations.

The philosophy of ‘need to share’ drove the brigade’s approach to intelligence no matter from which source. To assist in the free movement of information between organizations, the brigade dispensed with the bureaucratic requirement that all information to be passed through the headquarters and down to its units. Instead, information could be transmitted from collectors in different agencies directly to units either in the field or preparing for their patrols. There is no question that the transmission of highly classified information directly to operating units was facilitated by the Stryker’s digital and satellite communications network that allowed encrypted information to get passed directly to patrolling units. It also was facilitated by the attitudes of the collectors, which technically could have classified the information in compartments that would have prevented the information from being transmitted over the Stryker’s digital backbone. The willingness of these agencies to allow the 172<sup>nd</sup> to widely and quickly disseminate the information proved it worth time and again in

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<sup>72</sup> Author interviews with Shields, June 10, 2008, and Colonel Charles Webster, Commanding officer of 2<sup>nd</sup> Battalion, 1<sup>st</sup> Regiment, March 7, 2009.

successful tactical operations executed by empowered junior leaders. The brigade's encrypted communications network proved instrumental in placing the intelligence analytical unit directly in support of patrolling forces and proved its worth in many quick-turnaround operations for both 1/25 and the 172<sup>nd</sup> in which squad leaders could quickly cross reference local tips with established intelligence databases that led to cache finds as well as high-value target raids that netted sought-after insurgent cell leaders.<sup>73</sup> This phase of the war also saw the gradual creation of a new series of databases by such agencies as the National Security Agency used by all operating units in the field. These databases helped battalion and brigade staffs to quickly correlate all-source intelligence on suspected targets. Other, simpler steps helped immeasurably. Various company commanders purchased phones in the local economy supported with pre-paid phone cards.<sup>74</sup> These cell phones proved to be extremely useful to the brigade's company commanders, who passed their numbers freely around the local communities in which they worked. Soon, tips from the locals began arriving over these cell phones and passed up into the intelligence network collection and analysis apparatus.<sup>75</sup> Each battalion sector subsequently built vast 'walls' that diagrammed the insurgent cell structure throughout the area using link-nodal analysis. Units such as the 172<sup>nd</sup> developed extraordinarily detailed and coherent understandings of their insurgent adversaries through the fusion of various national-level organizational capacities with their own developing skills at tactical collection and analysis.

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<sup>73</sup> Examples will be provided later in this chapter.

<sup>74</sup> Author interview with Major Ed Matthaideess, commander of 'C' Company, 1<sup>st</sup> Battalion, 17<sup>th</sup> Infantry, March 12, 2009. Company C conducted COIN operations in south Mosul over the period.

<sup>75</sup> Ibid.

The brigade successfully lowered the threshold of what constituted ‘actionable’ intelligence. As relationships between the SBCT and the various supporting agencies matured, the brigade leadership encouraged government agencies operating outside the formal SBCT structure to pass their tips directly to operating units. Higher headquarters at Task Force Freedom strongly supported this approach and encouraged the 172<sup>nd</sup> to mount local operations on virtually all credible local tips.<sup>76</sup> The aggressive approach taken by Task Force Freedom and supported by the brigade had a self-fulfilling cycle as aggressive local operations drew upon and intelligence organizational structure that fused national, operational and tactical level in a continuously reinforcing cycle. As noted by Shields, ‘you can have a centralized intelligence architecture, but you’ll lose agility and so we had a phenomenal team in Mosul where we flattened our intelligence architecture, which played into our concept of distributed operations that was based on our junior leader development program.’<sup>77</sup>

## **Logistics**

Combat logistics in Ninewa proved to be a challenge that required a departure from doctrinal practice, which in conventionally-oriented fire and maneuver scenarios featured combat support on a linear battlefield with clear delineations between friendly and non-friendly forces. In Ninewa, there was no forward line of troops, or FLOT, to divide the battlefield and thereby guide logistical operations using traditional doctrinal practice. The 172<sup>nd</sup> fought as a distributed unit over extremely wide distances that militated against centrally-controlled logistical operations used in

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<sup>76</sup> Lieutenant Colonel Robert Hulslander, ‘The Operations of Task Force Freedom in Mosul, Iraq: A Best Practice in Joint Operations’, *Joint Center for Operational Analysis Journal*, Joint Forces Command, Norfolk, Va., (September 2007), p. 20.

<sup>77</sup> Author interview with Colonel Michael Shields, June 10, 2008.

conventional warfare. To support the operations of its widely distributed elements in 4 larger FOBs and 17 smaller COPs, the BSB and its 600 personnel adapted and innovated as it built support capacities to keep the brigade task force's combat elements in the field. The large distances between its combat unit customers represented just the first of several hurdles for the BSB to overcome. The BSB also found itself supporting a far larger force than just the 172<sup>nd</sup>, also providing varied levels of support to related task force elements as well as Iraqi Army and police units that had little sustained logistical support in place over the period. The BSB, commanded by Lieutenant Colonel Bill Keyes, operated from FOB Marez in Mosul and provided forward support to as many as 10,500 task force personnel in Ninewa and Anbar provinces – more than twice the number of people in the brigade. The numbers involved, however, only told part of the story. The soldiers receiving brigade-level support were organized into 11 differently configured battalion task forces and 11 separate companies, all of which had different numbers of personnel and which required different types and levels of support. For example, the 172<sup>nd</sup> 4-11 Field Artillery battalion, which had been almost completely reorganized in the pre-deployment training to function as a maneuver battalion, performed few indirect fire missions operating in the area south of Mosul operated in relatively quiet area. It relied mostly on HMMWVs for its tactical mobility. By contrast, the two maneuver battalions operating in and around Mosul (2-1, 1-17) were in daily contact with insurgents and depended on the Stryker to move around the battlefield. The 4-23, operated in Tal Afar and along the Iraq-Syrian border, which constituted its own unique environment. Last, but not least, the 4-11 cavalry group operated nearly 120 miles to the south in Anbar in Rawah and could count on little if any support from the neighboring Marine Corps units. Eventually, nearly 1,000 personnel operated out of

the main operating base at Rawah, requiring herculean efforts by the BSB in weekly 18-hour convoys to keep the base resupplied. Beyond the unique support requirements and dispersed locations for each of these complex task forces, each unit worked with multiple Iraqi Army Battalions and Iraqi Police Stations. In total, the brigade partnered with 21 Iraqi Army Battalions, 30 IP stations, and 2 Iraqi Commando units. Each Iraqi battalion then partnered with a MiTT and each Iraqi Police Station partnered with a Specialized Police Training Team (SPiTT). Both MiTTs, SPiTTs and BiTTs (Border Transition Teams) were supported by their partnered maneuver task force and the brigade support battalion. The numbers of units and personnel requiring support over such distances created a chronic manpower shortage for the BSB – there were simply not enough people in the BSB to perform all the support operations.

During the deployment to Mosul, Iraq, Keyes realized that he would have to drastically change and streamline his battalion's organizational structure to support the brigade's concept of distributed operations and the additional support requirements created by the 172<sup>nd</sup>'s task force members and ISF partners. The BSB normally consisted of a headquarters and headquarters company (HHC), a distribution company, a maintenance company, and a medical company. Keyes needed a more fluid and cross functional organization – a conclusion that had also been reached by his predecessor, 1/25.<sup>78</sup> Both units devised creative solutions to the logistical problems confronting them in northern Iraq. During the 1990s, the Army's approach to combat support featured 'just-in-time' logistics, which sought to avoid warehousing large stocks of materiel at or near the front lines. Instead, 'just-in-time'

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<sup>78</sup> Major Dwayne M. Butler and Captain Eric J. Van De Hey, 'The Logistics Support Team: SBCT Combat Multiplier', *Army Logistician* 37, No. 6 (November/December 2005), [https://www.almc.army.mil/alog/issues/NovDec05/sbct\\_multiplier.html](https://www.almc.army.mil/alog/issues/NovDec05/sbct_multiplier.html), accessed February 1, 2009.

combat logistics sought to deliver support as the maneuver units needed it for operations. This approach would be impossible to execute for the 172<sup>nd</sup> due to the distances between the brigade's units, the lack of transportation assets to move the equipment, and manpower shortages in the BSB to move such precise amounts of equipment on a short-notice basis. Keyes needed to design a flexible and adaptive stockpiling system that could enable the brigade's concept of distributed operations across a range of different scenarios that reflected the diverse tasks being performed by different units in the brigade.

Given the fluid nature of environment in northern Iraq and the disparate logistical requirements of his units, Keyes reached back to Army doctrine from the 1980s to help solve his problem. During the 1980s as the Army reoriented its doctrine towards the Airland Battle and deep strike maneuver, it created logistical support organizations called forward area support teams, or FAST, that embedded with the maneuver elements. Keyes adopted the same idea for the 172<sup>nd</sup>, effectively splitting the BSB into a series of cross-functional FAST teams that he sent out directly to the battalions dispersed throughout the area. The unit's predecessor – the 1/25, had employed a similar idea, naming the groups logistical support teams. The composition of each FAST team varied from one unit to another based on the location and requirements of the unit it supported. The FAST teams effectively extended the BSB's logistics capability forward to each battalion to facilitate support.<sup>79</sup>

The forward deployed FAST teams worked with their maneuver customers, providing a continuous stream of data for the BSB's planning and support operations

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<sup>79</sup> Information drawn from author interviews with Colonel Bill Keyes, April 8, 2009 and Major Jeffrey Dayton, Forward Maintenance Company Commander, 172<sup>nd</sup> BSB, 172<sup>nd</sup> SBCT, April 15, 2009.

administered out of FOB Marez. The FAST teams operated under the tactical control of the maneuver battalions and participated in all the battalion targeting and operational cycles. Out of this constant interaction with the battalion executive officers and targeting staffs, the teams developed a detailed understanding of the unit's support requirements. Using the brigade's digital communications system, the teams fed all their information into the BSB headquarters element at FOB Marez. The headquarters element compiled all the inputs from the teams and created an overarching brigade support plan based on a system of flexible, adaptive planning that matched unit support requirements with available support. Keyes and the BSB staff tried to anticipate the unexpected that could change their support requirements by war-gaming different support scenarios throughout the deployment. These war game exercises built a database for a range of different support scenarios that kept the support staff sharp and the BSB prepared to react to unanticipated events.<sup>80</sup>

Manpower shortages were a constant headache for the BSB – a casualty of the breaking up the battalion into forward-deployed embedded teams. The unit simply lacked the manpower to deliver the complicated support needs throughout the province. The BSB addressed this by developing creative work solutions that moved the organization 'outside the doctrinal box,' as characterized by Keyes.<sup>81</sup> Instead of using precious infantry combat power to provide convoy security, the BSB took responsibility for providing its own security teams, using cooks, mechanics, and clerks to guard its convoys. As was the case throughout the 172<sup>nd</sup>, the BSB personnel received combat related training and had to stay current on their marksmanship and

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<sup>80</sup> Ibid.

<sup>81</sup> Ibid.



combat medical training.<sup>82</sup> Using the detailed knowledge gained by participating with the customer targeting cycles, the BSB headquarters element leveraged the use of their customer operations to shoehorn ongoing logistical requirements into maneuver battalion operations. When patrols were operating between the hub and spoke network, the FAST teams used its own manpower to help move water, food and supplies along with the patrols. As was the case with other elements in the brigade, manpower shortages and the emphasis on distributed operations pushed authority down the organizational structure. Keyes placed senior enlisted personnel in charge of convoy security and other critical tasks that would normally have been delegated to officers.<sup>83</sup>

The BSB developed new procedures to push support out to the bases via combat logistics patrols, or CLPs, which varied based on the number of personnel, the amount of fuel used, the amount of food rations, the distance, and the insurgent presence. With continuous inputs from the FAST teams, the BSB delivered support via CLPs, CH-47 helicopters, UH-60 helicopters, air drops by C-130 aircraft, and the C-23 Sherpa air freight aircraft that could land on short runways.<sup>84</sup> The flexibility of the BSB work force extended to other areas. Before deploying to Iraq, the unit realized that managing detainees could become a significant brigade task. The unit reached out to the Fairbanks Alaska Police Department before their deployment and received specialized training from the police in handling and transporting convicts. The BSB cooks took on the missions of detainee operations, which involved receiving Iraqi

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<sup>82</sup> Ibid.

<sup>83</sup> Ibid.

<sup>84</sup> Ibid.

detainees arriving from C-130s from Baghdad and transporting them to the central jail in Mosul.<sup>85</sup>

Brigade maintenance required 240 mechanics that maintained all the brigade's wheeled vehicles, engineer equipment, weapon systems, and electrical communication equipment. The wheeled mechanics in the were responsible for all vehicle repairs from the operator level to the repair and replacement of major assemblies, like engines and transmissions. Due to the brigade's advanced technology, it relied heavily on contracted civilian support from a variety of companies. These civilian maintainers conducted technical inspections, ordering of all the parts required and the completion of repair on all contractor supported systems. Most of the 180 civilian contractors began working with the brigade in Alaska and deployed with the unit to Mosul.<sup>86</sup>

General Dynamics served as largest contractor supporting the brigade. In addition to helping fix vehicles, contractors ordered and tracked Stryker specific repair parts throughout the Middle East and the United States. Contractor teams used a General Dynamics tracking system called DEMIS that located parts with seven TACION satellites and 22 satellite phones that could reach any remote location. To expedite the movement of parts, the contractor pre-staged parts in northern Iraq and drew upon Federal Express and DHL to overnight ship parts from the United States to ensure a contracted 90% readiness rate for the Stryker fleet.<sup>87</sup>

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<sup>85</sup> Ibid.

<sup>86</sup> Ibid.

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The civilian contractors made immeasurable contributions in the efforts to keep the brigade deployed in the field. Indeed it is fair to say that the 172<sup>nd</sup>'s combat readiness could not have been kept at such high levels without the use of civilian contractors. Keyes estimated that the use of contractors represented a 50 percent increase in logistical support available to the brigade. He estimated that 60 contractors provided the same degree of support as 90 soldiers due to all the different tasks required of soldiers, such as force protection, physical fitness training and other tasks. By contrast, the Stryker support contractors could dedicate all their time to the support of the units complex machinery. These contractors added a kind of invisible layer of organizational complexity to the brigade in that they appeared on no formal organizational chart or no unit briefing slides. Yet the specialized technical competencies of the civilian support enabled the unit to function at a high rate of technical and operational proficiency. Complex technological systems break down and require a specialized and complex set of skills in the work force to enable their continued operations. The battlefield innovation process in the 172<sup>nd</sup> was in part enabled by a complex organizational network of private contractors that provided a task specialization skill set not part of the formal unit structure.<sup>88</sup>

During the 12 months of the 172<sup>nd</sup> SBCT's deployment to Mosul, Iraq, the BSB drove 135,635 miles over 787 combat logistical patrols, completed 7,893 direct support maintenance jobs in the motor pool, processed 61, 658 parts in the Forward Distribution Point (FDP), produced 3,500,000 gallons of water, issued 1,705,748 gallons of fuel and treated over 1,900 patients in 13 different medical screens.<sup>89</sup>

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<sup>88</sup> Ibid.

<sup>89</sup> Much of the information in this section is distilled from an author interviews with Colonel William Keyes, commanding officer of the 172<sup>nd</sup> Brigade Support Battalion, as well as background papers on BSB operations provided by Colonel Keyes.

## **Information Operations**

Information operations developed into a centerpiece of the 172<sup>nd</sup> COIN campaign in Ninewa, complementing and feeding the other aspects of the brigade's operations. The brigade integrated IO into its targeting cycle very early in its deployment and came to regard it as a vital tool in its COIN campaign. Throughout the deployment in Ninewa, the brigade used radio, television, handbills, loudspeakers, and skillfully positioned press coverage to actively contest the information domain against the insurgents. A frequent complaint voiced by U.S. units in Iraq was the cumbersome review and release procedures demanded by higher headquarters before permitting the release of IO products. These procedures meant that U.S. IO efforts lagged those of the insurgency, which dominated the information domain in much of Iraq during the 2004-2005 period. This was not the case in northern Iraq, where the 172<sup>nd</sup> brigade staff assumed release authority for most IO related products in its battle space and was able to quickly tailor IO products to local events as it sought to drive a wedge between the population and the insurgency. A favorite tactic was to use loudspeaker operations in areas where failed IED attacks had occurred to undermine the credibility of the cell prosecuting the attacks. The brigade had the advantage of deploying into an area with a functioning and well-subscribed Iraqi Media Network, or IMN, television station in Mosul. Colonel Shields and his battalion commanders made a determined effort to use the station to publicize the operations of the Iraqi military. Under the direction of the brigade IO coordinator Major Mike Sullivan and the public affairs officer, Major Mike Blankartz, local radio stations and the TV developed programming where residents called in to ask questions directly to Iraqi government

officials. The staff promoted joint ISF/IP media events whenever possible. A typical press conference as indicated in Figure 5-5 included the senior officers of a variety of different units.<sup>90</sup>

The brigade worked to build relationships with the manager of the local TV station and its main engineer. Insurgents had killed three workers from the station. The brigade paid condolence payments to the families of the IMN workers knowing the IMN station could not afford to pay out of its pocket. This gained the brigade traction with the station staff. Other small gestures, such as providing medical care to children in the families that worked at the station, just helped to further build a relationship. IMN proved very responsive in reporting community events such as school openings and in publicizing insurgent attacks that killed women and children. The relationships developed with local media outlets proved critical in contesting the information domain with the insurgency over the brigade's deployment.<sup>91</sup>

A key feature of the 172nd IO campaign became the 'Mosul Most Wanted' list released every 30 days in handbills and posters and then publicized on the local TV station. As the brigade began to experience success in the IO domain, it began refining its TTPs to take advantage of the tool to complement its other COIN activities. By the end of the deployment, the brigade achieved nearly a 50 percent success rate to kill/capture the individuals who were placed on the poster.

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<sup>90</sup> Author interview with Colonel Michael Shields, June 10, 2008 and with Lieutenant Colonel Rambin and e-mail exchanges with Major Michael Sullivan March 28, 2009.

<sup>91</sup> Author interviews with Colonel Shields, June 10, 2008, and Lieutenant Colonel Rambin and e-mail exchanges with Major Michael Sullivan March 28, 2009.



## IRAQI SECURITY FORCES IN THE MEDIA COMBINED PRESS CONFERENCES



**Figure 5-5**

*Source: PowerPoint presentation titled ‘172<sup>nd</sup> SBCT Operation’ dated November 26, 2006*

Placing individuals on the list required concurrence of the brigade and battalion intelligence sections and coordination with other agencies that had reasons to target particular individuals. The brigade carefully vetted the target nomination process and made only one mistake of placing an individual on the poster only to find out he had been detained a month prior and released due to his innocence after interrogation. The brigade IO coordinator, Major Sullivan told the S-2 after hearing this: ‘tell him to hide for 30 days.’ After this event, battalion targeteers throughout the brigade began to realize how powerful the product had become.<sup>92</sup> The IO staff then developed the follow-on to the most wanted list, advertising punishments meted out to insurgents by the Iraqi justice system (see Figure 5-6 below).

<sup>92</sup> Author interview with Major Michael Sullivan, March 20, 2009.

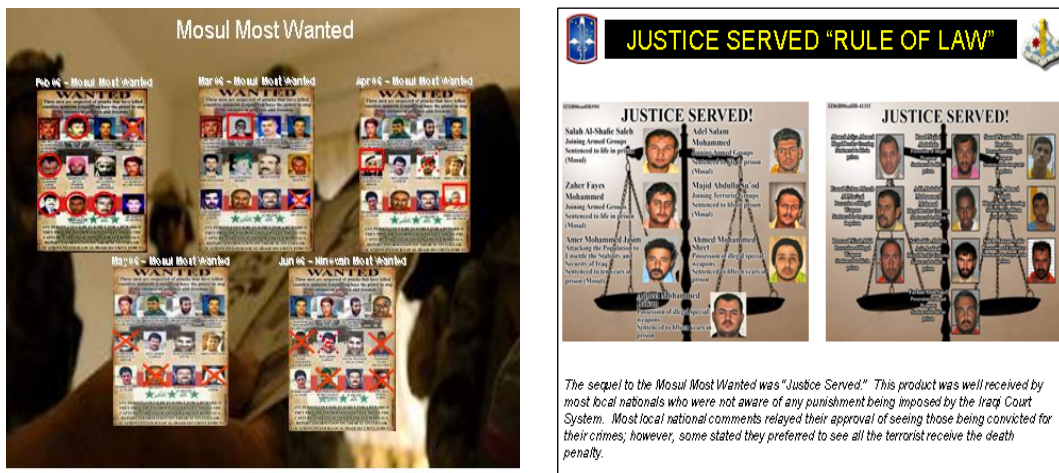


Figure 5-6

### Mosul Most Wanted Posters and its sequel – Justice Served

Source: PowerPoint presentation titled '172<sup>nd</sup> SBCT Operation' dated November 26, 2006

The brigade IO coordinators reached out to the battalions in the target coordination process and soon realized that more involvement at lower levels in the unit led to greater success rates. As the ISF became integrated into the brigade's targeting cycles, the ISF started providing updates of known locations of the individuals identified on the posters. In certain cases, the ISF had already detained people on the list. The battalions subsequently produced individual 'wanted' flyers to concentrate on certain areas that also proved successful.<sup>93</sup> Release of the most wanted list evolved into a monthly IO event. Various battalion commanders reported that the local population eagerly awaited the new list each month. The list got released on the first Tuesday of every month – the brigade's ISF targeting meeting day. Local media outlets such as the television station and the local newspapers were prepared for the stories, making the day a local media blitz day for the product. During this week, the battalions received hundreds of these flyers to give to the ISF for their patrols and checkpoints. Units posted flyers all over Mosul for the entire week. Later in the

<sup>93</sup> Author interview with Major Michael Sullivan, March 20, 2009.

brigade's deployment, the most wanted product became the 'Ninewa Most Wanted' and was distributed throughout the province.

