

# Renaissance of the Attack Helicopter in the Close Fight



*Americans define war as being waged against a uniformed, disciplined, opposing state's armed forces, the sort who will fight fairly, the way the Americans do.*

—Daniel P. Bolger<sup>1</sup>

**T**HE FACT THAT I am writing this article at an Iraqi airfield north of Tikrit testifies to the success of the United States and its coalition partners in their endeavor to remove Saddam Hussein's Ba'athist regime and to liberate the Iraqi people. Although this second Persian Gulf war witnessed conventional and symmetrical battles in its opening phases, some Iraqi forces employed asymmetric techniques to undermine U.S. campaign plans and to test America's resolve.

Subsequent to the capture of Baghdad, Task Force (TF) Iron Horse, comprising the 4th Infantry Division (ID) and attached units, was charged with clearing the area north of Baghdad (centered on Tikrit, the former hub of Saddam's political support) of noncompliant forces (NCF) and interdicting the proliferation of the many remaining weapons systems in that area. Both the employment of asymmetric techniques against U.S. forces moving against Baghdad and the subsequent intransigence of NCF in northern Iraq, employing hit-and-run, guerrilla-style tactics to acquire weapons and disrupt U.S. lines of communications (LOC), were anathema to the U.S. definition of war.

During the first Persian Gulf war in 1991, Iraqi forces confronted the United States and its coalition partners according to the dominant Western (conventional and symmetric) paradigm of war. It is hardly surprising that the Iraqi forces were defeated. It is also not surprising that in 2003, some Iraqi forces adopted asymmetric approaches to try to mitigate U.S. overmatch in technology and conventional military prowess. The most glaring and disquieting Iraqi employment of asymmetric techniques occurred during the approach to Baghdad on 23 March 2003. Highly dispersed small Iraqi units set ambushes, using a cell phone and observer network in the cities south of Baghdad. These ambushes damaged a number of AH-64s that were conducting a corps-level, deep-shaping attack against Republican Guard divisions surrounding Baghdad.

The Iraqi enemy never presented a massed target for AH-64 attacks and quickly dispersed into the cities rather than remain in conventional and predictable defensive battle positions. During this Iraqi ambush, small-arms and antiaircraft fire damaged more than 90 percent of a U.S. regiment's helicopters, and one helicopter crew was captured. The damage to one attack helicopter battalion's aircraft was so severe that the battalion did not see any major action for the rest of the war.<sup>2</sup>

Not long after the fall of Baghdad, and before coalition forces had finished subduing a host of NCF in northern Iraq, the media began to report that the days

of the Apache Longbow were numbered. These negative media comments echoed the death knell of deep-attack shaping operations and postulated that the Apache was obsolescent. This opinion seemed to be based on one highly visible but unsuccessful large-scale deep attack. Actually, the Apache had proven its worth and effectiveness during the first Persian Gulf war and the war in Afghanistan.

Hoping to gain an advantage in the zero-sum defense appropriations game, self-proclaimed attack helicopter and air-power experts said it was time to eliminate the Apache and supplant its ground support role with the U.S. Air Force's A-10 Warthog. Others argued that the Apache was designed for a deep-attack role in the context of a conventional war between organized, combined-arms formations. Therefore, adversaries who embraced asymmetric approaches saw the Apache as a dinosaur, just another Cold War relic.

The armchair experts were wrong. After 23 March 2003, Army attack aviation adapted tactics to counter the asymmetric threat. With close air support (CAS) A-10 attacks, Apache helicopters conducted effective armed reconnaissance and close shaping missions that were integrated with ground maneuver to defeat Republican Guard divisions surrounding Baghdad. After Iraq's organized formations dissolved, Iraqi Ba'ath party guerrillas confronted effective and lethal small AH-64 armed weapons teams integrated with ground scouts and unmanned aerial vehicle (UAV) sensors. This phase of Operation Iraqi Freedom was characterized by decentralized, combined arms, small units operating in nonlinear, noncontiguous areas of operations (AOs). U.S. Army Field Manual 3-0, *Operations*, provides a perceptive description and codification of this operational milieu where combat and stability operations intersect.<sup>3</sup>

The Apache Longbow remains an effective instrument in armed reconnaissance operations throughout a nonlinear, noncontiguous battlespace against an enemy that uses symmetric and asymmetric tactics. After Baghdad was seized, the attack helicopter integrated with ground maneuver in a close fires role. Coalition forces were operating against paramilitary and noncompliant forces in nonlinear AOs that were highly distributed in time and space.