### **Civil Military Operations**

Execution of civil military operations in northern Iraq occurred through a diverse array of organizations and agencies – not all of which were synchronized or coordinated with one another. During its deployment the 172<sup>nd</sup> established a CMO coordination cell to synchronize the activities of the two civil affairs battalions (the 401<sup>st</sup> later replaced by the 403<sup>rd</sup>), the U.S. Army Corps of Engineers, and a State Department provincial reconstruction team stood up in November 2005 following a visit by then Secretary of State Condoleezza Rice. As was the case in most areas of Iraq during the period, CMO operations faced a number of hurdles. First, the environment was for the most part non-permissive. The insurgents actively sought to prevent CMO projects from being delivered, and civil affairs officers were not combat elements that could both fight and deliver their projects at the same time. Second, the infrastructure was generally in poor condition if it existed at all. In Mosul, for example, the city had taken shape iteratively over centuries with little modern urban planning to integrate central sewage, water, and electrical services. Third, economic activity in general in Iraq had been dominated by state-run activities or, alternatively, the underground, black market economy. This was certainly the case in northern Iraq. In Ninewa, there were 16 state-run companies that provided such items as cement, drugs and medical supplies, cotton, sugar and yeast, oil and gas, furniture, and dairy products. Most of these companies operated at less than 30 percent capacity, but served the useful purpose of proving a means for the government to disburse money



to local residents that mostly never showed up for work. The notable exception was the pharmaceutical plant located 30 miles outside Mosul, which operated at 100 percent capacity producing a variety of medical products. Despite these hurdles, the 172<sup>nd</sup> and the organizations executing CMO successfully integrated these projects into the COIN campaign in the north. Weekly targeting meetings throughout the battalion included CMO participation, and the brigade regarded it as a critical non-lethal effect on the battlefield.<sup>94</sup>

When the 172<sup>nd</sup> arrived, CMO execution at the tactical level fell to the 401<sup>st</sup> Civil Affairs Battalion. Also present was the Army Corps of Engineers, which focused on larger scale projects such as maintenance of the Mosul dam located just to the north of the city and other multi million dollar projects such as Mosul's electrical substation rehabilitation and building of a new air traffic control tower at Mosul airport. The Mosul dam provided electricity to the city's residents and needed constant maintenance. The 401<sup>st</sup> embedded its civil affairs teams with the 172<sup>nd</sup> battalions and continued to work ongoing projects that had been started under 1/25's deployment. The 172<sup>nd</sup> brigade staff exercised oversight over these projects but had no technical authority over the unit, which reported up a separate chain of command to the 11<sup>th</sup> Armored Cavalry Regiment. Execution of projects occurred through local contractors identified by the 401<sup>st</sup> teams working in their respective local communities. Each project took shape after consultation with local leadership via the regional security councils set up by the 172<sup>nd</sup>'s battalions throughout the province and provincial government ministries in Mosul. Funding for the projects came through the commander's emergency response funds, or CERP, that were provided to Task Force

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<sup>94</sup> Author interview with Lieutenant Colonel Rick Somers, March 27, 2009. Somers served as the brigade's civil affairs officer during the 172<sup>nd</sup> deployment in Ninewa.

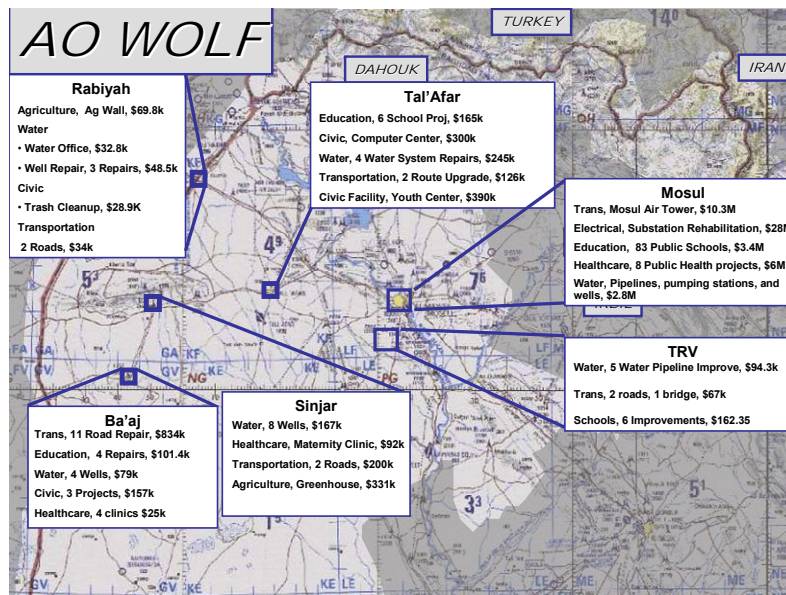
Freedom in Tikrit. In November 2005, the State Department created Iraq's first provincial construction team in Mosul, which added yet another organizational entity involved in CMO and which had its own source of funding. Since it technically worked for the State Department, the PRT, headed by Ambassador Cameron Munter, had no reporting relationship with any of the U.S. military units and worked mainly with Iraqi national government ministries. Coordination between these entities happened at the Civil-Military Operations Center, or CMOC, located at FOB Marez and other CMOC located in Dahuk in Iraq's northern-most province along the border with Turkey.<sup>95</sup>

The disparate organizations involved created coordination problems for the 172<sup>nd</sup>, which had overall control over the battle space. In the spring of 2006, the SBCT created a Ninewa Reconstruction and Development Management Cell (RDMC) to ensure unity of effort in executing governance and economic civil-military operations. The cell tried to synchronize the ongoing civil military operations throughout the province. In May, the 172<sup>nd</sup> helped coordinate Operation Barnstormer – an Iraqi Agriculture Ministry's program to protect crops in northern Iraq from insect damage. Over a two week period, wheat and date crops got sprayed with pesticide using helicopters and bi-planes. Some of the highlights of the CMO work done in northern over the period of the 172<sup>nd</sup>'s deployment are highlighted in Figure 5-7.<sup>96</sup>

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<sup>95</sup> Author interview with Somers.

<sup>96</sup> Author interview with Somers.



**Figure 5-7**

Select Civil-Military Projects in Northern Iraq During 2005-2006

Source: PowerPoint presentation titled '172<sup>nd</sup> SBCT Operation' dated November 26, 2006

## 2-1 Infantry in Eastern Mosul

The COIN fight in Mosul proper proved a particularly difficult challenge to the wheeled Stryker units. The dense urban terrain provided insurgents with an ideal environment to conduct operations against the 172<sup>nd</sup>. Without a well-established, modern road network bisecting the city, insurgents could quickly melt back into densely-populated neighborhoods criss-crossed by a series of winding alleyways too narrow for the Strykers to mount easy pursuit. The 2<sup>nd</sup> Battalion, 1<sup>st</sup> Infantry, or 2-1, operated on the eastern side of Mosul; its 800 to 900 soldiers divided into two infantry companies, a cavalry troop, and 74 Stryker vehicles that conducted a COIN campaign in dense urban terrain hosting a population of between 750,000 to 800,000 spread over five to six square miles. In addition to the fight in these neighborhoods, the unit exercised responsibility over the area north of Mosul north to Dahuk and roughly 22

villages to the east of the city. To have described 2-1's operations as an economy of force mission given its numbers and responsibilities would be an extreme understatement. Eastern Mosul was an area the size of the city of Ramadi in Anbar province – a city that received the attentions of an entire U.S. brigade in 2005 and 2006. As detailed earlier in this chapter, 2-1 operated out of a series of FOBs and COPs in its area called 'AO Legion' manned by its own personnel, MiTTs and Iraqi Army units. The area had three Iraqi Police divisions and a number of substations. The police had an advertised strength of approximately 1,500; the daily end strength fluctuated between 600 to 800 per day.<sup>97</sup> Like much of the rest of the city, eastern Mosul had a number of active insurgent cells mounting sniper attacks, IEDs, RPG attacks, and targeted assassinations directed at both the ISF and U.S. units. As noted by Lieutenant Colonel Webster: 'There was pretty much someone shooting at you all the time.'<sup>98</sup>

Interestingly, 2-1 did not expect to defeat the insurgency during its deployment. As noted by Webster, 'We [i.e., Americans] like to solve things, to finish things, to win. But, unfortunately, that's not what a COIN fight is all about. Defeat is a very definitive term. I believe I stressed to my guys the year prior to deployment and all through the deployment that we would not 'defeat' the insurgency or 'win' this fight on our tour. Our job was to win by improving the ISF and improving security.'<sup>99</sup> Indeed, the insurgency during 2-1's deployment proved to be very resilient and remained so as of this writing in the spring of 2009.

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<sup>97</sup> Author interview with Colonel Charles Webster, March 7, 2009.

<sup>98</sup> Ibid.

<sup>99</sup> Ibid.

Prior to arriving in Mosul, 2-1 actively participated in brigade-wide activities to build knowledge and understanding of COIN. The lack of established joint doctrine presented no hindrance to the unit as it prepared for its deployment. Using inputs from a wide variety of sources, the battalion staff collectively identified a number of desired goals and end states to achieve: a secure populace; established local political institutions; a contributing local government; neutralized insurgent capabilities; and, information flows from all sources.<sup>100</sup>

In its pre-deployment training, the battalion organized its operations into four broad categories: security, governance, economics and information operations. To organize its operations in support of its end states, the battalion staff took the novel approach of organizing its own campaign plan for the deployment. While campaign plans are doctrinally the purview of corps- and division-level units in the Army, Webster wanted a systemic way of relating the unit's operations to the overarching campaign plan built by the brigade. Webster looked to established Army doctrine to help prepare a campaign plan for extended tactical operations, which, as he characterized it could 'apply doctrinal solutions to non-doctrinal problems.'<sup>101</sup>

Webster reached back to Army doctrine in *FM 7.0 Training the Force* for an established methodology of building a campaign plan based on the mission essential task list, or METL.<sup>102</sup> These were core tasks identified by the unit that the unit judged would need to be accomplished during the deployment. Identified METL

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<sup>100</sup> Author interview with Webster. Ideas further fleshed out in Lieutenant Colonel Wayne Brewster, 1-25 S3, and Lieutenant Colonel Charles Webster, TF 2 Senior JRTC Operations Group, 'Task Force Adaptive Planning: Everything is Connected', *A Battalion Task Force in COIN*, CALL Newsletter No. 08-25 (July 2008), Center for Army Lessons Learned, Fort Leavenworth, Kansas, p. 4.

<sup>101</sup> Author interview with Webster.

<sup>102</sup> *Field Manual 7-0, Training the Force*, Department of Army, Washington, DC (22 October 2002)

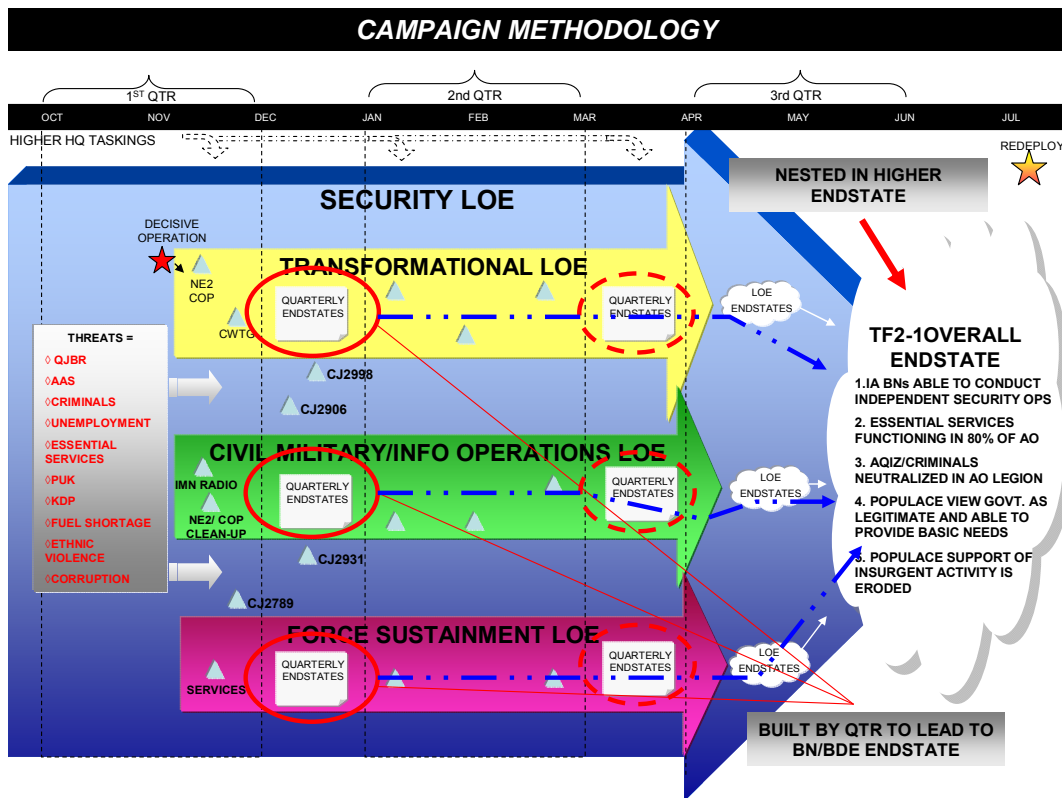
tasks formed the basis for the unit's pre-deployment training. Over the course of the year prior to arriving in Iraq, 2-1 built a METL that fed into a flexible, adaptive campaign plan to nest its operations within the 172<sup>nd</sup>'s overall objectives. The plan, detailed in Figure 5-8 below, identifies the tasks required to achieve the end states and established quarterly reviews over the course of the year for the staff to measure its progress towards fulfilling the campaign objectives. The staff constantly reviewed the plan to allow for adjustments and looked at the plan as an adaptive, living product that could be adjusted whenever necessary.

The plan served as the battalion's template to guide its lethal and non-lethal targeting operations in attempting to meet the quarterly desired end-states. The targeting cycle evolved over two week periods in which the staff evaluated the non-lethal and lethal targets and then formally proposed the target set to the battalion staff for mission planning and execution. The battalion established a reporting system in a series of products for all units to pass over the Stryker's communications network to the senior staff, which maintained a database that tracked the battalion's overall progress on a continuous basis.

The campaign plan reflected a systems-based approach to unit's conduct on the battlefield, giving all the units a common framework for understanding the purpose of their daily operations.<sup>103</sup> The major elements of the campaign plan are summarized below in Figure 5-8.

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<sup>103</sup> Author interview with Colonel Charles Webster, March 7, 2009.



**Figure 5-8**

2-1 Campaign Plan in Eastern Mosul, 2005-2006

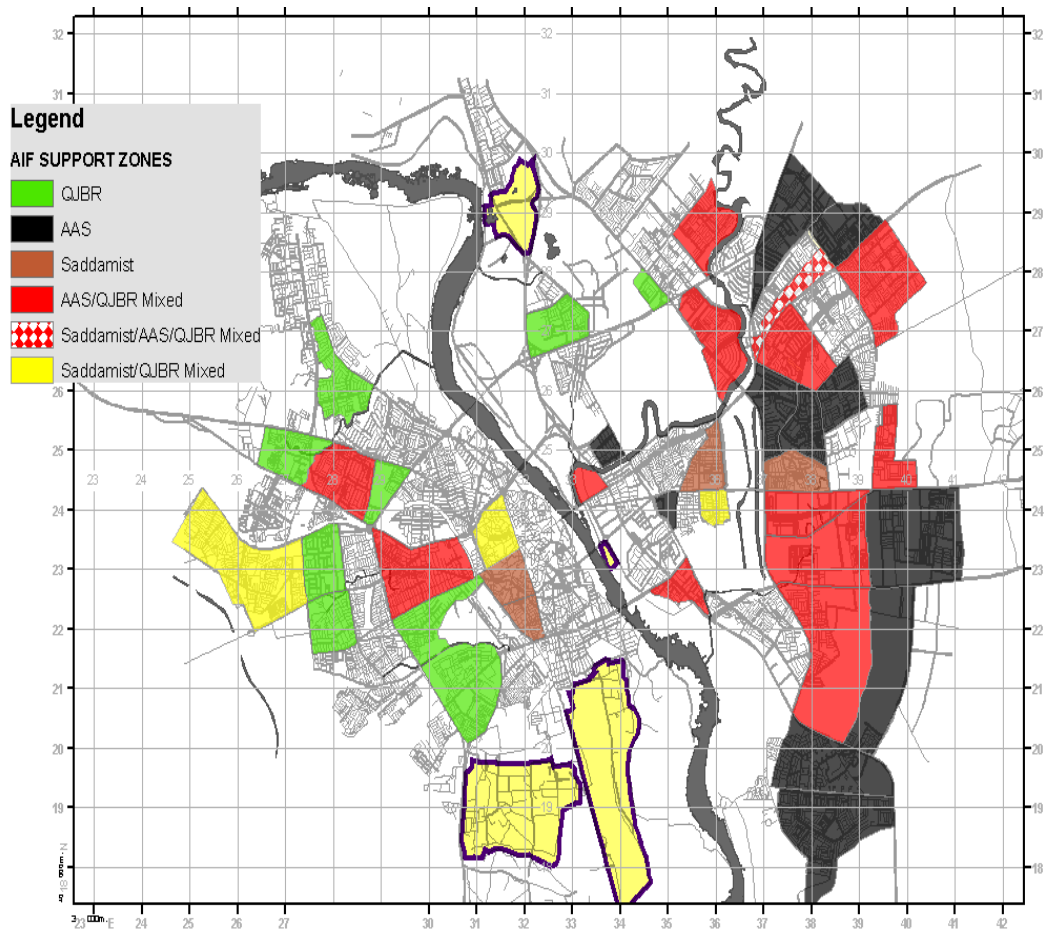
Source: PowerPoint presentation titled 'Fighting COIN: It's All Connected, TF 2-1 Leader Assessment, 2<sup>nd</sup> Quarter, FY 06, Mosul, Iraq' undated.

Not surprisingly, the battalion realized early in its deployment that a plan drawn up in Fairbanks Alaska (the unit's peacetime home) would need adjustment when executed on the ground in Mosul. The need for change emerged after the first three months on the ground saw the battalion build situational awareness, gather reporting data, and begin to apply the targeting methodology to tactical problems on the ground. The battalion evolved through a three-phased analytical process during the first three months in which it identified as: (1) evaluate the enemy and his TTPs; (2) evaluate the terrain – physical, human and economic/social makeup; and (3) evaluate the unit performance by examining the application of combat power through TTPs and the use

of enablers such as Iraqi police and Iraqi Army commandos. During the first three months, the battalion databases on insurgent networks, reporting from daily patrol records on the performance of men and equipment, got populated by the reporting and data gathering operations of its units. The battalions' initial assessment of eastern Mosul came from intelligence assessments of the city's neighborhoods compiled by the brigade S-2 staff, which drew heavily on the experiences of the prior unit, the 1/25.

As shown in Figure 5-9, the assessment of eastern Mosul showed neighborhoods immediately east of the Tigris River free from direct insurgent control – but surrounded by a series of insurgent support zones influenced primarily by Ansar al-Sunna (AAS) and al Qaeda in Iraq (QJBR). During the October-November 2005 period, the battalion faced an upsurge in violence as the insurgents sought to derail the December 2005 elections. In addition to targeting the Iraqi Army and Iraqi police forces, the insurgents specifically sought to destroy the Stryker vehicles in order to film the attacks, using the videos to swing popular support in the city against the United States and the local government. Attack pattern analysis showed that 90 percent of all insurgent attacks occurred between 0900-1400 were focused on Iraqi Army and Police units and on the Stryker vehicles themselves with IEDs and suicide vehicle attacks.





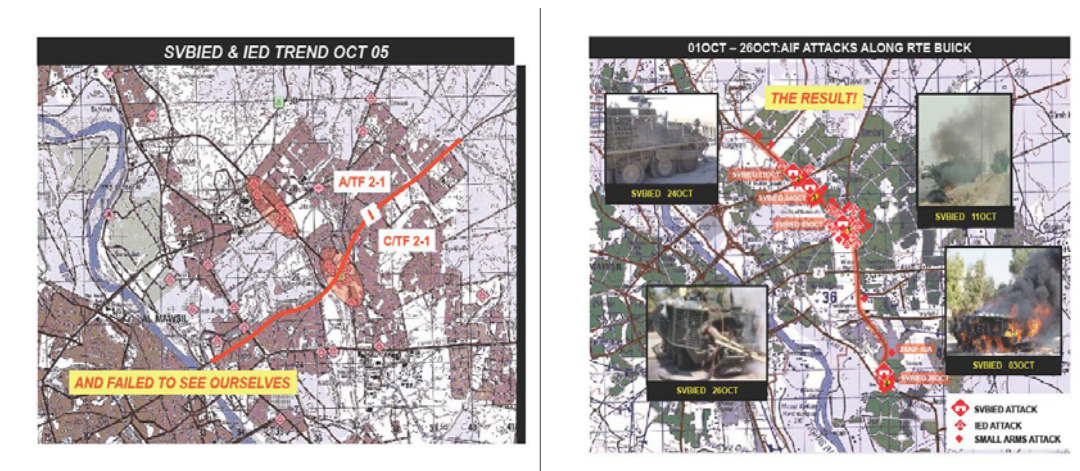
**Figure 5-9**

Early Assessment of Mosul Neighborhoods in 172<sup>nd</sup> COIN Campaign.

Note: AAS is Ansar Al Sunna; QJBR is Tanzim Qa'idat al-Jihad fi Bilad al-Rafidayn, or Al Qaeda in Iraq – the organization of Abu Musab Al Zarqawi.

Source: PowerPoint presentation titled 'Fighting COIN: It's All Connected, TF 2-1 Leader Assessment, 2<sup>nd</sup> Quarter, FY 06, Mosul, Iraq' undated.

Leader Assessment, 2<sup>nd</sup> Quarter, FY 06, Mosul, Iraq' undated.



**Figure 5-10**

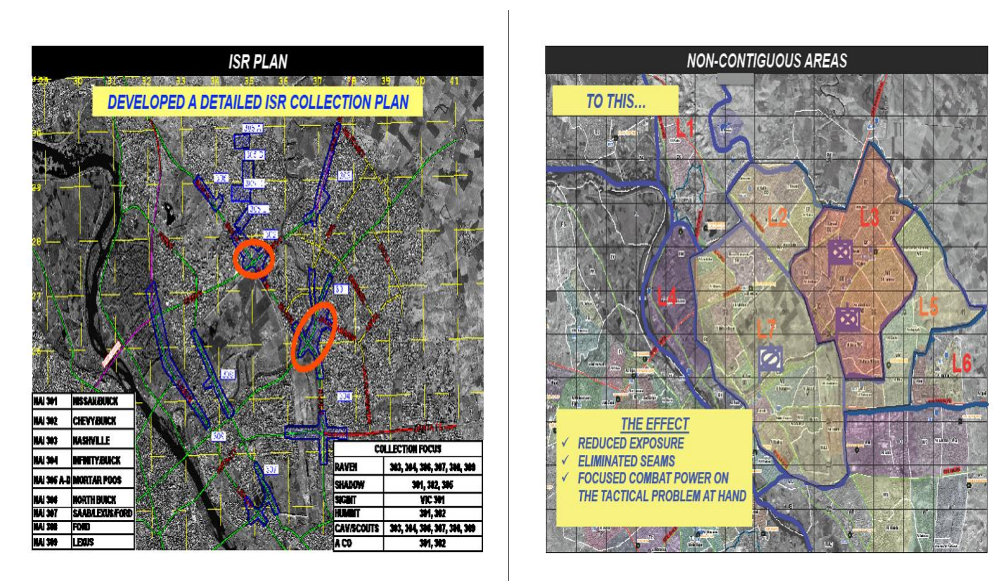
Findings of Pattern Analysis during October 2005 by 2-1 in Eastern Mosul

*Source: PowerPoint Presentation titled 'Exploiting Tactical Intelligence in COIN OPS: Figuring Out 'What's Next' ' Undated.*

As shown in Figure 5-10 above, attack trends and pattern analysis revealed that insurgents focused their IED and SVBIED attacks along the two major roads in eastern Mosul – one of which fell upon the seam of sectors patrolled by 2-1's companies A and B. The seam had been exploited the insurgents in successful IED attacks on four Strykers during October.

The battalion responded to these findings by adjusting its own battlefield framework and tactical patterns. First, the battalion eliminated all traffic along Route Buick that had been used by insurgents to mount attacks on the Strykers. Second, the battalion established a multi-layered information, surveillance and reconnaissance, or ISR, plan to detect the insurgent response in to the shutdown of route Buick. The plan included overhead video surveillance by the brigade's remotely piloted vehicle, beefed up

signals intelligence interceptions using the Raven airborne system,<sup>104</sup> and aggressive efforts to improve HUMINT networks in the neighborhoods surrounding the attack areas. Last, the unit eliminated the geographic boundaries between its units – meaning that its companies no longer had sole responsibility for a defined battle space. Instead, eastern Mosul became divided up into a series of non-contiguous ‘L’ designated areas. The ISR collection plan and the elimination of the battle space boundaries are illustrated in Figure 5-11.



**Figure 5-11**

2-1 ISR Plan and Changing Map of Battle space in November 2005

*Source: PowerPoint presentation titled ‘Fighting COIN: It’s All Connected, TF 2-1 Leader Assessment, 2<sup>nd</sup> Quarter, FY 06, Mosul, Iraq’ undated.*

The changes adopted by 2-1 through October allowed the unit to penetrate the insurgents’ decision cycle, which began to pay immediate dividends with the roll-up of several insurgent networks that had successfully attacked the battalion during September and October. The battalion further leveraged this tactical evolution with

<sup>104</sup> Details of the Raven system components at <http://www.telemus.com/datasheets/s-eagle.pdf> ; <http://www.telemus.com/datasheets/raven.pdf>, accessed April 3, 2009.

organizational changes to its THTs. The experiences of 2-1 mirrored many other units in Iraq over the period, which realized they needed more robust S-2 sections and better tactical intelligence to drive COIN operations. The 2-1 successfully reoriented its THT capacities to generate useful information, which, in turn, fed into a fused tactical-intelligence-operations-cycle used by the unit for the remainder of its deployment in Mosul. By the end of its deployment, nearly 90 percent of deliberate operations conducted by battalion were HUMINT-source driven.<sup>105</sup> Webster estimated that the battalion mounted 500-plus directed raids during the unit's deployment that resulted from HUMINT and SIGINT.<sup>106</sup>

Upon starting operations in Mosul in early September, the battalion soon realized that it lacked adequate HUMINT gathered from detainees, tactical questioning of the local populace by patrolling soldiers (hindered by language limitations), and informants. First, the unit began to draw upon HUMINT networks that had been developed by OGA— i.e., the CIA – in the city. The CIA had a trained cadre of senior, trained personnel who had more latitude (i.e., money) and greater experience in supporting informant networks with funding than did the brigade/battalion THT personnel. The all-source information from OGA networks started being fed into the battalion's databases to build their understanding of the insurgent networks.<sup>107</sup> In addition, the unit immediately cycled through a series of internal steps to address the deficiency. First, the battalion broke up its THT's that were centralized at the battalion level and pushed THT personnel directly down to the maneuver companies to participate

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<sup>105</sup> Author interview with Webster. Also see LTC Richard G. Green, Jr. TF XO, and CPT Mark N. Awad, TF 2-1, 'Optimizing Intelligence Collection and Analysis: The Key to Battalion-level Intelligence Operations in Counterinsurgency Warfare', *A Battalion Task Force in COIN*, CALL Newsletter no. 08-25, pp. 17-32.

<sup>106</sup> Author interview with Webster.

<sup>107</sup> Author interview with Webster.

directly in patrols and directed raids. The battalion soon discovered that on-site questioning often was the most productive in generating useful information, which could then be passed in real time to the battalion S-2 for correlation with other known information. Detainees were often at their most vulnerable psychologically immediately after being picked up in cordon and knock operations or after being pursued after they had been engaged in actual operations. The quality of the information generated from these interrogations also improved as a result of new field questioning and interrogation strategies developed by the battalion with OGA inputs. After pushing the THT teams down into his maneuver companies, Webster placed the battalion executive officer, Lieutenant Colonel Richard Greene, in charge of detainee questioning, in effect bridging what had been a gap and lack of capacity between the operations (S-3) and intelligence sections (S-2) on the battalion staff in the conduct of detainee questioning. The S-2 section focused on building its understanding of the insurgent network, while the S-3 concentrated on the targeting process. Neither organization had the overall vision of what the other organization was doing to inform the questioning process, whereas the executive officer had oversight over both the S-2 and S-3.<sup>108</sup> Detainee questioning represented a critical collection tool, and the throughput of detainees required a systematic approach to the process. Approximately 500 detainees cycled through the 2-1 questioning process over the course of ten months. The battalion started seeing results to the increased role of OGA-sourced networks and the new detainee interrogation supervision system as indicated in Figure 5-12. In mid-September, it had generated little information to populate its link-nodal analysis of the insurgent cell structure. By October, the gaps

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<sup>108</sup> Author interview with Webster.

were starting to get filled in – a process that gathered momentum over the next several months.

Information about the insurgent cell structures in eastern Mosul steadily grew in richness and detail during the fall of 2005, enabling the battalion to begin development of its intelligence-operations fusions cycle and the better integration of non-kinetic effects such as information operations and CMO into the targeting process.

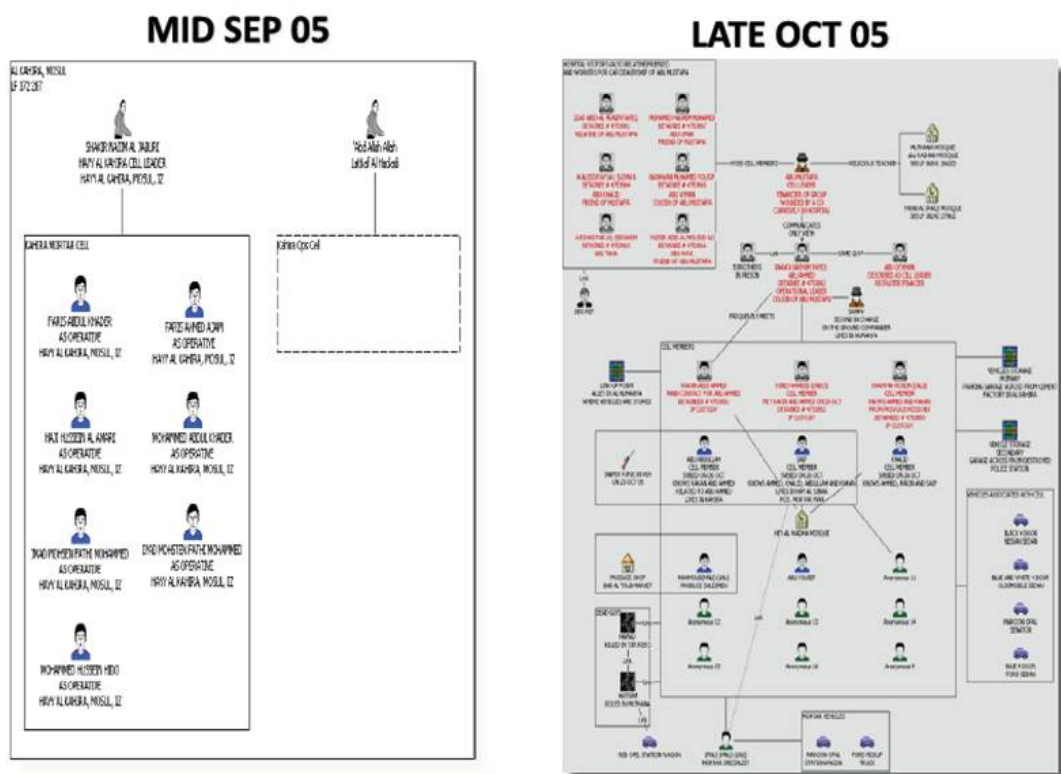


Figure 5-12

Humint Generated by 2-1 Following Changed Handling of Detainee Questioning

Source: PowerPoint Presentation titled 'Exploiting Tactical Intelligence in COIN OPS: Figuring Out

'What's Next' ' Undated.



Information gleaned from interrogations was greatly aided by the participation of OGA, Special Forces and the ISF personnel during the fall of 2005. Detainees were well aware of that the United States could only hold them for two weeks before being transferred into the Iraqi national government's detention process, which often resulted in the return of the detainees to the streets in weeks. The detainees most feared the prospect of being transferred to Iraqi police custody. When the battalion introduced ISF personnel into the detainee interrogation process, detainees invariably became much more cooperative in the interrogations.<sup>109</sup> All these changes that began populating the 2-1 databases led to growing link-analysis charts of the insurgent network in eastern Mosul. The changed TTPs, the ISR collection plan, and the focus on generating better HUMINT led to concrete results late October and November as 2-1 began to actively disrupt insurgent cells. The quick turnaround of tactical level intelligence into the operations planning cycle of the unit was facilitated by the placing of an intelligence analyst in the battalion S-2 command post operations unit. The analyst monitored all incoming intelligence and could quickly judge which of the incoming information might warrant a direct, short notice operation. Placed on the battalion staff, the analyst could quickly relay the information to the battalion S-3 operations officer and his targeting staff.<sup>110</sup>

A series of successful raids on insurgent cells unfolded in late October and November and continued throughout the 2-1 deployment that drew upon changes in the ways the battalion generated intelligence and then integrated it with its targeting cell. In late

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<sup>109</sup> Green and Awad, TF 2-1, 'Optimizing Intelligence Collection and Analysis: The Key to Battalion-level Intelligence Operations in Counterinsurgency Warfare', *A Battalion Task Force in COIN*, CALL Newsletter no. 08-25, pp. 17-32; Author interview with Webster.

<sup>110</sup> Green and Awad, TF 2-1, 'Optimizing Intelligence Collection and Analysis: The Key to Battalion-level Intelligence Operations in Counterinsurgency Warfare', *A Battalion Task Force in COIN*, CALL Newsletter no. 08-25, p. 25.

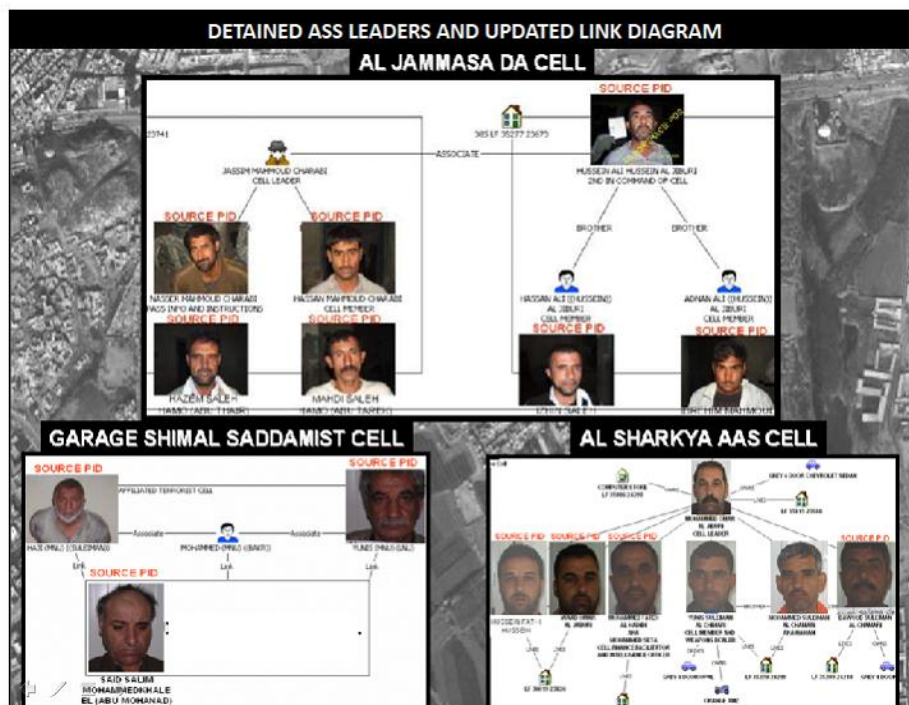
October, the battalion successfully targeted a series of insurgent cells that had mounted attacks using IEDs, mortars and snipers. Using information from the ISR collection plan and HUMINT developed information, the battalion mounted a simultaneous operation by two Stryker companies and a cavalry troop in the Al Sharkya neighborhood of Mosul as indicated in Figure 5-13a and 5-13b below. Each company raided five houses and the cavalry troop searched four houses, detaining seven members of the Al Jammasa direct action cell, seven members of the Al Sharkaya AAS cell and three members of the Garage Shima Saddamist cell. The ability of the Strykers to mount swarmed, targeted raids became a feature of the 172<sup>nd</sup>'s operations throughout Ninewa. Webster and other commanders called it 'moving to the sound of the guns.'<sup>111</sup> The conduct of the raids enabled through the ISR collection plan and the resulting intelligence windfall are illustrated in Figure 5-13a and b.



Figure 5-13a

<sup>111</sup> Author interview with Webster and with Lieutenant Colonel Mark Freitag, Commanding Officer, TF 4/14, conducted at the Pentagon, Washington, DC, May 15, 2008.





**Figure 5-13b**

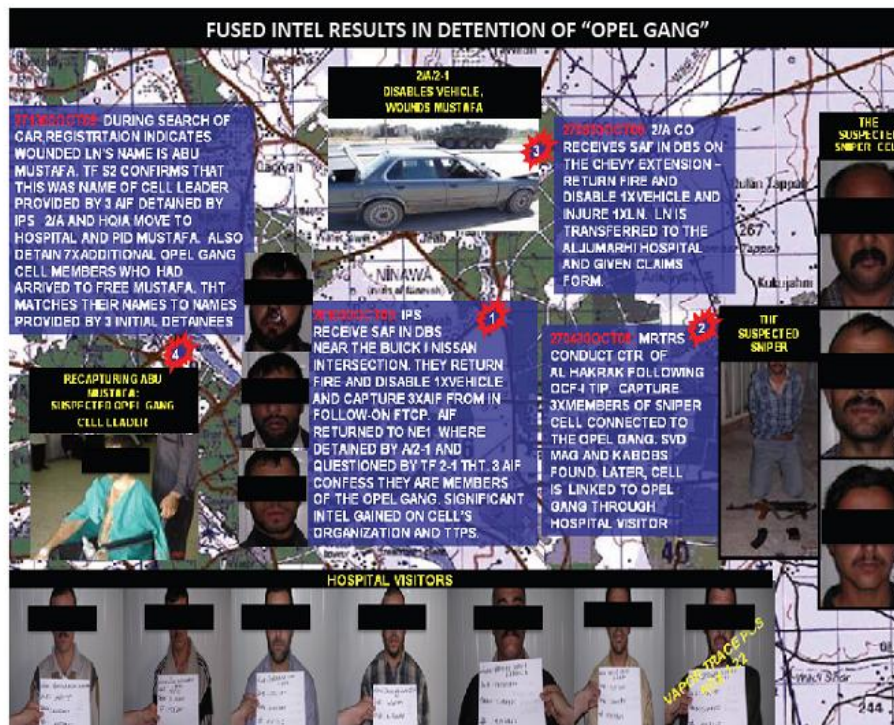
Figure 5-13a (preceding page): 26 October Directed Raids on Al Sharkya IED Cells.

Figure 13b (above): Results of the 26 October Directed Raids.

*Source 5-13a: PowerPoint Presentation titled 'Exploiting Tactical Intelligence in COIN OPS: Figuring Out "What's Next",' Undated; Source 5-13b: PowerPoint Presentation titled 'Exploiting Tactical Intelligence in COIN OPS: Figuring Out "What's Next",' Undated.*

Days after the successful raids in the last week in October, detainee questioning by ISF and OGA personnel gave the battalion a critical lead by providing the name of a financier of the so-called 'Opel' gang that had been harassing 2-1 patrols ever since the unit arrived. Gangs of insurgents driving in small Opel cars had mounted continuous RPG and direct fire small arms attacks at 2-1 units, escaping with their more maneuverable vehicles into Mosul's neighborhoods. The cell also used SVBEID and mortars to attack ISF and U.S. personnel. The battalion also received

critical information on the cell's operations from Special Forces units that 2-1 had invited to participate in the battalion's targeting operations.



**Figure 5-14**

*Source: PowerPoint Presentation titled 'Exploiting Tactical Intelligence in COIN OPS: Figuring Out 'What's Next' ' Undated.*

The cell had mounted a series of complex attacks throughout the fall, firing mortars from pre-determined firing points. Transportation for the mortars was provided in a series of different vehicles. The cell used a security cell in each of its fire missions of six to eight cars that patrolled the neighborhoods from which the direct attacks were launched. The cell received logistics support from a cell leader, Abu Mustafa, which paid each participant about 75,000 Iraqi dinars (\$75) for each mission. All the vehicles were returned to parking garages at the conclusion of the operations. Each

SVBEID operation was supported by observation teams that also provided covering fire if necessary and ambushes for recovery forces if the attack succeeded. Over a period of 36 hours starting on October 26, 2-1 rolled up the network using a fused intelligence-operations cycle. At 1030 on the morning of October 26, Iraqi police detained three insurgents – one of which confessed and provided details of Opel cell operations and names of key members of the organization. The next day at 0430 based on tips in the debrief, 2-1 captured three members of a sniper team and their weapons in a directed raid. At 0930 the same day, Iraqi police exchanged fire with insurgents injuring what they thought to be an innocent bystander in a blue Oldsmobile. However, after battalion personnel searched the car they found several sets of identification – one of which corresponded with the name of the cell’s financier that had just been provided to the unit by during detainee questioning less than 24 hours earlier. Information provided through the detainee questioning had cycled immediately back to the tactical unit searching the vehicle – information confirmed with the battalion S-2 via the Stryker’s encrypted communications suite. The patrol quickly deployed to the hospital, where seven cell participants had assembled to free the cell leader. Over the next day, additional information gleaned from interrogations revealed the names of 27 additional cell members that were quickly rounded up.<sup>112</sup>

Over the 36-hour period, a fused intelligence collection and operations cycle had significantly disrupted an entrenched insurgent cell. The pattern of the fused intelligence-operations cycle characterized operations throughout 172<sup>nd</sup> operations in Ninewa.<sup>113</sup> The operation had begun with deliberate and detailed target exploitation

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<sup>112</sup> Details of the operation from author interview with Webster; Also see Linda Robinson, ‘The Shadow Warriors’, *U.S. News and World Report*, August 28, 2006; Margaret Friedenauer, ‘Strykers Make a Difference in Mosul’, *Fairbanks Daily News-Miner*, November 11, 2005.