### **Asymmetric Warfare, Quo Vadis?**

*The enemy, employing his small forces against a vast country, can only occupy some big cities and main lines of communication and part of the plains. Thus, there are extensive areas in the territory under his occupation that he has had to leave ungarrisoned and that provide a vast*

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*arena for our guerrilla warfare.*—Mao Tse-tung<sup>4</sup>

Mao Tse-tung is one of the most widely studied practitioners of the asymmetric approach. In the quote above, he explains how guerrilla bands can harness time and space to their advantage. A host of definitions of asymmetric warfare and asymmetric strategy exists. In fact, there are so many definitions that asymmetry has become the strategic *term de jour* since the mid-1990s and now means many things to different people.

The *Joint Doctrine Encyclopedia* characterizes asymmetry as attacks “posing threats from a variety of directions with a broad range of weapons systems to stress the enemy’s defenses.”<sup>5</sup> However, Joint Publication 3-0, *Doctrine for Joint Operations*, describes asymmetric action as actions in which “forces, technologies, and weapons are different,” or actions in which terrorism and a rejection of the conventional approach is the norm.<sup>6</sup> The 1999 *Joint Strategy Review* defines asymmetry even more broadly as “attempts to circumvent or undermine U.S. strengths while exploiting U.S. weaknesses using methods that differ significantly from the U.S. method of operations.”<sup>7</sup>

U.S. Army War College professor Steven Metz offers another definition for strategic asymmetry: “In military affairs and national security, asymmetry is acting, organizing, and thinking differently from opponents to maximize relative strengths, exploit opponents’ weaknesses or gain greater freedom of action. It can be political-strategic, military-strategic, operational, or a combination, and entail different methods, technologies, values, organizations, or time perspectives. It can be short-term, long-term, or by default. It can also be discrete or pursued in conjunction with symmetric approaches and have both psychological and physical dimensions.”<sup>8</sup>

Counterinsurgency expert Max Manwaring limited the scope of asymmetric warfare to insurgencies and small internal wars. Manwaring explicitly refers to the U.S. experience of fighting guerrillas

A crew chief from the 392d Air Expeditionary Wing marshals in his A-10 Warthog to its parking spot 3 April 2003 at a forward deployed location in Iraq.



US Air Force

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in Vietnam as an asymmetric war.<sup>9</sup> The first reference to his notion of asymmetric conflict is in an article on the U.S. experience in Vietnam.<sup>10</sup>

Asymmetric warfare is not a new concept; it dates as far back as the Roman occupation of Spain and the Levant. Asymmetry's scope and definition limit the use of hit-and-run, small-unit tactics by irregular and paramilitary elements to harass, ambush, bomb, and disrupt the outposts, checkpoints, or LOC of conventional formations. Practitioners of the asymmetric approach concentrate limited attacks against regular military forces' critical vulnerabilities by using treachery to undermine the overmatch of technology and aggregate forces of their adversaries.<sup>11</sup>

The subject of asymmetric warfare is relevant because the U.S. military will continue to confront enemies that use asymmetric techniques. Four facts point to this likelihood:

□ Western powers have the most advanced militaries (technology and firepower) in the world.

□ Economic and political homogenization among these nations essentially precludes a war among them.

□ Most rational adversaries in the non-Western world have learned from the two wars against Iraq not to confront the West on its terms.

□ The United States and its European allies will employ firepower and technology in the less-developed world against ostensibly inferior adversaries employing asymmetric approaches.