<sup>113</sup> Also detailed in 4-14 operation in Anbar in Chapter Three.

of detainees that revealed cellular linkages and enemy TTPs. By this period of 2-1's deployment, the battalion had instituted changes to its THT operations and placed the battalion executive officer in charge of detainee questioning. The avalanche of information gleaned from detainee questioning fed into the overall ISR collection plan that included overhead imagery and signals intelligence interceptions. The links created in the insurgent networks created new targets and permitted the development of still more refined collection plans – plans built from prior doctrinal training and practice. As applied in Mosul, however, this process of fusing collections with operations worked extremely quickly – making the Stryker units agile and flexible within the operations- maneuver cycle. The plan allowed maneuver element to operate within the insurgent decision cycle.

The growing tactical proficiency of 2-1, however, did not mean the battalion wasn't vulnerable to insurgents, who were themselves adapting and innovating on the battlefield. On November 19, 2005, amidst rumors that Abu Musab Zaraqawi was in the city, insurgents successfully ambushed a platoon that had been called in to assist an Iraqi Police operation. Iraqi police called for support after being driven off by gunfire from a house they attempted to search. The platoon arrived and attempted to enter the house only to be met with insurgents throwing fused mortar shells at the unit. As a squad entered the house, it turned out that the building had been fortified with built up firing positions that caught the unit in a cross fire. The squad had entered a prepared ambush site – at close range and lost 12 wounded soldiers in the space of a few chaotic, violent minutes. The squad finally retreated from the house after a soldier outside the building crashed a Stryker through the side of the house to give the squad a way out of the ambush. Insurgents shot Private Christopher Alcozer

in the back of the head as he covered the retreat of his wounded comrades from the house. After rocketing the house from a Kiowa helicopter that had been called in for support, a squad of Iraqi soldiers led by a U.S. special forces sergeant attempted another clearing of the house. Insurgents then blew up the building, killing U.S. special forces Master Sergeant Anthony Yost and four ISF soldiers. It was the battalion's heaviest single day of casualties in the deployment.<sup>114</sup>

The development of the battalion's fused intelligence-operations cycle facilitated the integration of deliberate lethal and nonlethal planning in an attempt to 'mass' these effects in particularly troublesome neighborhoods. The assessments of the first several months drove the battalion into an expanded data collection and analysis to try and improve the unit's situational awareness on a neighborhood-by-neighborhood basis. As indicated in Figure 5-14, using a software tool called the situational template, or SITEMP, the battalion began delving beneath the data populating its databases coming from SIGACTS reporting, or significant actions, which was mostly comprised of data flowing from enemy attacks and the unit's response. The unit set out to populate a Microsoft database of each neighborhood focusing on: key political and religious leaders, content being delivered in the mosques, location and capabilities of local medical facilities, public works facilities, mass transit services, information on local business, and other detail. While the databases did not constitute house-by-house census detail – a process used elsewhere in Iraq by U.S. units – the databases provided a product that could be passed along to the next unit. The neighborhood SITEMPs, as they were called, helped the battalion build situational awareness of the complex dynamics driving and/or supporting the insurgent violence.

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<sup>114</sup> Details of the violent encounter in Rachel D'Oro, 'Army Makes Clearer How Soldier Died', Associated Press, November 23, 2005; Doug O'Harra, 'Terrorist's Blind Fire Killed Stryker Soldier', *Anchorage Daily News*, November 23, 2005

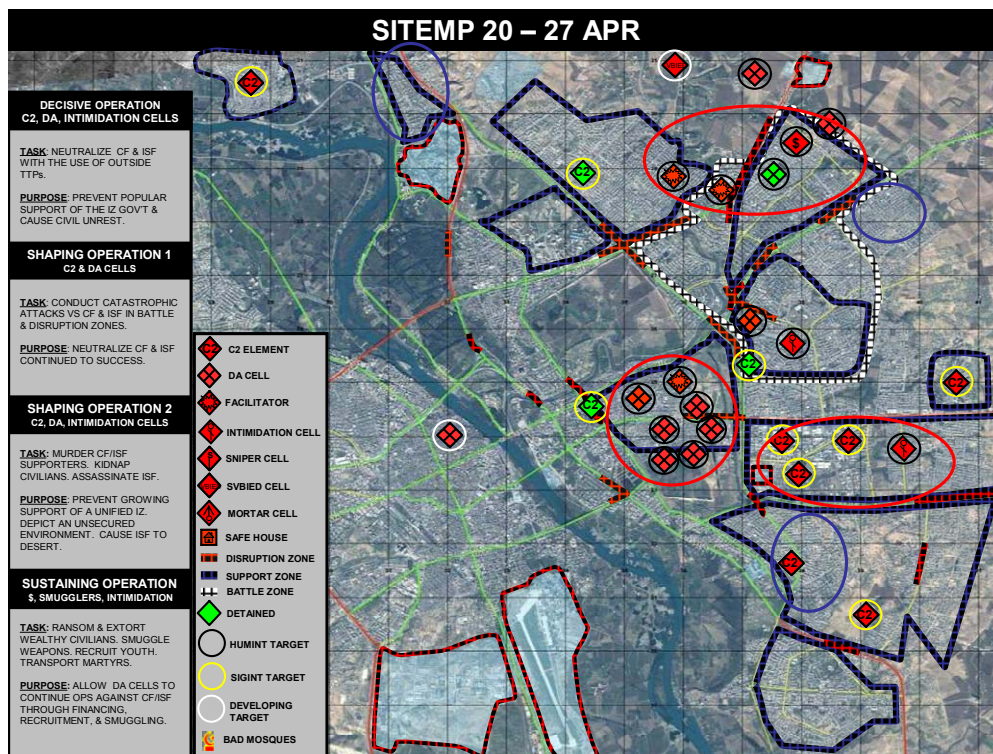
Using the SITEMP, the battalion divided up eastern Mosul into disruption zones (areas where insurgents wished to draw U.S. and Iraqi forces into unproductive engagements); battle zones (areas where the insurgents wished to engage coalition forces to demonstrate their effectiveness to the civilian population); and, support zones – the areas where the insurgents lived and/or stockpiled their equipment and planned their missions.<sup>115</sup> Figure 5-15a shows the battalion at the start of the process of developing neighborhood SITEMPs and Figure 5-15b shows one example of a SITEMP compiled in the spring of 2006.



Figure 5-15a

<sup>115</sup> An example of a patrol in a battle zone is detailed in Margaret Friedenauer, 'Soldiers Employ Daring Tactic', *Fairbanks Daily News-Miner*, December 21, 2005.





**Figure 5-15b**

An Example of a 2-1 SITEMP from April 2006

*Source: PowerPoint presentation titled 'Are We Doing The Right Things? Are We Doing Things Right?' undated.*

By the late fall of 2005, building ISF capacity represented the brigade's top priority. The 2-1 took responsibility for partnering with two Iraqi Army battalions: the 1<sup>st</sup> Battalion, 2<sup>nd</sup> Brigade; 2<sup>nd</sup> Iraqi Army Division; 2<sup>nd</sup> Battalion, 4<sup>th</sup> Brigade, 2<sup>nd</sup> Iraqi Army Division. Assisting in the effort were SFODAs, which conducted training for squads, platoons and companies. MiTTs focused on higher-level staffs as the battalion, brigade, and division level. The 4<sup>th</sup> Brigade was 90 percent Kurdish and consisted of either Patriotic Union of Kurdistan or Kurdish Democratic Party personnel that had fought each other at various points. The other major component in the partnering program was the Iraqi police. Eastern Mosul had three Iraqi Police district headquarters and two emergency unit response battalions. The police advisory

program was administered by the 549<sup>th</sup> Military Police Company. The training efforts for the Iraqi Army took place at the Al Kindi Training Center in eastern Mosul.

The partnership activities at the brigade and battalion staff levels were operationalized early in 2-1's deployment first through the observation of the battalion's targeting process by the Iraqi Army units. In late 2005, that observation gradually evolved into active participation in the targeting process – which greatly improved the partnership (particularly in the 4<sup>th</sup> IA Brigade). While the MiTT teams and SFODAs worked at their levels, the rest of 2-1 remained unsure of how best to interact at the working level between the platoons and companies conducting daily operations.

The battalion had metaphorically divided up its activities into its 'day' and 'night' jobs. Night jobs were usually directed raids conducted by battalion personnel, whereas their day job included training the Iraqis and working on creating other battlefield effects. Preparing the Iraqi Army to conduct joint operations fell under the rubric of the battalion's day job.<sup>116</sup> To facilitate the interaction with the Iraqis and build tactical proficiency, 2-1 formed tactical combat advisor teams, or TCATs, to operationalized their objective of building the ISF capabilities and to fill the void left by the departure of the SFODAs in December. The TCATs subsequently established a small-unit training program for two Iraqi Army battalions commanded by Captain Jason Glemser and Captain Rusty Topf.

The TCAT mission was to 'train and advise the Iraqi infantry companies and below in order to facilitate their capabilities to conduct unilateral missions and the handover of

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<sup>116</sup> Author interview with Webster.



combat missions from U.S. forces to the Iraqi Army.’<sup>117</sup> Each team consisted of five men – a sergeant first class team leader, three junior non-commissioned officers and a soldier. The TCATs designed and supervised a four-week training cycle focused on basic combat skills for an Iraqi company, with one platoon a week in training. When the training program began, some of the ISF personnel did not know how to operate and maintain their weapons. The TCAT program concentrated on fire and maneuver. In addition to supervising the training, the TCAT personnel accompanied joint patrols, but as the Iraqi Army battalions gradually improved over the spring of 2006, the TCATs became less directly involved in the operations. In planned joint operations, the TCATs served as the liaison between the IA and the battalion staff.<sup>118</sup>

Improved host-nation capabilities became another ‘effect’ available to 2-1 to apply on the battlefield.<sup>119</sup> During the spring of 2006, the unit began to develop the mature, integrated targeting packages that had been envisioned in the campaign plan. The battalion drew upon its targeting ‘wheel of stuff’ to build targeting packages to address the SITEMP maps developed for each of the neighborhoods. As indicated in Figure 5-16, those elements – developed out of the campaign plans lines of operation – included all the assets at the battalion’s disposal to create battlefield effects.

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<sup>117</sup> Major Jason Glemser, ‘Task Force Partnership’, A Battalion Task Force in COIN, *CALL Newsletter* no. 08-25, July 2008.

<sup>118</sup> Ibid; Author interview with Webster.

<sup>119</sup> Details of one such joint operation detailed in Charles Levinson, ‘In Iraq, U.S. Troops Widen Role as Soldier Teacher’, *Christian Science Monitor*, April 4, 2006.



**Figure 5-16**

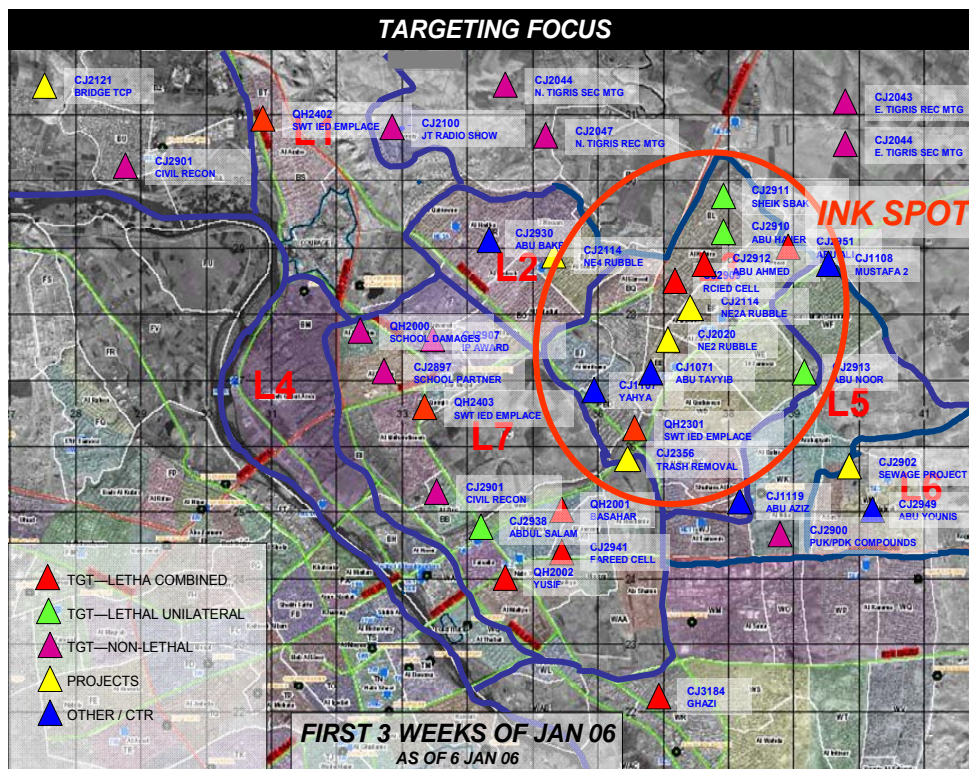
The 2-1 'Wheel of Stuff'

*Source: PowerPoint presentation titled 'Fighting COIN: It's All Connected, TF 2-1 Leader*

*Assessment, 2<sup>nd</sup> Quarter, FY 06, Mosul, Iraq' undated*

The wheel represented tools available in the targeting process that got integrated in the bi-weekly targeting cycle run by the battalion staff. Each of the effects got aligned with the lines of operation and the desired end states. By the winter of 2005-2006, the battalion had developed an integrated targeting process that attempted to mass effects in the most troubled neighborhoods of eastern Mosul. The result was a massing of effects in the L3 sector of the city – the so-called 'heart of darkness' in Eastern Mosul as illustrated in Figure 5-17.<sup>120</sup> The objective of massing effects represented the attempt to operationalize the 'ink spot' strategy used by various military commanders in Iraq during the period to create zones of stability free from insurgent influence and control – seeking to gradually expand those areas over time.

<sup>120</sup> As characterized by Colonel Charles Webster in author interview.



**Figure 5-17**

The 2-1 Integrated Target Set in Eastern Mosul, January 2006

*Source: PowerPoint presentation titled 'Fighting COIN: It's All Connected, TF 2-1 Leader Assessment, 2<sup>nd</sup> Quarter, FY 06, Mosul, Iraq' undated*

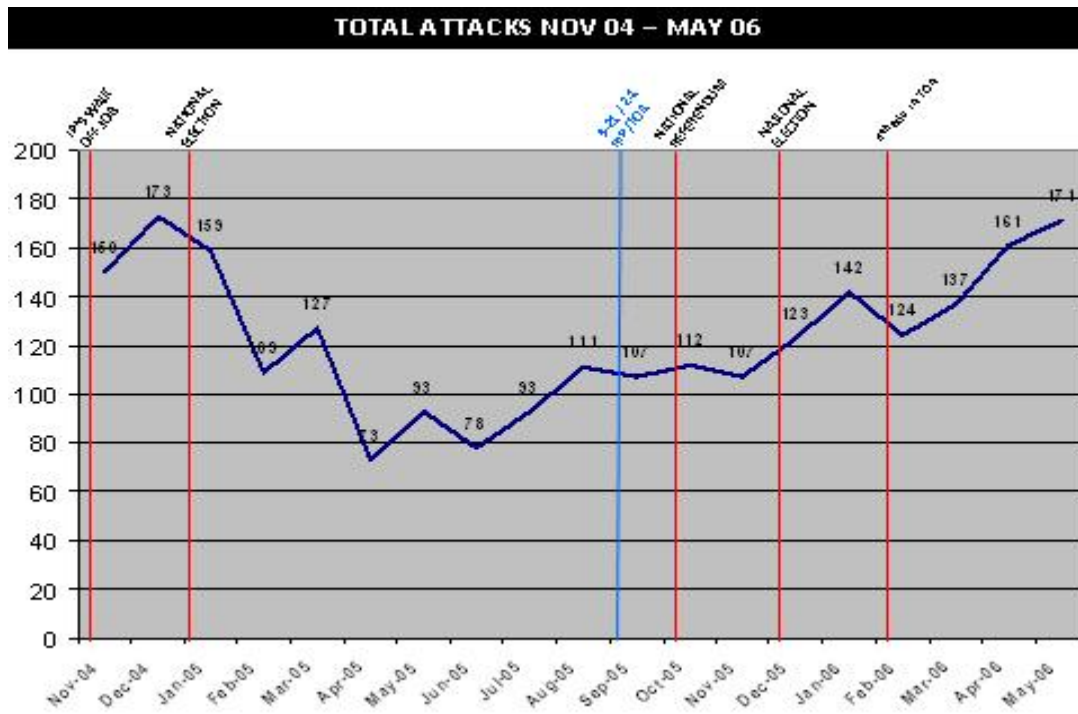
The 2-1 COIN campaign in eastern Mosul demonstrated a systematic attempt to apply effects-based operations in a difficult environment. The battalion built a campaign plan from the ground up to apply a variety of organizational capacities on the environment to reach its end states of a neutralized insurgency and stable local security, an ISF capable of independent operations and a government capable supporting the population's basic needs. It is clear that the battalion innovated in the field in its attempt to deliver effects to create that end state. The battalion had its greatest success in the direct action domain of operations conducted against counterinsurgency. The building of the unit's operations-intelligence fusion cycle created an extremely agile, flexible organization that drove authority down the organizational hierarchy to the units in the field. The brigade's pre-deployment

emphasis on junior leader development successfully created a middle management that accepted and exercised authority and initiative and flourished in the field. It is also clear that that in 2-1's case that the unit worked hard to use non-lethal effects through information operations and local leader engagement. By the definition used in this dissertation, the battalion demonstrated significant innovative capacity in the field in the absence of overarching joint doctrine.

The battalion succeeded in reducing the effectiveness of insurgent attacks, which continued throughout the deployment at relatively constant levels. As indicated in Figure 5-18, total attacks mounted in eastern Mosul actually increased slightly during the period of 2-1's deployment. Behind the numbers, however, had been a shift in insurgent tactics during the spring of 2006 and a decreasing lethality over the period. As the ISF steadily gained in competence during the spring of 2006, insurgent attacks increasingly focused on Iraqi Army and police personnel. The ISF was subjected to a concerted insurgent fear and intimidation campaign in the spring of 2006 that mirrored tactics used elsewhere in Iraq as the ISF slowly built its capacities. The growing integration of ISF into the battalion targeting cycle and improved operational capabilities led to a steady roll-up of insurgent cells. The continuous disruption of these cells meant less skilled bomb makers were established and the IEDs and SVBIED's became less effective. Insurgent TTPs also shifted during the period to less direct fire engagements to standoff attacks using IEDs.<sup>121</sup>

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<sup>121</sup> Author interview with Webster.



**Figure 5-18**

Attack Trends in Eastern Mosul from November 2004-May 2006

Source: PowerPoint presentation titled '3-2 Infantry Transition Brief' dated June 2006

The insurgency in eastern Mosul, however, clearly was not defeated during 2-1's deployment – despite an active operational tempo that nine months after arrival totaled 7,300 combat patrols, 192 cordon and search operations and nearly 400 detainees processed. Insurgents mounted 317 IED attacks and 17 vehicle-IED against the battalion. None of the unit's Stryker vehicles were destroyed in the campaign. As various observers commented, however, the insurgency throughout Mosul seemed to have a certain resilience that remains as of this writing (two years later). For every cell that got killed or disrupted, another one sprouted up in a relatively short period. The SITEMPs developed early in 2-1's deployment that described the threat facing the battalion in the different neighborhoods looked remarkably similar to the SITEMPs later in the deployment – although the unit showed great proficiency in its

targeting methodology and in the translation of that methodology into an effective operations-intelligence fusion cycle.

### **Company C/1-17 in Western Mosul**

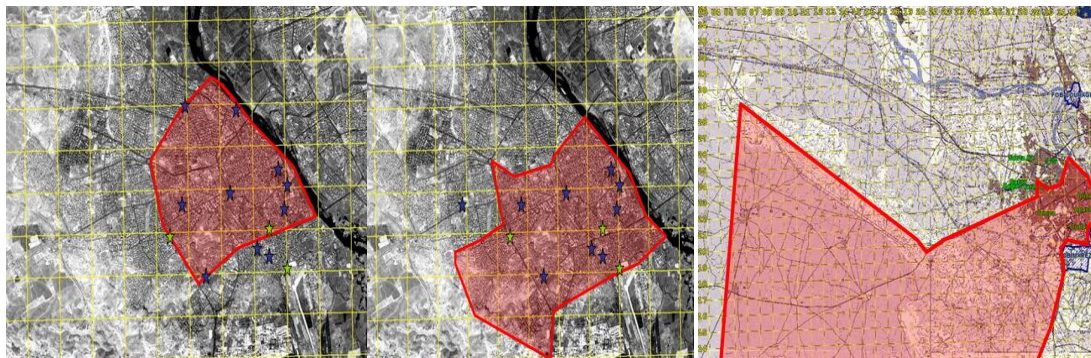
On the other side of the river, 1<sup>st</sup> Battalion, 17<sup>th</sup> Infantry conducted COIN operations in the western neighborhoods of Mosul – the largely Sunni area of the city that had been the focus of insurgent attacks in November 2004 when the Mosul police force disintegrated.<sup>122</sup> Company C and its 175-odd ‘on paper’ personnel and its 21 Stryker vehicles conducted COIN operations in south western Mosul from September 2005-July 2006 – an area with a population totaling between 700,000 and 900,000 people. The unit averaged a daily end-strength of 155 people available for duty on a daily basis – significantly below its authorized end strength. By the end of its deployment the unit received successively greater geographic areas of responsibility as indicated below in Figure 5-19. By the summer of 2006, the company had responsibility for policing villages 35 kilometers to the west of the city. Describing its operations as an economy of force mission would be a charitable description given the number of boots on the ground available for operations in western Mosul. Company C conducted operations in the so-called ‘Old Town’ part of the city that also hosted most of the Iraqi governmental offices. The ‘Old Town’ section of western Mosul had only three major roads capable of handling the Strykers, which meant that many operations were fought with soldiers dismounted from their vehicles. The company partnered with the 2<sup>nd</sup> Battalion, 2<sup>nd</sup> Brigade, 2<sup>nd</sup> Infantry Division, turning over primary responsibility

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<sup>122</sup> Details of operations in western Mosul early 2006 in Julian Barnes, ‘Cracking an Insurgent Cell’, *U.S. News and World Report*, January 9, 2006; Shawn Macomber, ‘Preparing to Transition’, *The American Spectator*, January 13, 2006.



for battle space in the city to the unit in January 2006. With this event, Company C ceased to mount 'independent' operations without IA participation.



**Figure 5-19**

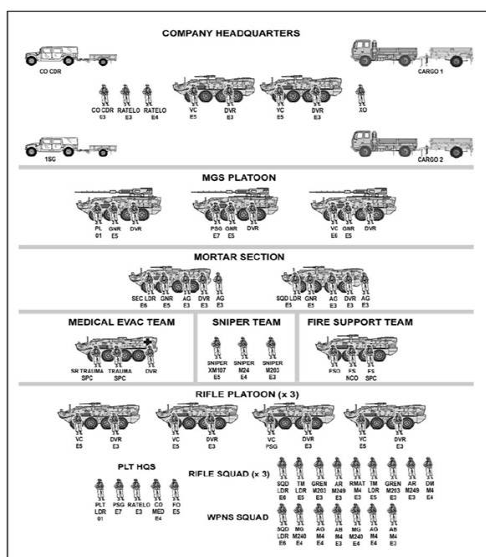
The Growth of C/1-17's Area of Responsibility from 2005-2006

Note: Blue Stars Are Iraqi IP Stations; Green Stars Iraq Army Facilities

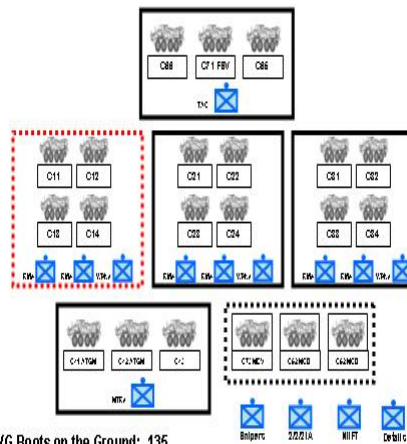
Source: PowerPoint presentation titled 'COIN CFE: C/1-17 IN: Los Diablos' undated.

Upon arrival in its area, the company immediately set about reconfiguring itself to squeeze combat power from the unit. The changed organizational structure of the company is illustrated in Figure 5-20 below. The graphic at the left of the figure illustrates the standard doctrinal organization of a Stryker infantry company;<sup>123</sup> the right hand side illustrates the structure that the unit evolved into upon the deployment into western Mosul. The company's commanding officer, Captain Ed Matthaides, did away with the traditional Stryker infantry company organizational structure as illustrated on the left of Figure 5-20 and instead integrated his mortar, fire support and medical evacuation team into the four existing maneuver elements (three rifle platoons and a mobile gun system platoon.)

<sup>123</sup> Drawn from *FM 3-21.11 The SBCT Infantry Rifle Company*, Department of Army, Washington DC, January 23, 2005, [http://www.wearsoldiers.org/armyorganizationdoctrine/SBCT/sbct\\_infantry\\_rifle\\_company.htm](http://www.wearsoldiers.org/armyorganizationdoctrine/SBCT/sbct_infantry_rifle_company.htm).



## DAILY TASK ORG



AVG Boots on the Ground: 135  
 AVG Available for Combat OPS: 100

Figure 5-20

Source: PowerPoint presentation titled 'COIN CFE: C/1-17 IN: Los Diablos' undated

The organizational structure that resulted is on the right. Matthaides also reconfigured and augmented the dedicated company headquarters element and made it another maneuver force. The dotted line surrounding four of the Strykers above reflected the loss of a maneuver element to force protection requirements at the company's training base. The configuration of the company into five distinct maneuver elements reflected the embrace of the concept of distributed operations throughout the brigade and which drove authority down to the squad leader level.

Also reflecting the brigade's emphasis, the company supported operation of the Northern Iraq Institute Field Training, or NIIFT, and structured a platoon level training program for its partnered IA unit. The program was administered at FOB Marez by the four senior non-commissioned officers in the company, 1st Sergeant Daniel Schoemaker, who received further staffing support by four squad leaders from



the company's platoons. The U.S. trainers got augmented by whichever platoon had been assigned force protection duties or were posted as the company's quick reaction force. This meant that different platoons with operational experience all cycled their IA counterparts through the training program. An average of one IA platoon was put through the training very week. The course started with basic rifle marksmanship, maintenance, and weapons safety on a static range. The training evolved to implement 'buddy team' movement ranges, and advanced to fire team moving through shoot houses. Eventually, the IA units all graduated to actual live fire exercises in a facility built by the company to build combat competencies in urban terrain – called a MOUT, or military operations in urban terrain. The average IA soldier fired 1,200 rounds of ammunition per week – more than most soldiers had ever fired in careers.

The training facility simulated the conditions likely to be encountered in urban combat. The training program emphasized small arms fire discipline to counter the IA tendencies to 'spray and pray' in firing their automatic weapons. The course taught the units skills to control their rates of fire and work on target acquisition. The program worked to focus on the IA NCOs learning their roles so that they would be able to make decisions in the absence of their officers. This proved difficult during the program and many senior IA officers opposed the concept and the IA NCOs were reluctant to take on tactical responsibilities. The curriculum included first aid classes and physical fitness training, which proved difficult in the Iraqi heat. The program integrated rudimentary maintenance classes for the IA weapons and vehicles. The

unit worked hard at the program and believed that the tactical proficiency of the IA platoons improved over the course of the training.<sup>124</sup>

Nearly all company C's patrols were conducted with IA partnered units – despite continuous frustrations within the company on working with Iraqi units. The unit's After Action Report noted: 'When the IA were present they often had poor noise and light discipline, added hours to the execution of the mission...and threatened OPSEC. One the objective they often questioned why people were targets...and thought most everyone was innocent.'<sup>125</sup> In addition to NIIFT base, company NCOs would conduct 'Sergeant's Time Training,' with Iraqi Army units on a continuous basis and participated in weekly IA battalion training and targeting meetings.

Working joint patrols with the IA represented one of the unit's lines of operations structured around the brigade-wide lines of operation surrounding security, governance, and host nation capacity building.<sup>126</sup> The unit oversaw civil military operations in its sector that included the reconstruction of three schools, two rebuilt parks, two road reconstruction projects and various trash cleanup programs. The unit made efforts to synchronize CMO and IO, using the Mosul Most Wanted List and spray painting the names of wanted suspects with contact information using stencils in public places. The IO tools proved very useful to the company in generating local tips to the company commander's cell phone, further leveraging the benefits of drawing upon the OGA HUMINT networks in the sector and the gradually growing

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<sup>124</sup> Information distilled from author interview with Master Sergeant Daniel Schoemaker, April 29, 2009; author interview with Major Ed Matthaides, March 12, 2009.

<sup>125</sup> After Action Comments for C/1-17 IN During OIF 2005-2006, Memorandum for the Record, Camp Taji Iraq, 15 November 2006.

<sup>126</sup> Examples of joint patrols in early 2006 covered in Shawn Macomber, 'They Shoot Litter Bugs, Don't They?' *The American Spectator*, January 10, 2006; Macomber, 'Night Raid!' *The American Spectator*, January 5, 2006.

competence of the unit's THT. The unit did not develop the same sort of tactical operations-intelligence fusion cycle that worked in 2-1 on the other side of the city. Instead, the unit maintained its own databases of information gleaned from THT debriefs and tips from a growing number of sources in the patrolled neighborhoods. The unit sometimes conducted as many as eight to nine raids a night. The unit also used female American soldiers on raids that had been provided by a neighboring combat support battalion to help in cordon and knock operations and raids. Using female soldiers helped gather information on these operations and defuse tensions in late-night searches of homes in western Mosul's dense urban neighborhoods.<sup>127</sup>

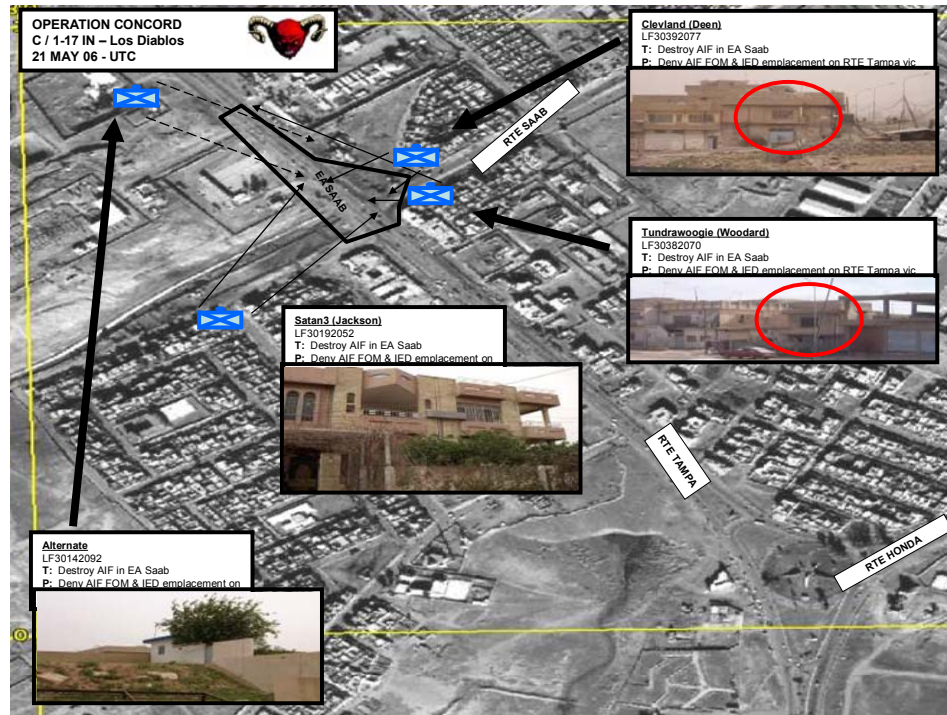
The unit played a dangerous cat-and-mouse game with local insurgents and built a variety of new TTPs to combat IEDs, which represented the most serious daily threat to the unit. They relied on non-doctrinal 'Small Kill Teams,' or SKTs, to ambush insurgents who were themselves seeking to ambush the company's patrols along the three major roads in western Mosul. The use of SKTs evolved in Iraq in 2005 and 2006 and was in more widespread use by 2007.<sup>128</sup> In Mosul, 1/25 had used teams in over watch positions but had not refined the TTPs to the extent done in C/1-17. The Company C SKT teams typically were comprised of five or six unit personnel that infiltrated under cover into areas of high insurgent IED activity. Each SKT typically included at least one M240B machine gun, 1 M14 Rifle, and 1 M203 grenade launcher in addition to normal fire support team weapons. Other favored weapons included the AT-4 or Javelin anti-armor weapons. Prior to an operation, the company

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<sup>127</sup> Author interview with Matthaideess.

<sup>128</sup> Use of SKTs in Diyala, for example, is detailed in Spc. Ryan Stroud, '6-9 SKT's Dominate the Enemy in Diyala Province', NewsBlaze.com, July 31, 2007. The article details SKT operations by 1st Platoon, B Troop, 6-9 Armored Reconnaissance Squadron, 3rd Brigade Combat Team, 1st Cavalry Division.

gathered data on the houses adjacent to major intersections using Microsoft PowerPoint.



**Figure 5-21**

Example of C/1-17 SKT Operation Concord, May 2006, in Mosul

*Source: PowerPoint presentation titled 'COIN CFE: C/1-17 IN: Los Diablos' undated*

Once the data had been gathered, the unit selected houses with good over watch positions to infiltrate prior to the operation. The unit devised various innovative ways to infiltrate teams into the houses, which it would then secure for up to 48 hours, or until their location was compromised. One favored technique was to place the teams to top of the Strykers to infiltrate a house through the second story. As indicated in Figure 5-21, the operations involved multiple locations to give the unit different fields of fire over the area under observation. The SKTs proved effective in killing IED

emplacement cells when the teams were employed in the fall of 2005 and winter of 2006, which led to a temporary reduction in the attacks.<sup>129</sup>

A variety of means were used by the company to lure insurgents into SKT ambushes. The Unit's after action reported that: 'Cameras, fake cameras, fake satellite dishes and other technical looking device or CF [coalition force] looking like device have been used to bring AIF into SKT engagement areas. This is a useful method to spot AIF because they will often try to destroy these devices, thereby PIDing [positively identifying] the LNs [local nationals as AIF].'<sup>130</sup>

In January 2006, the company mounted Operation Devil's Den, placing six SKT teams and two decoy cameras along a route that had been repeatedly attacked by insurgents. In addition to the SKT teams, the unit established a small COP nearby with a quick reaction force ready to pursue fleeing vehicles. Plans for the operation are described in Figure 5-22. The operation resulted in the killing of an insurgent IED/sniper cell that had been responsible for the wounding of 10 coalition soldiers over the previous several months. The cell tried to destroy the decoy cameras and walked right in to the ambush.

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<sup>129</sup> The use of these teams has been controversial. See Josh White and Joshua Partlow, 'U.S. Aims to Lure Insurgents With Bait', *Washington Post*, September 24, 2007.

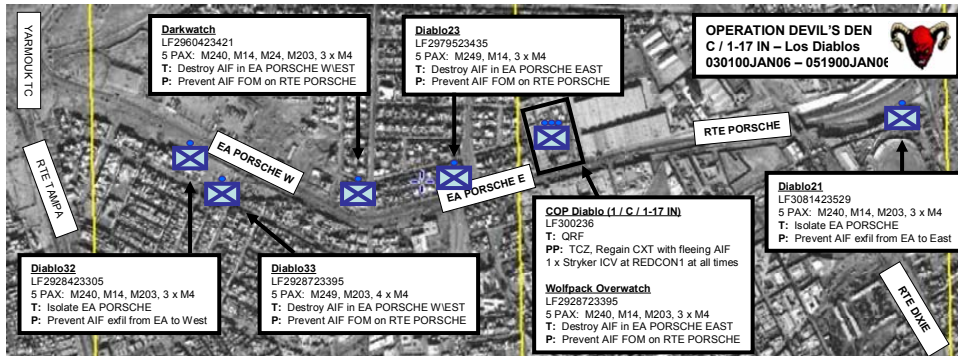
<sup>130</sup> After Action Comments for C/1-17 IN During OIF 2005-2006, Memorandum for the Record, Camp Taji Iraq, 15 November 2006.



**C / 1-17 IN**  
**OPERATION DEVIL'S DEN (02-05 JAN 06)**



- **THE SITUATION...**
  - RTE PORSCHE East (vicinity Tal Afar Garage) has had numerous IEDs since C / 1-17 IN occupation of AO Diablo
  - Tal Afar Garage is a known AIF meeting location
  - SKT operations overwatching 2 x decoy cameras resulted in 2 x AIF WIA (1 x detained) on 28 DEC 05
- **THE PLAN...**
  - Insert 6 x overwatch positions along RTE PORSCHE destroying and isolating AIF in two EAs
  - Have 1 x platoon establish COP Diablo to serve as QRF for any overwatch position in contact
  - Have 1 x Stryker ICV from COP Diablo at REDCON1 for the duration of the operation to action any fleeing vehicles



**Figure 5-22**

*Source: PowerPoint presentation titled 'COIN CFE: C/1-17 IN: Los Diablos' undated*

The results of the operation are illustrated in Figure 5-23 below. In addition to SKTs the unit used mortar illumination rounds over key road intersections as a further deterrent to IED emplacement. During May, the company mounted a complex operation comprised of firing mortar illumination rounds over key city intersections with SKTs inserted to ambush IED emplacement teams. Counter IED operations mounted by Company C were temporarily successful. As noted in the unit's after action report. 'SKT Operations worked very well for awhile in the beginning, we were putting them out at random. We seemed to be surprising the enemy on several different occasions. As time went on, though, we began putting out SKTs almost on

a schedule, over-saturating the zone....While IED emplacement wet down, the AIF just went to other areas or ceased operations until CF operations were complete.<sup>131</sup>



**Figure 5-23**

*Source: PowerPoint presentation titled 'COIN CFE: C/1-17 IN: Los Diablos' undated*

Company C demonstrated significant adaptive capacity used its adaptive skills to build new organizational capacities during its deployment – all while operating below its authorized end-strength in dense urban terrain. The unit’s flexibility stemmed from trained, confident personnel throughout the organization that had built cross-functional skills before the deployment and which continued to build cross functional capabilities within the organization while closed with the enemy in Mosul. Stated differently, members of the unit knew how to do each other’s job.<sup>132</sup> Circumstance played a role in forcing this upon the unit, which didn’t receive its complement of vehicles until just before its major pre-deployment training exercise at the Joint Readiness Training Center, which limited its ability to build standardized SOPs and TTPs with its vehicles. This meant that the unit had little practice in building TTPs and SOPs for the coming battle in Mosul. Training prior to JRTC emphasized

<sup>131</sup> After Action Comments for C/1-17 IN During OIF 2005-2006, Memorandum for the Record, Camp Taji Iraq, 15 November 2006.

<sup>132</sup> Author interviews with Matthaides and Schoemaker.

dismounted operations and focused on skills called ‘close quarters battle’ and ‘battle drills 6A’ that focused on clearing buildings and rooms.<sup>133</sup> This training would be used by the unit to build its training program in early 2006 for its partnered Iraqi units. During the unit’s final exercise, the scenario subjected the company to a notional COIN environment against an aggressive opposition force at a time when the unit was at just over 50 percent of its authorized end-strength. The training scenarios at JRTC generally stressed units to a point where they were forced into organizational changes and adaptation to accommodate the scenario. A principal way of doing this is to inflict casualties. During the Company C exercise, the notional insurgents used extremely accurate and powerful mortars that damaged Stryker and wounded between five and ten company members with each round. This meant that lower ranking noncommissioned officers had to fill roles performed by more senior leadership – a step made even more necessary by the unit’s under-strength status. The exercise helped spur junior leader development and diverse, cross function skill building that built organizational flexibility. For example, exercise casualties forced different unit members to become proficient at driving their vehicles, a process that normally took each Stryker crew a year’s worth of training. During the JRTC exercise, the scenarios saw many crewmembers ‘wounded,’ which meant that another Soldier had to step up and fill that position. Matthaides estimated that by the end of his company’s JRTC rotation, the unit had double the coverage across the unit’s vehicle crews for people with experience manning the vehicles. The skill building during the training got expanded in the friction of actual combat. The crew casualties became real in Mosul (one killed in action; 10 wounded), as did other circumstances, such as leave and administrative and training requirements that pulled crewmembers out of their roles.

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<sup>133</sup> Standard Army training in accordance with *FM 7-1, Battle Focused Training*, Headquarters Department of Army, Washington D.C., September 15, 2003, <http://35.8.109.2/resources/FM7-1BattleFocusedTraining.pdf>, accessed April 2, 2009.



The unit's skills meant that it had a trained manpower pool to immediately step up and ensure that the company never lost combat capability. More importantly, the unit found out what teams worked best together and gave it the opportunity to assign individuals to tasks for which they had demonstrated specific competency. While the established organizational hierarchy did not become moot during Company C's deployment, the capacities of the work force allowed authority to be driven down the hierarchy to reside in team-driven operations. This philosophy extended to the senior company leadership, where Matthaideess designated his fire support officer (as opposed to the executive officer) the unit commander in his absence because of the officer's more complete training.<sup>134</sup>

The unit attempted to apply this experience to its IA / IP training partnerships. During engagements with local Iraqis, it tried to replicate the cross training experience by incorporating junior leaders into combined planning and engagements to build their confidence and ability to operate independently or assume a higher role. The adaptive capacity in the unit combined with a command atmosphere that emphasized junior leader distributed operations drove the company to develop new organizational capacities like the non-doctrinal SKT as one way to fight the insurgents.

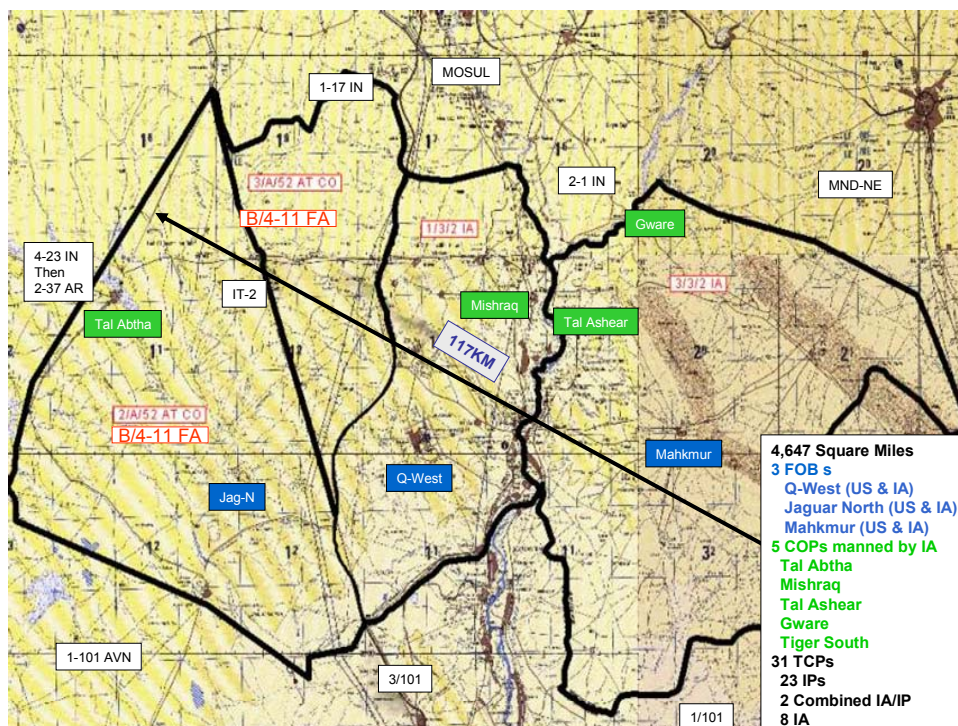
#### **4-11 Field Artillery Southern Ninewa**

The 172<sup>nd</sup> 4-11 Field Artillery conducted COIN operations south of Mosul and to the west of the Tigris River – an area that spanned nearly 5,000 square miles. The area's population consisted of approximately 75 percent Sunni in the western reaches of its

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<sup>134</sup> Author interview with Matthaideess and Schoemaker.

area and 25 percent Kurdish immediately to south of Mosul. The area was aligned with the 3<sup>rd</sup> Brigade, 2<sup>nd</sup> Iraqi Army Division. It hosted 21 police stations organized into three districts: Kiara, Makmur and Hadr. Eight of the towns in the area had elected and/or appointed mayors. In contrast to the urban landscape of Mosul, the area of 4-11's operations featured low population density and comparatively low levels of insurgent violence. As characterized by the 4-11's commanding officer, Lieutenant Colonel Scott Wuestner, the area required 'hold' operations in the clear, hold, build sequence of COIN being used by most U.S. units in Iraq. The unit's area of operations and its deployment scheme is identified below in Figure 5-24.



**Figure 5-24**

4-11 Area of Operations South of Mosul, 2005-2006

*Source: PowerPoint Presentation titled 'Task Force Thunder: 4-11 Field Artillery Qwest/Taji Iraq August 05-Dec 06'.*

As indicated above, the 4-11 deployed into three FOBs: Q West (center), Jaguar North (left) and Mahkmur (right). Each of these facilities hosted U.S. and Iraqi forces. In addition to these three FOBs, the Iraqi Army manned four additional COPs (from left to right in Figure 5-24) at Tal Abtha, Mishraq, and Gware. The Q-West FOB eventually housed an Iraqi Army non-commissioned officer training academy as well as an Iraqi Police training academy. The unit's tactical mobility came not from the Stryker but from up-armored HMMWVs.

The 4-11 deployment represents an interesting case in the context of this analysis because it represented a core competency of the 172<sup>nd</sup> organization – the organic artillery capacity – that would not be needed in the COIN campaign. The battalion realized a year before the deployment that it would be operating as another brigade maneuver/infantry regiment and set about recasting itself around a new set of core competencies, while still maintaining an ability to be used as an artillery unit should the need arise. To recast itself and build new infantry-oriented TTPs, the unit redesigned its pre-deployment training cycle and re-educated its work force to prepare for its new job. Shooting artillery requires a different set of skills and different mindset than fighting as an infantry organization. As noted by Wuestner, the senior noncommissioned officers in the brigade had 'engrained the stepology of shooting a canon whereas as an infantryman everything is variable.'<sup>135</sup> The unit drew upon instruction from the Center for Enhanced Performance at the U.S. Military Academy at West Point in reorienting the mindset of the unit to its new tasks. The Center had been established in 1989 to help the academy's football players improve their mental approach to their respective sport. By the early 1990s, the program had been

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<sup>135</sup> Author interview with 4-11 commanding officer, Colonel Scott Wuestner, April 2, 2009.

expanded to include a variety of other sports activities and then further expanded to more general training activities. The West Point presentations got married up with experts provided by the JRTC at Fort Polk to familiarize the battalion with the TTPs it would need in Iraq.

Like the other battalions in the 172<sup>nd</sup>, 4-11 sought to operationalize an approach to the battlefield based on effects-based operations. Wuestner had worked at JRTC earlier in his career when the concepts first started being tested in the field and believed it was important to develop a holistic understanding of the environment. Attempting to understand the different components of the environment led the battalion develop an 'effects wheel' for tying to develop and evaluate courses of action in the field. The battalion took over a battle space with relatively low levels of violence. The Kurdish villages in the eastern part of the sector provided no haven for the collection of Sunni insurgents groups battling the rest of the brigade in Mosul. In the West, the villages had controlled smuggling routes coming in from Syria. Like the Sunni villages in western Anbar in Al Qaim, these tribes had little interest in aligning themselves with insurgents that would disrupt and/or seek to disrupt their income stream. The area directly to the south of the 4-11 was thought to be a haven for Saddamist insurgents, but 4-11 was discouraged from operating in the area that was the responsibility of the 101<sup>st</sup>.

The battalion developed three LOOs around which to structure its operations: (1) AIF Neutralized; (2) Legitimate Iraqi Government; and (3) Develop Iraqi Infrastructure; (4) Develop capable ISF. While insurgents occasionally planted IEDs on several of the major supply routes, the overall security environment was relatively benign.

Wuestner oriented the battalion to aggressively move to build partnerships with the IA and IP and a mounted determined effort to build relationships with local village leadership in the small villages throughout its area. The regional security council meetings held each month with the villages became a fixture in 4-11 AOR. These meetings initially featured 4-11 leadership meeting in public forums with local mayors and police chiefs to discuss issues surrounding local governance.<sup>136</sup> Eventually, the 4-11 reduced its role in these sessions as Iraqi police and army officials also appeared to take questions with the Iraqi mayors and develop agenda items to work with the provincial government in Mosul. Wuestner took advantage of the State Department provincial reconstruction team that got activated in Mosul in November 2005 and used his security council meetings as part of a process to send project requests up to the PRT and Iraqi ministries in Mosul. By the end of its deployment, the battalion had facilitated \$18 million in CMO in its area. A typical example of a 4-11 engagement activity is illustrated in Figure 5-23 below.

The training program featured side-by-side facilities at Q-West for the Iraqi police and Iraqi Army non-commissioned officers. The police training program went through two iterations. The Iraqi Police Proficiency Training program graduated 100 Iraqi police officers and its successor, the Iraq Police Basic Skills Training had a throughput of 250 police officers. The battalion consciously integrated the IP into their patrols, and each unit in the battalion had to do one joint patrol a week with an Iraqi police counterpart. Wuestner distributed his platoons to co-locate them with the Iraqi Army units at the various sites in the AOR to cycle their Iraqi counterparts through a training cycle designed to build IA proficiency. A squad from B battery

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<sup>136</sup> An example of one meeting detailed in Robert Kaplan, 'The Coming Normalcy'.

lived at COP Jaguar to train the 2<sup>nd</sup> IA battalion; another squad from the same company deployed to Mahkmur to train the 3<sup>rd</sup> battalion; and, A company assumed responsibility to train the 1<sup>st</sup> IA battalion and Q-West.



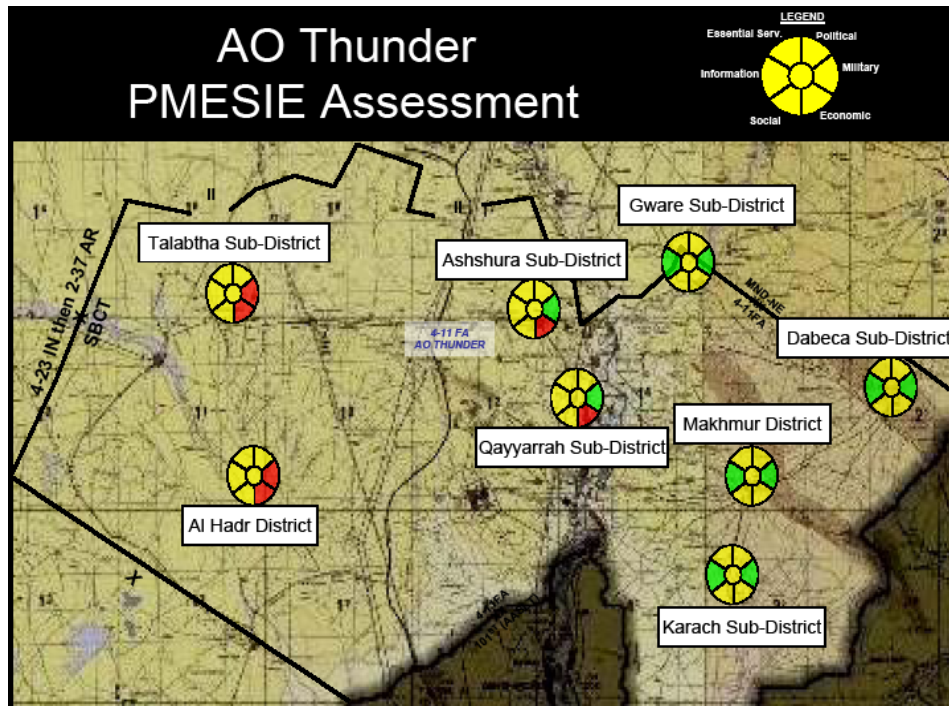
**Figure 5-25**

*Source: PowerPoint Presentation titled 'Task Force Thunder: 4-11 Field Artillery Qwest/Taji Iraq August 05-Dec 06'.*

Wuestner used an 'effects wheel' to assess the state his area which sought to evaluate the political, economic, information, essential services, social, and information conditions in each of the towns. The 'wheel' is illustrated below in Figure 5-26. The integrated assessment drove the battalion's targeting process as it sought to fuse kinetic and non-kinetic tools at its disposal to achieve the brigade's desired end state. The unit built a three-week targeting cycle with its Iraqi units and included constant



feedback loops by the Iraqi and U.S. units on the degree to which they were meeting the assigned objectives. The targeting cycle attempted to integrate the wheel elements to build a plan that anticipated second and third order effects.



**Figure 5-26**

4-11 Integrated Assessment of its Area of Operations

Key: red is negative; green positive; yellow is neutral

*Source: PowerPoint Presentation titled 'Task Force Thunder: 4-11 Field Artillery Qwest/Taji Iraq August 05-Dec 06'.*

An example of the battalion's attempts to shape its targeting strategy and supporting courses of action is indicated in Figure 5-27 – an attempt to determine whether and/or how the battalion could address the region's persistent unemployment by creating jobs through trash removal.

Figure 5-27 illustrates the efforts of the 4-11 staff to break the problem down into its constituent elements, using the different ‘frames’ of political, military, information, governance and essential services to drive potential courses of action and to anticipate second and third order effects of these actions. As noted in the wheel, the goal of job creation required an integrated approach that fused information, political analysis and relationships, military and security issues, with an appreciation of hard-headed economics.

The targeting wheel represented an attempt to apply the same sort of systems-based thinking and analysis used by 2-1 in eastern Mosul – albeit in a different environment using a somewhat less systematic methodology to specifically nesting the activity in a structured campaign plan. The approaches, however, were strikingly similar and arrived at independently by each battalion. In the case of 4-11, however, the intellectual and organizational reorientation from the artilleryman’s motto of ‘pull lanyard: got cookie’ to the complexities of trash removal in rural Iraq is particularly striking. The intellectual and organizational framework developed by 4-11 helped establish the basis for the unit to build capacities specifically tailored to the environment.



# COA Analysis

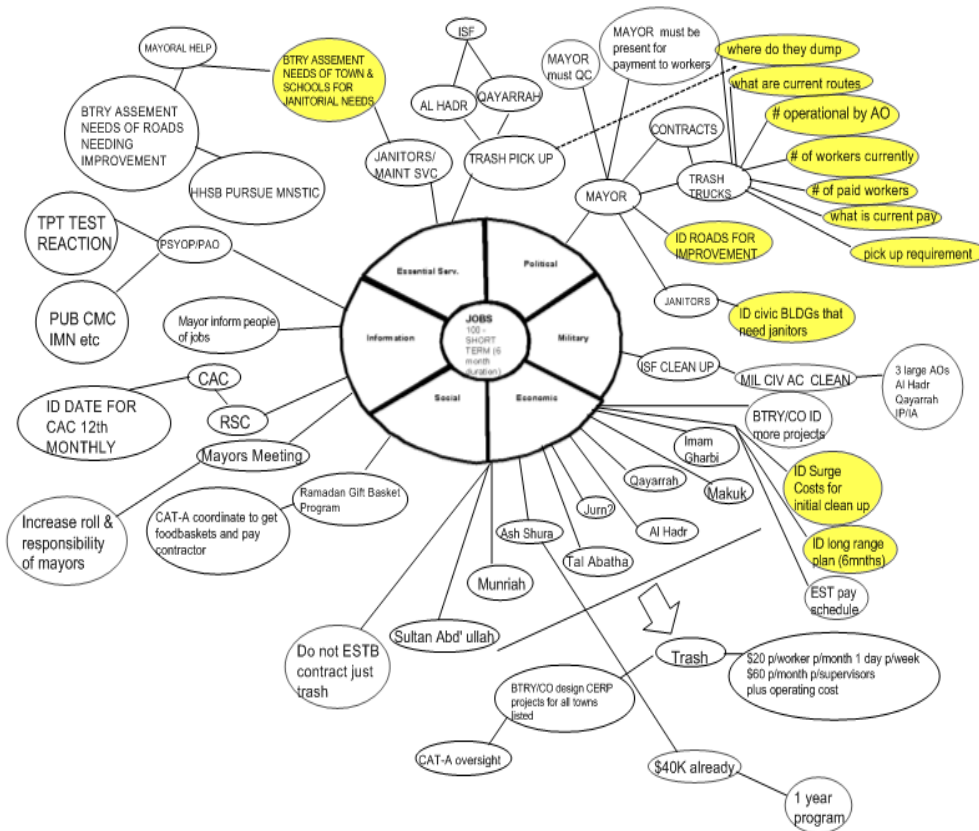


Figure 5-27

## 4-11 Targeting Wheel Applied to Economic Situation in AOR

Source: PowerPoint Presentation titled 'Task Force Thunder: 4-11 Field Artillery Qwest/Taji Iraq August 05-Dec 06'.

## Summary of 172<sup>nd</sup> Wartime Innovation

The 172<sup>nd</sup> SBCT demonstrated significant wartime innovations through the development of a variety of at least four new organizational competencies once it arrived in Ninewa. Although the unit had been organized, trained, and equipped to fight on a conventionally-oriented battlefield, the unit seamlessly transitioned to the COIN environment and worked hard to develop capacities that were relevant to

COIN. First, the units built a fused operations-intelligence cycle that drew upon a flattened, interagency organizational hierarchy that delivered intelligence to the units using the Stryker's digital communications and data backbone. As demonstrated in the 2-1 campaign in eastern Mosul, that cycle proved its worth in many directed raids against a resilient foe. Second, the brigade built an integrated targeting process as battalion staffs sought ways to meld kinetic and non-kinetic effects into mutually supportive activities as it worked to operationalize the 'clear, hold, build' strategy. Third, the brigade consciously sought to develop a systems-oriented perspective on its environment and apply the complex concepts of effects-based operations. Fighting in a COIN environment using these concepts represented a powerful organizational innovation in and of itself. In the space of a year, the 4-11 Field Artillery transformed itself from an organization whose purpose was to deliver indirect fire in conventional military operations into an organization attempting to systematically organize local governments and municipal services in rural Iraq. Fourth, the unit developed an integrated partnership program with the ISF that included infrastructure development, curriculums for training programs, and actual routinized exercises to build host nation capabilities.

It was no accident that the organization demonstrated significant flexibility in building new capacities and applying them to the environment in northern Iraq. Preparations during its training cycle sought to build an organization that embraced the concept of distributed operations that empowered junior leaders operating at the tip of the proverbial spear. In the 172<sup>nd</sup>, that took the form of squad leaders taking the initiative and being backed up by the brigade-wide leadership – whether it was development of training programs for the Iraqi Army or short, notice, directed raids

against insurgent cells using locally generated intelligence. It is clear that the unit also stretched its combat power drawing upon a cross functional work force that proved to be very flexible in the wartime environment. While the 172<sup>nd</sup> didn't tear up the doctrinal manuals in building its COIN campaign, its doctrine proved to be no hindrance in structuring operations to meet the demands of the tactical environment. In the case of 2-1, doctrinal principles got usefully applied to construct a flexible and adaptive campaign plan that related means to ends and provided a transparent, common set of assumptions baseline for all members of the organization to draw upon as they did their jobs. Just as the BSB developed a new organizational structure through its Forward Area Support teams to conduct logistics over the wide areas of northern Iraq, the SKTs developed by C/1-17 similarly grew out of common-sense applications of the organizational capacities to counter the adversary.

As has been noted previously in this chapter, the 172<sup>nd</sup> did not defeat the insurgency. Indeed this analysis does not argue that wartime innovation produced a 'victory' like that which occurred in the fall of 2006 during the battle for Ramadi. But it is clear that the 172<sup>nd</sup> and its predecessors consciously sought optimal solutions to the complex problems posed by the insurgency in Mosul and developed new organizational capacities in the field that mirrored the environmental complexity it confronted. In the case of the 172<sup>nd</sup>, it is clear that its network-centric capabilities proved to be an enabler in that process – but technology alone did not produce the flexible, adaptive organization that flattened its hierarchical structure in the wartime environment. That process happened largely due to senior leadership that drove authority down the chain of command to the company-, platoon- and squad leader.

## CHAPTER VI

### CONCLUSION

This dissertation has sought to answer two key questions: (1) How did the American military adapt to the growth of the insurgency in Iraq in 2005 and 2006; and (2) What were the sources of their adaptation? The evidence presented in the case studies shows that a disparate series of units in a diverse set of operational environments clearly improved their military response to the insurgency over the period. The units adapted by constructing integrated COIN campaigns using a tailored mix of kinetic and non-kinetic tools. The units constructed these campaigns empirically and, as it were, on the fly, based upon experience, and despite the absence of governing joint military doctrine. Evidence from the case studies suggests that the sources of tactical adaptation overwhelmingly resided within tactical units, which, in all the instances studied here, gradually built new organizational capacities by themselves over the course of their deployments. I define the development of these new organizational capacities as innovation. The process of innovation drew upon tailored training and intellectual preparation, leadership that apportioned authority throughout a unit's organizational hierarchy in ways not envisioned in doctrine, and junior leaders that accepted authority willingly and seized the initiative in the execution of missions handed down by the organizational leadership. The process of tactical adaptation evolved into organizational innovation in which new SOPs were developed that in turn built new and more generalized organizational capacities.

It is worth re-emphasizing the relationship between the concepts of tactical adaptation and organizational innovation. In this study they function as mutually supportive concepts and processes. Tactical adaptation occurs when units change organizational procedures on the battlefield in order to address perceived organizational shortfalls, which are generally revealed by their interaction with the adversary. The concept of organizational innovation in turn seeks to capture the process by which tactical adaptation gathers institutional momentum and validation, leading to the generation of new SOPs embodying organizational capacities that did not exist when the units began their deployments. The generality with which these processes can be observed shows that every unit in this study proved in the end to be a learning organization, which continuously sought to improve its performance and tailor its outputs to meet the demands of the environment. Each unit openly adjusted its outputs over time as ideas within the units surfaced to improve performance and address organizational shortfalls. The learning process drew upon steadily increasing knowledge of the environment and, no less crucially, an increasing understanding of the of the second- and third-order effects of the unit's operations on that environment – a subtle and inferential form of knowledge easily shrouded in the fog of war, but one whose mastery will always prove critical in counterinsurgency.<sup>1</sup> Each unit eagerly sought information about and from the environment, related that information to its TTPs and worked hard to change those TTPs as required to achieve their objectives. All the units covered in this study demonstrated significant learning capacities.<sup>2</sup>

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<sup>1</sup> See discussion in Chapter II, with reference to Lyn Eden's research on the roles of knowledge frames and knowledge laden organizational routines in *Whole World on Fire*.

<sup>2</sup>As noted in Chapter II, see definition offered by Richard Duncan Downie that is applicable here: 'A process by which an organization (such as the U.S. Army) uses new knowledge or understanding gained from experience or study to adjust institutional norms, doctrine, and procedures in ways designed to minimize previous gaps in performance and maximize future successes.' See Downie, *Learning from Conflict: The United States Military in Vietnam, El Salvador, and the Drug War*, p. 22.

This is perhaps a surprising conclusion given a number of factors that framed the original U.S. invasion and its overall operations in the period from 2005-2006. As documented here, the innovation accomplished by the U.S. military appears all the more remarkable given that it had arguably been set up for failure by its national-level political and military leadership. In 2005 and 2006, no relevant joint doctrine existed for units to draw upon in preparing for their deployments. The word ‘joint’ should be emphasized, since in Iraq all U.S. ground components conducting the COIN campaign fought as task forces in which they integrated elements from different services and civilian agencies into their schemes of operation. Army officers commanded Marine units and vice versa. All relied on air support from the Navy and Air Force. Special Forces operated in the same areas as their conventional counterparts. The ubiquitous OGAs supported military operations throughout the country. Personnel from a wide variety of civilian agencies served as members of task force operations.

The process of tactical adaptation and organizational innovation happened despite strategic confusion over the war’s objectives at the national level. Without a coherent strategic objective, troop leaders in Iraq would have been justified in being confused about connecting their operations to a clearly defined political objective. The initial justification for the war centered on counter-proliferation objectives – objectives that lost their relevance when it became clear that Saddam had successfully hoodwinked the world into believing that he remained armed to the teeth with unconventional weapons. The Bush administration then cycled through a series of national-level war aims until it finally settled on the idea of establishing a stable, functioning democracy. This objective was not clearly and consistently articulated until two years after the

invasion and even then remained conceptually cluttered with persistent references asserting a relationship between the Iraq occupation to the so-called War on Terror.<sup>3</sup>

National level leadership and coordination of the war effort was further compromised by a broken national-level interagency process, in which feuding cabinet secretaries (Donald Rumsfeld and Colin Powell) and their departments refused to cooperate. Just as important, a weak National Security Adviser proved unwilling or unable to mediate cabinet-level disputes, set the conditions for interagency coordination, or counter the strong influence of the Office of the Vice President in the decision-making process.<sup>4</sup> A strong contributing element to the fiasco was a politicized Joint Staff that could not or would not confront the civilian leadership with demands for more troops when more were clearly needed.<sup>5</sup> During the period of military operations studied here, all these factors prevented a truly unified national governmental effort to support military operations in Iraq.<sup>6</sup>

Without question, military operations were initially hampered by the biases and beliefs of senior civilian leadership, which received no significant opposition from the

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<sup>3</sup> Articulated in The White House's *National Strategy for Victory in Iraq* released in November 2005. As one of three 'long-term' wartime objectives, the report notes that US objectives are: 'An Iraq that is peaceful, united, stable, democratic, and secure, where Iraqis have the institutions and resources they need to govern themselves justly and provide security for their country' (p. 3). Even this document, however, is confusing in its verbiage in which it conflates the 'war on terror' with the myriad, complex problems faced by tactical commanders throughout the country. For a summary of the U.S. constantly shifting war objectives, see Associated Press, 'AP Charts Shifting Justifications for Iraq War', October 14, 2006.

<sup>4</sup> As documented by David L. Phillips, *Losing Iraq: Inside the Postwar Reconstruction Fiasco* (New York: Westview Press, 2005). Also see Ron Suskind, *The One Percent Doctrine* (New York: Simon & Schuster, 2006); Bob Woodward, *State of Denial: Bush At War, Part III* (New York: Simon & Schuster, 2006).

<sup>5</sup> It is also worth noting that the MNF-I Commander, General Casey, believed more troops were neither desirable nor necessary. See the account in Woodward, *The General's War*, pp. 75-76.

<sup>6</sup> The British effort suffered from some of the same maladies. See Anthony King, 'Britain's Vietnam: Learning the Lessons of Operation Telic', *Commentary*, Royal United Services Institute, April 30, 2009, <http://www.rusi.org/research/militarysciences/uk/commentary/ref:C49F9BEE224FA0/>, accessed May 1, 2009.

military leadership in the Joint Staff. The lack of prior planning for the post-invasion period placed ground commanders in a reactive position virtually from the moment the insurgency appeared in the summer of 2003. There was no systemic plan for post-invasion operations, if for no other reason than because to have conceived such plans would have required the civilian leadership at the Pentagon to concede that such operations might be necessary. Senior military leadership on the Joint Staff and the Central Command, for its part, seemed to accept a vague plan that called for the exit of U.S. troops soon after the toppling of Saddam. The bungled and haphazard way the Coalition Provisional Authority (CPA) finally got cobbled together in the spring of 2003 reflected the confused decision-making process in the Defense Department's civilian secretariat, which merely mirrored the broken national-level interagency process at the time of the invasion. These deficiencies in planning and foresight manifested themselves most catastrophically in the CPA's May 2003 decision to summarily disband the Iraqi Army. This decision, which was apparently never subjected to comprehensive interagency review and analysis,<sup>7</sup> would have calamitous and enduring consequences for ground commanders in Iraq by providing the insurgency with a trained pool of unemployed, military-age males with a grievance against the occupation. While senior Pentagon leaders like Rumsfeld and his deputies Paul Wolfowitz and Douglas Feith trumpeted the benefits of effects-based operations, they made little attempt to practice it themselves, by way of evaluating even the most

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<sup>7</sup> Background covered in Michael Gordon, 'Debate Lingered on Decision to Dissolve the Iraqi Military', *New York Times*, October 21, 2004. Then Vice Chairman of the Joint Chiefs, General Peter Pace, claimed that the Joint Staff had never been consulted in the decision. See AFP, 'Joint Chiefs Bypassed in Decision to Disband the Iraqi Army', February 18, 2004. Secretary of State Colin Powell later claimed not to have been consulted in the decision, according to the account in Bob Woodward's *The War Within*, p. 49; President Bush later said he did not recall reviewing the decision, an account disputed by the CPA's Paul Bremer. See Edmund Andrews, 'Envoy's Letter Counters Bush on Dismantling of Iraqi Army', *New York Times*, September 4, 2007.



obvious branches and sequels that might arise from their preferred policy choices for post-war Iraq.

Finally, it is worth emphasizing that the organizations charged with executing the ground war in Iraq initially evinced little interest in fighting a counterinsurgency. In Iraq (unlike the Afghanistan campaign of 2001-2002) combat operations fell overwhelmingly to the mainstream ‘regular’ military, whose institutional preferences and instincts have historically favored heavy forces and conventional operations. While the Defense Department had produced a dizzying array of documents suggesting that military institutions should build capacities to fight irregular war, the military departments had not operationalized these requirements by the time of the Iraq invasion 16 months after 9/11 attacks. The development of what would eventually become institution-wide capacities to conduct irregular war (particularly for the Army) was forced upon these reluctant organizations by the circumstances of war.<sup>8</sup> While the Rumsfeld-administered Pentagon sought to advertise the ‘transformation’ of the American military via standoff weapons, precision strike operations, and other advanced technologies,<sup>9</sup> an alternative process of defense ‘transformation’ indeed did unfold in Iraq within the units studied here. That transformation process originated in the minds of company, battalion, and brigade leaders, who then set about restructuring their battlefield operations and building new organizational capacities to fight an irregular war. In the final analysis, the wartime innovation process operationalized by brigade, battalion, and company commanders and their seasoned non-commissioned officers rescued a cowed national-level senior

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<sup>8</sup> As noted by Thomas Ricks in *Fiasco*; As also poignantly documented in Dexter Filkins, *The Forever War* (New York: Alfred A. Knopf, 2008)

<sup>9</sup>Detailed in a stream of press released posted on the homepage of Defense Department’s Office of Force Transformation created by Rumsfeld in October 2001. The office was closed in September 2006.

military leadership and their feckless civilian masters from an unfolding strategic debacle in 2004 and 2005.

It must also be emphasized, that any learning process in war takes time – time that may be cut short by political processes beyond the control of the armed forces. For the United States, the adaptive and innovative processes of its engaged units could not alter the rapid erosion of public support for the war that occurred during precisely the period when the American counterinsurgency effort was finally finding its legs.<sup>10</sup>

There is no denying that the often remarkable efforts at tactical adaptation and organizational innovation that have been studied here were made necessary by the strategic obtuseness and comprehensively poor preparation with which the Iraq war was undertaken in the first place. When strategic objectives are clearly defined, military institutions can more easily tailor their operations to achieve those objectives. When objectives shift or are not clearly defined, military institutions, good ones anyway, will do their best to rise to the occasion, and may still fall short of strategic success in the end. In Iraq the U.S. military confronted a range of problems that would have made Carl von Clausewitz turn over in his grave: a shifting series of political objectives, broken national-level decision-making process, weak domestic political support, and problematic civil-military relations. The largely bottom-up innovation process chronicled in this study may have rescued the nation from immediate strategic debacle, but it may well prove insufficient, in the end, to overcome all these systemic shortcomings. If there is an abiding lesson in all this, it is that strategic objectives

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<sup>10</sup> For polling that charts the decline in U.S. public support for the war during the period studied here, see 'Pessimism Grows as Iraq War Enters Its 4<sup>th</sup> Year', The Pew Research Center for the People and the Press, March 16, 2006, <http://people-press.org/report/272/pessimism-grows-as-iraq-war-enters-fourth-year>, accessed May 3, 2009.

must be clearly articulated by civilian and military leaders alike and thoroughly infused with a realistic appreciation on the political limits of military power and with an understanding of the capabilities of the organizations charged with its exercise. The fact that this lesson has been learned so many times before in no way diminishes its importance for the future.

### **Wartime Innovations**

All the units in this study realized that their primary conventional war-fighting skills would form only one of a variegated set of competencies that would be needed for the Iraq COIN environment. All consciously searched for an appropriate mix of kinetic and non-kinetic tools suggested by COIN theorists,<sup>11</sup> and sought to build the new organizational competencies required by their diverse array of missions. These missions included such activities as: military operations against the insurgents; local political and leader engagement; building host nation military capacities virtually from scratch through training and exercises; building governance capacities through elections and assisting in the establishment of local civic institutions; helping build local infrastructure through coordinated civil-military operations; using IO, ranging from radio broadcasts and television to posters and flyers to shape their battle with the insurgents for the local population. The innovation process happened in both rural and urban environments, in areas where the insurgency operated at both higher and lower levels of activity, and while in contact with insurgent elements of markedly

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<sup>11</sup> One of the most widely cited COIN theorists is David Galula, *Counterinsurgency Warfare: Theory and Practice* (London: Pall Mall, 1964); Robert Thompson, *Revolutionary War in World Strategy* (New York: Taplinger, 1970); Ian F. W. Becket, Ed., *Armed Forces and Modern Counterinsurgency* (London: Croom Helm, 1985); also see Becket, *The Roots of Counterinsurgency: Armies and Guerilla Warfare 1900-1945* (London: Blandford, 1988). For an excellent review of COIN theory literature, see David Kilcullen, 'Counter-Insurgency Redux', *Survival* 48, No. 4 (December 2006), pp. 111-130; Robert R. Tomes, 'Relearning Counterinsurgency Warfare', *Parameters* (Spring 2004), pp. 16-28.

different political and ideological makeup. The innovation process appeared unhindered by unit type, tables of equipment and organization, or institutional identity – although it is clear that these variables affected the process. Army legacy units, Marine Corps light infantry and relatively new Army transformational units all engaged in the innovation process. In other words, the innovation process exhibited common characteristics across disparate organizations fighting in different circumstances and with different equipment and organizational structures.

The principal innovations identified in the cases fall under the following three general categories:

(1) *New Organizational Activities and Competencies*: All the units demonstrated a pronounced widening of organizational competencies in addition to the primary conventional warfare skills for which the units had been trained, organized, and equipped. These competencies included the standup of local governing organizations to assume responsibility for civic affairs; information operations designed to shape the tactical environment; partnering and training programs created by U.S. units for Iraqi Army and police units; and coordinated outreach to local leaders to enlist their support against the insurgents. While all the units studied here developed these competencies, examples from a few of the cases are particularly noteworthy. In March 2007, the 1-6 Marines in central Ramadi helped stand up a 15-member local district council to discuss security, education, employment, local infrastructure issues and variety of other governance issues. The local district councils later became a mechanism more widely used in the province to facilitate interaction between municipal authorities, citizens, and the security providers. In southern Ninewa, the 4-

11 Field Artillery set up a similar series of local leadership councils throughout their whole area. Other battalions in the 172<sup>nd</sup> created similar local councils for the same purposes. The 1-6 Marines built an IO campaign from scratch in their sector of Ramadi that used radios, loudspeakers, and handbills to deliver its message directly to the residents of its sector. By the end of the unit's deployment, local officials were virtually lining up to get their messages out over the system.<sup>12</sup> In Mosul, the 172<sup>nd</sup> SBCT built its own IO campaign using the local television station and other tools. The unit worked assiduously with the local media, and developed an effective 'most wanted' poster program that helped publicize its efforts to counter the insurgents. The 3-6 Marines modeled combined Iraqi-U.S. platoons in Western Iraq during late 2005 that helped build host-nation capabilities and improved relationships with local tribes and helped draw them into the process of providing local security. In the fall of 2006, the 1/1 in Ramadi built the effective and much publicized local security forces in the aftermath of the Anbar Awakening that helped lead to a dramatic reduction in insurgent violence in and around Ramadi. In Ninewa province, the 172<sup>nd</sup> SBCT built a systematic training regime for 18,000 Iraqi soldiers throughout the province that included marksmanship, NCO training, maintenance, fire and maneuver training in urban terrain, logistical support, basic combat medical skills and a police academy to help increase the skills of the local police.

(2) *Effects-Based Planning and Operations Cycles*: The units in this study consciously embraced and attempted to operationalize effects-based operations in the COIN environment. The units built deliberate planning, operations, and targeting cycles that attempted to integrate the kinetic and non-kinetic effects created by their

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<sup>12</sup> Author interviews with Colonel William Journey, 1-6 commanding officer, and Major Daniel Zappa, battalion executive officer and head of battalion non-kinetic effects working group.

widened number of competencies. The 2-1 Infantry campaign plan in eastern Mosul perhaps represented the most systemic attempt at the process among the units in this study since it built a formalized, adaptive campaign plan. In the 2-1 plan, each kinetic and non-kinetic target and tactical operation was consciously related to campaign objectives. Other units in the study largely adopted the same approach, though perhaps on a less formalized basis than 2-1. Such innovation can be regarded as both intellectual and organizational. Embracing effects-based operations intellectually represented an attempt to use systems-based theory and analysis in guiding organizational courses of action and a deliberate attempt to anticipate second- and third-order effects. The planning and operations cycles led to organizations that delivered outputs addressing requirements ranged from the provision of dental clinics and the building of schools in Anbar, on the one end of the non-lethal spectrum, all the way up to precision ambushes of insurgent cells emplacing IEDs on the roads of Mosul. Not surprisingly, some of the units were more successful than others in the integration process, and competence in the diverse array of new capacities varied from unit to unit. The Marine Corps units initially tended to be somewhat more comfortable than the Army in the COIN role, given the institutional background of the Marine Corps as a light infantry force and its experiences in expeditionary operations. By contrast, the Army units, designed primarily to fight a campaign-style conventional ground war, had a more difficult task in innovating, due in part to the large equipment and logistical footprint required to support the conventional operations for which they were designed. The gradual evolution in the Army's adaptation to the environment is vividly illustrated in the transition from the 2/28 in Ramadi from July 2005 to the 1/1 in July 2006. The 2/28 went through a wrenching adjustment process as it struggled to adapt to the difficult COIN environment around

Ramadi in 2005 and 2006. That adjustment process, however, and the momentum established by 2/28 prepared the battlefield for the 1/1 COIN campaign of the fall of 2006 which led to the decisive defeat of AQI in the battle for Ramadi.

All the units studied here demonstrated a grasp of COIN principles and sought to build organizational competencies that could be operationalized in plans and operations. Senior leaders in each of the units studied here universally recognized that the ultimate objective in their operations was to secure the support of the local population and isolate the insurgents from local support. In the 172<sup>nd</sup>, the 2-1 built an integrated, adaptive campaign plan in eastern Mosul, supported by a targeting cycle that included lethal and non-lethal effects. The 4-11 Field Artillery in southern Ninewa used an ‘effects’ wheel as a decision aid in target selection across the full spectrum of operations. The development of these integrated, effects-based approaches to planning and operations fundamentally changed the conduct of these units on the battlefield – turning them from organizations largely prepared for conventional warfare to organizations that conducted irregular warfare.

(3) *New COIN-related TTPs.* The units in this study developed a variety of new TTPs that markedly changed the way they fought the insurgents. In all cases, the units de-emphasized conventional warfare capacities in favor of new warfare skills better suited to the COIN environment in Iraq. This generally meant that relatively heavy, large-unit operations were gradually replaced by a variety of different small unit operations, some kinetic, others not. The process of the tactical re-orientation of the units progressed in an iterative, graduated process. These approaches ranged from the adoption of law enforcement TTPs in order to build more effective patrols (1-7 in

Qaim), to the tailoring of TTPs for precision raids by relatively small tactical teams that minimized collateral damage without compromising the capacity to disrupt insurgent cells (4-14 Cavalry in Rawah; 2-1 Infantry in eastern Mosul). The new TTPs collectively gained momentum throughout the deployments of these units studied here and had a cumulative effect that fundamentally changed the way the organizations conducted themselves on the battlefield.

One of the most obvious examples of this sort of adaptation was the general de-emphasis on 'fire for effect' indirect fire missions by 2/28 after complaints by local leaders about casualties and needless destruction during their local leader engagement meetings in the summer and fall of 2005. The 172<sup>nd</sup> virtually abandoned its indirect fire capability and retrained its artillery unit, the 4-11 Artillery, which reorganized and retrained itself as a brigade maneuver unit. The de-emphasis on traditional, conventionally-oriented warfare skills occurred as the units adopted a series of new and extremely effective warfare skills to kill insurgents and disrupt their networks. The 172<sup>nd</sup> built an organization-wide fused intelligence-operations cycle used to great effect in precision raids on insurgent cells as illustrated in 2-1 operations in eastern Mosul. In western Mosul, C Company in 1-17 developed TTPs for small kill teams that ambushed insurgent IED teams along the road network in its sector.

The 1-7 Marines in Al Qaim applied lessons developed by American law enforcement experts experienced in combating gangs in large cities in the United States. The 1-7 drew upon this expertise to better enable it to disrupt insurgent cells along the Iraq-Syrian border. Not only did 1-7 retrain its workforce to build law-enforcement-related competencies, it made creative use of the COPLINK relational database



software and surveillance equipment to support its COIN operations. The 1-7 example of re-orienting its tactical outlook and capabilities is not an outlier in this study. Like various other units over the period, the 1-37 Armored in Ramadi developed new tactics surrounding the concept of census operations to create an integrated database using Microsoft Access software that compiled information on the residents of neighborhoods in its sector. The database provided enhanced situational awareness for the unit throughout the sector and successfully helped target the insurgent network in south-central Ramadi. The idea for the database came from one of the unit's company commanders, and subsequently became an organization-wide SOP during the deployment. The 1-37 came to regard its census patrols as one of the most effective tools in its COIN campaign in south central Ramadi. In both examples, the battalions leveraged technology and software that was either new to the organization (1-7) or which had not been used before (1-37) as an application to support tactical operations.

All the units studied here adopted a deployment scheme featuring a hub-and-spoke network of operating bases to push their units out into the populations in their areas. The hub and spoke network operationalized the concept of distributed operations. This effectively broke up their organizations into smaller components that were better able to conduct small-unit operations and gave small-unit commanders the flexibility to better tailor their TTPs to the environment. The COP construction procedures used in 1/1 during its 'island hopping' campaign to retake Ramadi in the fall of 2006 subsequently became a recommended SOP for all units operating in Anbar. The hub and spoke base network was adopted by the 172<sup>nd</sup> in Ninewa province partly as a

necessity to spread its combat power over the wide expanses of the province in addition to the dense urban terrain in Mosul.

### **Wartime Innovation Enabling Processes**

The wartime organizational innovations summarized above drew upon a number of enabling processes. The cases covered in this study illustrated five general innovation enablers that are described below.

(1) *Delegated Authority*. In the cases studied here, organizational leadership carefully delegated and apportioned authority and responsibility to different sectors of the organization, with particular emphasis on empowering tactical-level leadership. This was not simply a matter of pushing authority downward, but rather of strengthening the tactical orientation of the entire organization in all the units studied here. Virtually all levels of the organizations studied here interacted with the environment at the tactical level in some way, shape, and form – meaning that organizational outputs were delivered from a variety of sources and not just from those at the bottom of the command hierarchy. While the operating units mounted their daily patrols, mid- and senior level leadership also engaged the environment either through local leader interaction, meeting with local media and information outlets, interrogating detainees and developing local intelligence source networks, to name a few of these activities. The battalion commanders of the 172<sup>nd</sup>, for example, found themselves giving civics lessons and helping to create municipal authorities (in the case of the 4-11) while their maneuver elements cycled through anti-insurgent operations on a round-the-clock

basis. Simultaneously, the brigade staff executed an information operations program through work via the local radio and television stations.

The units studied here delivered their diverse array of organizational outputs from different levels of the organizational hierarchy as a result of delegated and apportioned authority. The apportionment and dispersal of authority throughout the organizations flowed from what military officers might describe as a ‘command atmosphere’ that allowed and even encouraged lower level adaptation and initiative in searching for solutions to the complex problems confronting the units on the battlefield. Ideas developed at different organizational levels that proved successful were quickly passed to other parts of the organization and routinized in new SOPs. The units studied here accepted that while hierarchy remained the central organizing principle for their organizations, they also accepted that delegated and apportioned authority had created organizations that were substantially more complex than their ‘wiring diagrams’ suggested. The circumstances of war pushed the units studied here to embrace a flattened structure of organizational authority and informal relationships that dispersed organizational output capacities throughout the hierarchy. The distribution and apportionment of authority throughout the units proved to be an important enabler to the innovations identified in the previous section. To a certain extent, this outcome resulted from the dispersal of units in their operational sectors that spread their commands out over wide geographic areas. In western Anbar province, the wide open spaces created opportunities for company commanders in 1-7 Marines to build a system of local security using local tribes and combined action platoons that helped reduce the violence in the area. In Ramadi, information operations by the 1-6 Marines got designed and delivered by an ad-hoc working group

headed by the battalion executive officer – not normally a job associated with the billet. The wartime environment and the demands on scarce combat power within the organization forced all the hierarchical levels to become involved in outputs of various kinds that tried to maximize the efficiencies in a limited labor pool.

(2) *Information flow.* The unrestricted movement of information represented a critical building block for organizational innovation. Hierarchically structured military bureaucracies have a well-deserved peace-time reputation as stove-piped organizations reluctant to share information. The circumstances of war caused the units studied here to abandon this practice. In war, the flow of information passed quickly up and down the organizational hierarchy and, in certain cases, flowed seamlessly into the units from organizations operating outside the unit. In other words, wartime circumstances created conditions for enhanced intra- and inter-organizational information flow at various classification levels. This free-form information flow served several different functions. First, it allowed ideas and initiatives from lower- to mid levels to quickly bubble to the surface for evaluation and decision by senior leadership. This happened, for example, in 1-37 Armored in south Central Ramadi with the building of census databases by a company commander, a process that was eventually adopted throughout the unit. The databases became the basis for a whole new scheme of operations, which took the form of battalion-wide census patrols. Second, the information flow served as an intra-organizational highway for continuous feedback loops both within the organization and between the organization and the environment. For example, the reporting requirements of the tactical units in the 2-1 Infantry in eastern Mosul served as vital feedback loops for senior leadership to continually monitor the impact of its

interactions in the environment. These feedback loops gave leadership the ability to continuously measure and evaluate organizational performance or non-performance, which, in turn, formed the basis for changes in organizational activities and outputs. The information flows and feedback loops provided the foundation for an organizational decision-making process that produced changed and/or altered organizational outputs. The 2-1 campaign plan in eastern Mosul featured numerous feedback loops from the tactical and senior levels of the organization that provided the basis for the command leadership to change and/or alter its operations. Early in its deployment, the feedback loops demonstrated that the battalion was generating insufficient human intelligence on the insurgent networks. The feedback loops provided the basis the battalion to re-orient its tactical questioning methodology and to push its tactical HUMINT teams out into its patrolling units that addressed the unit's intelligence shortfall.

Information flow was extremely important – but also of significance is that units studied here consciously sought diverse sources of information that resided outside their formal institutional structures. Both the Army and Marine Corps digitally-based lessons learned websites served as important source of information outside formal, institutionally 'blessed' doctrinal products. Members of Army units all drew upon information posted on Army Center for Lessons Learned website, or CALL, that provided after action reports, new TTPs, and other observations from units that had deployed in Iraq. The digital-age consolidation of knowledge in a well organized, easily accessible format helped shorten the learning cycles for units preparing for deployments. The 172<sup>nd</sup> SBCT made use of Strykernet, a website serving as a repository for Stryker units serving in Iraq. All the deploying units also make

extensive use of video conferencing and the Defense Department's encrypted Secret-level intranet to build situational awareness prior to deployment.

(3) *Organizational Substructures*. The units studied here showed immense flexibility in creating sub-organizational structures that were either completely new, or which enhanced the capabilities of existing, doctrinally accepted organizational structures. New organizational structures took form on the battlefield. These provided another important enabling component of the innovations identified above. Company C, 1-17 in Western Mosul adopted a completely new, non-doctrinal organizational structure to increase its number of maneuver elements in an effort to maximize its scarce combat power. Circumstances drove various logistics units studied here to virtually tear up their doctrinal manuals governing the delivery of logistical support to their far-flung operating elements. The 2/28 brigade support battalion developed a new series of TTPs and delivered support to combat units with ad-hoc organizations to overcome this systemic problem. In the case of the 172<sup>nd</sup> SBCT, the physical distances between outposts and the strain on limited combat capabilities forced the unit's brigade support battalion to design a whole new support organization, the fast support team, to keep the brigade in beans and bullets.

Many of the units studied here made significant changes to their intelligence support staffs, dramatically expanding the personnel in their intelligence sections and integrating people and expertise from different organizations to support the added demands that the COIN environment placed on intelligence processing and analysis. The 1-7 Marines in Al Qaim built an entirely new S-2 section that leveraged the

capacities brought to the unit through the COPLINK program that used a relational database developed by the Phoenix Department. Another example was the 172<sup>nd</sup> SBCT, which added personnel to each battalion's intelligence section relatively early in its deployment. The 172<sup>nd</sup> also drew extensively on OGA sources and expertise and the JIATF at Task Force Freedom to flow information from a variety of sources throughout its encrypted intranet communications system. It is again worth noting that the wartime innovation process was supported by organizations that in peacetime have the reputation of lacking organizational flexibility. In wartime, the organizations that to some extent were already organized in informal task forces displayed little of these peacetime tendencies – standing up organizations like the 1-6 Marines non-kinetic effects group in central Ramadi and the larger intelligence support sections relatively easily and quickly with little interference from their chain of command.

(4) *Ad Hoc Organizational Structures.* Various units displayed a marked willingness to work through ad hoc organizational structures to support the flow of information and materiel to the war-fighter. The array of different governmental agencies supporting the intelligence operations of the 172<sup>nd</sup> SBCT formed themselves into ad hoc working groups operating out of Task Force Freedom. These working groups built relationships with the 172<sup>nd</sup> staff that facilitated the flow of information between the war fighter and the informal working groups. This information flow helped the brigade become an agile organization that could draw upon a fused operations-intelligence quickly enough to react effectively to new information in the field. The 172<sup>nd</sup> also included a substantial contractor support organization that helped maintain the vehicles that formed the basis of the unit's combat power. The civilians providing contractor support functioned as de facto members of the units, although they had the

flexibility to draw upon sources of both parts and information that lay outside the formal military structure. The support by the contractor network undoubtedly contributed to the wartime innovation process.

(5) *Digital Age Technology*. Technology undeniably played a role in supporting the innovation process. For the American military, warfare in the digital age is enabled through advanced data collection and processing technologies. The units studied here drew upon numerous sources of sensors to gather information that included airborne warning and control system aircraft, or AWACS, signals intelligence collection devices, remotely piloted vehicles that allowed units to monitor terrain on a continuous basis using laptop computers, and a family of databases set up by intelligence agencies to support the link-nodal analysis of insurgent cell structures. Other technologies featured in these units ranged from loudspeakers used in information operations and software such as standard Microsoft Office products like Access and PowerPoint that allowed units to compile census-type databases of its area of responsibility. In the case of the 172<sup>nd</sup>, the unit's digital communications and data backbone clearly facilitated its ability to pass encrypted information directly to its operating units, which in turn lead to short-notice operations and gathering intelligence from detainees that fed directly into its cycle of operations. In the 2-1 campaign in eastern Mosul, technology provided an important enabling factor in the form of the Information Surveillance and Reconnaissance, or ISR, collection plan that helped the unit gauge insurgent reactions to its ongoing tactical operations in the fall of 2005. Information gleaned from these collections directly supported the process of tactical adaptation as the unit searched for ways to best the insurgents.



## Implications for Theory

A diverse set of implications flow from the case study findings presented above. In chapter two, this dissertation surveyed a wide spectrum of literature that covered the sources of military innovation, organizational theory, organizational learning, and prior empirically-based studies of wartime adaptation. This study argues that the process of organizational innovation in wartime happened primarily as a result of processes internal to the units themselves. I define innovation as the development of new organizational capacities on the field of battle that did not exist when the unit arrived. The argument presented in this study about the sources of military innovation is contrary to prevailing theories of military innovation on several counts.<sup>13</sup> Most of these theories assert that military innovation predominately happens in peacetime circumstances in which the military organization in question sets about reorganizing itself and its approaches to fighting the next war. This process of developing new ways of fighting is thought to happen as a result of a changed threat perception by political and/or military leadership, which then directs its military institutions to change in response to the new threat. When innovation happens, that change is reflected in new doctrine, which provides the basis for the military to organize and train itself to the new way of fighting.<sup>14</sup> This approach argues that militaries innovate as a result of top-down processes in which leadership directs change, and the organization delivers the desired output.

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<sup>13</sup> See cites in note 35 of Chapter I.

<sup>14</sup> Posen, *The Sources of Military Doctrine*, 1984. As noted in Chapter 2, Deborah Avant offers a variation on Posen's argument by drawing upon principal-agent theory. Avant argues in *Political Institutions and Military Change*, 1994, that in democracies military institutions develop customer-type relationships with legislatures, which control the purse strings for the military. She argues that change can also be driven by the need to satisfy the demand from this important customer.

A variation on this explanation is that peacetime innovation happens through intra-bureaucratic debates within military organizations, with the winners of these debates then reorienting the battlefield approach of the organization.<sup>15</sup> As noted in Chapter two, this argument also points to the importance of top-down forces in hierarchically structured organizations. That is, whichever side prevails in the internal debate on how best to fight then places its stamp on the organization in the form of new equipment and/or operations and even new military doctrine. A prevailing view in the theoretical literature is that innovation in war is thought to be extremely difficult. As argued by Stephen Peter Rosen, this is in part due to the difficulties experienced by units penetrating through the so-called ‘fog of war’ to gain accurate information on battlefield performance. Rosen argues that the difficulties of accurately seeing the battlefield make it difficult for organizations to develop metrics to gauge the strategic effectiveness of battlefield operations relative to the overall war objectives.<sup>16</sup> Rosen argues that organizations will change in war only in those circumstances where they realize that their operations are not achieving the desired strategic effect. The net effect of these difficulties combine to make it extremely difficult for military organizations to develop new ways of fighting while closed with the enemy, according to Rosen.<sup>17</sup>

While the findings of this study certainly are specific to the wartime innovation process, they are also germane to the literature addressing peacetime innovation. The political and strategic subtext of the Iraq invasion make it in some senses a good case from which to examine the applicability of the American battlefield experience to prevailing theories of military innovation. As argued in chapter two, these theories of

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<sup>15</sup> Rosen, *Winning the Next War*, pp. 76-106.

<sup>16</sup> Rosen, pp. 22-38.

<sup>17</sup> Ibid

innovation match poorly against the circumstances of the Iraq war. It is clear that the senior political leadership in the United States believed that a new global threat environment necessitated the development of new battlefield competencies in the area of irregular warfare. By the time of the Iraq invasion, however, it is clear that the military organizations charged with prosecuting the invasion had not developed these capacities. Moreover, it wasn't until two years after the war started that the Army and Marine Corps began to show any interest in changing their battlefield tactics to address the kind of war that had materialized in Iraq from 2003-2005. As chronicled in this study, that process of adaptation occurred in spite of and not because of considered top-down direction from either civilian or military authorities.

The findings in this study also suggest that the process of wartime innovation in Iraq suffered from none of the systemic impediments identified by Rosen as noted above. As discussed in the preceding section of this chapter, units were not in fact blinded by the so-called 'fog of war.' The units studied here all exhibited acute awareness of the environment, their adversary, and on the degree to which their tactical operations were achieving their objectives. Technology certainly helped pierce through the wartime fog, with a wide variety of sensors and data processing equipment to aid in building a comprehensive understanding of the environment and the adversary. But technology alone does not explain the clarity of forceful leadership exhibited at various levels of the organizational hierarchy in the units studied here. That leadership sought conceptual clarity, accepted environmental complexity, and encouraged lower level initiative. The units in this study developed their new organizational capacities without any commonly accepted metrics with which to measure the strategic effectiveness of their operations. The circumstances and

experiences of war gave unit commanders and their subordinates an intuitive grasp of what worked and what didn't in their battle with the insurgents.

The findings of this study clearly are relevant to the theoretical and empirical literature on military innovation and organizational behavior. First, the case studies demonstrate that the absence of an appropriate doctrine did not impede the innovation process. Innovation happened without the presence of a scheme of operations imposed from outside organizational hierarchies. If anything, the absence of doctrine may have freed unit commanders to come up with their own solutions to the tactical problems imposed on their organizations by the insurgency. That process unfolded largely within the units in an organic, bottom-up process and did not function as a top-down process forced upon the units from above. In Iraq, the actions of field commanders led the development of new COIN doctrine that finally emerged at the end of the period studied here. Interestingly, the content of the COIN manual looks strikingly similar to the best practices of all the units in this study – even though there was no formal reach-back process between the team preparing the doctrine and the engaged units.<sup>18</sup>

While noting the organically-driven nature of the innovation process, however, it would be a mistake to assert that military doctrine writ large, or other top-down processes, played no role in guiding innovation by field commanders. All the units studied here exhibited a firm grounding in doctrine. Doctrinal building blocks

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<sup>18</sup> Author e-mail with Sarah Sewell, who participated in the preparation of the manual, June 3, 2009. Sewell indicated, however, that much informal, ad-hoc interactions existed between the field and the team preparing the manual. It's worth noting that several Iraq experiences are highlighted in the manual. The manual summarizes Colonel H.R. McMaster's campaign in Tal Afar and cites it as a successful example of COIN. See *FM 3-24*, 5-22, 5-23; Also see references to the 1<sup>st</sup> Marine Division operations in Anbar in 4-7, 4-8.

provided unit commanders with a methodology to prepare and organize their units for combat. In the Army, for example, building the mission-essential task list is a basic doctrinal process that guides pre-deployment training and was routinely used by Army units prior to arriving in Iraq. Unit leaders clearly understood the tasks required to do their jobs in the Iraq COIN environment and went about building organizational competencies that drew upon doctrinally-bound processes. In one particular case, the 2-1 Infantry in eastern Mosul consciously adapted a doctrinally-based planning process for its COIN campaign. While it is true that the units developed counterinsurgency TTPs and organizational SOPs in the absence of an overarching doctrinal guide, intimate knowledge and background in doctrinal assumptions guided them in assembling their new organizational capacities.

This suggests that while doctrine need not be a powerful dependent variable in the innovation process, doctrinal grounding by senior leaders can provide a supporting framework to devise innovative and non-doctrinal solutions to difficult tactical problems.<sup>19</sup> Top-down direction played a role in the innovation process and clearly helped units draw up logical lines of operations that focused on a number of generic missions: governance, economic development, building up the ISF, and countering the insurgency. These objectives were articulated in national-level documents such as the Bush Administration's *National Strategy for Victory in Iraq*, released in November 2005. The operationalization of the objectives in this report was largely left to battlefield commanders, who searched for solutions on their own without direct guidance or undue interference from higher civilian and military authorities.

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<sup>19</sup> I am indebted to Colonel Charles Webster's (commanding officer of 2-1 in Mosul) insights on this particular point.

It also should be noted that institutional leadership did help in one of the cases studied here. The 1-7 Marine COIN campaign in western Anbar benefited by its exposure to law enforcement experts that helped shape their operations over the course of their deployment. The outreach to the law enforcement community happened because the Marine Corps' senior leadership also was searching for ideas on how to solve the tactical problems confronted by its units in Iraq.

Second, the process of tactical adaptation chronicled in the case studies is consistent with prior empirical studies covered in chapter two, which suggest that internally-generated adaptation and innovation are not uncommon in war. In the Iraq war, the units studied here demonstrated an iterative and evolving approach to their operations in their quest to master the complexities of full spectrum operations. In that sense, their behavior mirrored the experiences of militaries in prior wars, such as the German Army in World War I, which also constantly searched for ways to best their opponent on the field of battle.

Third, the units developed new capacities to address the requirements of the environment by adding new organizational capabilities and adapting their organizational structures over the period studied here. This phenomenon was common to most of the units, suggesting a kind of symbiotic correlation between organizational structure, organizational capacity, and environmental complexity. The organizations in this study clearly sought to develop task specialization and competencies where required, and built sub-organizational structures to house that specialization. This process most clearly reflected itself in the intelligence sections of many units, as well as in those ad-hoc groups established to integrate non-kinetic

effects into operations. This suggests that America's hierarchically-bounded military institutions can under certain conditions develop into structurally complex and flexible organizations that mirror environmental complexities. As noted in Chapter two, Chris Demchak's work has found that military organizations show a propensity to develop complex structures that match the technological complexity of their weapons systems.<sup>20</sup> Her conclusion suggested a relationship between the technological complexity of weapons and the complexity of organizations required to support them. This study suggests that over time military organizations can also develop complex capacities to match environmental complexity. More theoretical and empirical work is needed to examine this relationship, but the implications of this study should provide fodder for future study of this issue.

Fourth, the leadership in the units of this study exercised a rational, value-maximizing decision-making process in vigorous pursuit of optimal outcomes. The circumstances of war seemed to militate against any tendency to satisfice by unit leaders and follow the path of least resistance. None of the units studied here sought to drop their problems into succeeding units' laps. All exhibited a commitment to solving their tactical problems and weren't afraid to innovate in pursuit of optimal solutions. In that sense, the organizational decision-making processes in this study did not reflect a cautious, bureaucratic approach nor did it solely seek to manage uncertainty. The decision-making approach exhibited by the units in study is consistent with theories of innovation that point to the paramount role of individuals who engage in problem-solving activities when gaps in organizational performance are identified.<sup>21</sup>

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<sup>20</sup> See reference in Chapter II, Chris C. Demchak, *Complex Organizations*.

<sup>21</sup> See note 47 in Chapter 1, James G. March and Herbert A. Simon, *Organizations* (New York: John Wiley & Sons Inc., 1985), pp. 177-186.

Fifth, there are other interesting and related implications from this study for organizational theory as covered in chapter two. The innovation process in the units studied here happened in hierarchical, complex organizations. The findings of the cases are certainly consistent with Chester Barnard's early arguments in organizational theory that all organizations necessarily function as complex social systems and not just as mechanistic, task specialized hierarchies whose interaction is bounded by an organization's authority structure. While the military units studied here obviously were hierarchically structured, it is clearly the case that informal social relationships not bound by the hierarchy proved to be an immense source of organizational productivity and innovation in wartime circumstances. Part of the ability of the units studied here to quickly create organizational substructures and ad-hoc units to manage activities like information operations and logistics support depended on the willingness of the organizational workforce to willingly step outside the formal hierarchy to do new and different jobs. One of the inferences of this study is that successful wartime military innovation is critically dependent on the healthy functioning of a unit's social system to support organizational flexibility.

### **Implications for Strategy and Policy**

There are also implications in this study for strategy and policy. This dissertation does not argue that wartime innovation has or will produce strategic success for the United States in Iraq. It argues only that American military organizations demonstrated significant innovative capacities in conducting COIN operations there – a form of warfare for which these organizations were largely unprepared and for which there was no authoritative joint doctrine during most of the period of this study.



Nevertheless, it seems reasonable to conclude that battlefield innovation by U.S. forces clearly had a strategic impact in Iraq, and dramatically affected the provinces examined in this study.

During 2005 and 2006 it seemed clear that the U.S. was not achieving success in Iraq, and many believed that the insurgency had gained the upper hand. This study finds that innovation by U.S. military organizations helped prevent a strategic victory by the toxic mix of insurgent groups seeking political control over the country. During the period of this study, Sunni Islamist insurgents loosely affiliated with Al Qaeda had in fact seized control over much of Anbar province. While the organizational innovation displayed by units in this study did not in and of itself defeat the insurgents in Anbar, that defeat would almost certainly not have occurred without wartime innovation.

In some respects, the relatively short lifespan of the insurgency in Anbar (three years) must be considered as an historic anomaly in COIN history, which itself suggests that it was not the type classic revolutionary insurgency that characterized many of these prolonged armed struggles in the post-World War II era. Whatever the particular circumstances of the Anbar insurgency, however, organizational innovation was necessary but not sufficient to achieve strategic success. Local political dynamics clearly played a vital role in Anbar, but with U.S. units becoming more attuned to those issues it is clear that a flexible and enlightened American tactical leadership skillfully exploited those local dynamics to great effect in 2005 and 2006. In Ninewa province, the COIN campaign of the 172<sup>nd</sup> helped suppress the insurgency to give time for the building of host-nation economic and military capacities, which may or

may not prove successful in the longer term. As of this writing, the insurgents in Ninewa province and Mosul continue to battle U.S. units that arrived after the 172<sup>nd</sup>, and continue to challenge the authority of the central government in Baghdad. In both Anbar and Ninewa, wartime organizational innovation prevented the insurgents from achieving immediate success, and to that extent must be seen as a factor that will help determine whether or not Iraq emerges as a stable, peaceful democracy. Counterinsurgency is always about buying time to secure political legitimacy and enact reform, and the tactical-level innovations studied here surely helped with that. But it is much too soon to say with any certainty how that larger political process will work itself out.<sup>22</sup>

It is likewise difficult to offer any comprehensive judgment about the ability of American military organizations to adapt and innovate in future combat environments. Just because American ground forces showed themselves capable of adapting to the Iraq insurgency doesn't necessarily mean these same organizations can repeat the feat elsewhere. The progress in the COIN campaign in Anbar in 2005 and 2006 was not replicated in Ninewa province, after all, although, as documented here, U.S. units innovated successfully in both cases. Nor is it clear that the same process of adaptation and innovation displayed by Army and Marine units in Iraq will be replicated in Afghanistan, a simultaneous conflict in which social conditions may be just sufficiently different to confound whatever new confidence may have been gained from experience in Iraq.

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<sup>22</sup> A sobering assessment of these prospects is provided by Thomas Ricks, 'An Interview with Thomas Ricks', *Proceedings Magazine* 135, No. 5 (May 2009), pp. 20-24.

There are clearly a host of variables that determine the degree to which conventional militaries can adapt and innovate in COIN environments just as there are a host of factors that determine whether that innovation will achieve the desired political impact that leads to the defeat of the insurgency. Genuine innovation can occur which still falls short of producing tactical and operational success. In addition to the factors cited earlier in this chapter, broader forces such as local political and military context; physical and social terrain of the conflict; degree of political commitment by both the occupying power and the insurgents conducting military operations – are but a few of the variables that can determine the ultimate effectiveness of the innovation process.

As noted at the outset of this study, one of the major implications of this work is that scholars and analysts should more closely consider the sources and processes of military innovation in wartime versus those that occur in peacetime. The conclusion of this study must be that military organizations can and do innovate in certain wartime conditions. In this study, the exigencies of wartime prompted a collection of hierarchically structured organizations to become the kind of agile and adaptive structures thought only to exist in certain parts of the private sector. In Iraq, the units studied here exhibited a profound understanding of their ‘market’ and worked tirelessly to produce outputs relevant to their environment. The innovation processes chronicled here are perhaps only the beginning of what can be new avenues of theoretical and empirical research that scholars and military professionals alike can undertake to further enhance our collective understanding of the complex processes at work in the pursuit of building and maintaining innovative military organizations.

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