Asymmetric conflict will therefore be the norm, not the exception. The asymmetric nature of the war in Afghanistan underscores the salience of asymmetric conflicts.<sup>12</sup>

## **Time and Space: The Dispersion/Concentration Conundrum**

*Strategy is the art of making use of time and space.* —Napoleon Bonaparte<sup>13</sup>

In the vast expanses of China, Mao Tse-tung masterfully manipulated time and space to cause Japanese forces to disperse. By inducing the dispersal of the Kwantung Army, Chinese guerrillas could attack isolated outposts and reduce Japanese forces piecemeal. Essentially, the weaker opponent can use time and space factors to shape the concentration/dispersion chimera to his advantage. The asymmetric warrior uses space to draw his enemy out to the countryside, making it difficult for the big power to concentrate its numerical superiority. The conventional force, then, must use more and more troops

A 101st Airborne Division AH-64 Apache flies overhead during operations near Al Bajar, Iraq.

US Army

to secure its LOCs, resulting in the need for a host of isolated outposts. The weaker adversary is thereby able to locally concentrate his inferior numbers against overextended detachments.

Military historian B.H. Liddell-Hart refers to this form of warfare as an inversion of the orthodox principle of concentration: "Dispersion is an essential condition of survival and success on the guerrilla side, which must never present a target and thus can only operate in minute particles, though these may momentarily coagulate like globules of quick-silver to overwhelm some weakly guarded objective."<sup>14</sup> In other words, a prudent, asymmetric-thinking enemy manipulates time and space to disperse the greater power's military forces, protracting the conflict and wearing down the will of the orthodox opponent.

Mao Tse-tung and North Vietnamese General Vo Nguyen Giap repeatedly emphasized that forces dispersed to control territory become spread so thinly that they are vulnerable to attack. Thus, if the conventional formation concentrates its forces to overcome this vulnerability, then other areas are left insecure. A massive increase in forces could help resolve this operational contradiction, but it also immediately increases the domestic costs of the war. Conversely, if the conventional army aims to placate domestic opposition to the war by withdrawing some forces, the contradiction at the operational level becomes more acute.

Mao Tse-tung explained that the guerrilla could prolong his struggle and make it a protracted war by employing manpower in proper concentrations

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and dispersions and by concentrating against dispersed enemy detachments that are relatively weaker. For every territorial space, there is an inevitable mathematical logic that dictates how many troops are required to exert control. For example, British soldier and writer T.E. Lawrence claimed that it would have required 20 Turkish soldiers for every square mile (600,000 total—a prohibitive number) to control the Arab revolt in 1916.<sup>15</sup>

During Operation Iraqi Freedom, after the fall of Baghdad, TF Ironhorse's nonlinear AO north of Baghdad ran from Taji to Bayji along the Tigris River in the west, to Kirkuk in the north, and east to Iraq's border with Iran. On any given day, TF Ironhorse comprised about 24,400 combat and combat support troops operating in an AO of approximately 51,180 square (sq) kilometers (km). To put the potential for paramilitary dispersion and concentration into

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Lawrence's mathematical logic, in this highly dispersed environment, coalition forces had approximately one soldier for every 2 sq km.

### **Adaptation After the Abyss**

*Whoever fights monsters should see to it that in the process he does not become a monster. And when you look long into the abyss, the abyss also looks into you.*—Friederich Nietzsche<sup>16</sup>

The Apache crews who conducted the deep-shaping attack on the night of 23 March 2003 must have thought they were staring into the abyss when they flew into curtains of small arms and antiaircraft artillery fire thrown up by Iraqi regular and irregular elements. After the regiment's attack against the Republican Guard Medina Division, the helicopters, with battered rotors and airframes full of holes, withdrew. The Apaches flew into a classic asymmetric helicopter ambush similar to those guerrilla and paramilitary fighters created in Vietnam and Somalia.

According to an Army report, the enemy was able to set ambushes using a cell phone and a visual observer network in the cities south of Baghdad. Supposedly, an Iraqi two-star general in Al Najaf alerted the Iraqi air defense network by phone about the Apache assembly area locations and when the helicopters had been launched. Army V Corps Commander Lieutenant General William S. Wallace remarked that the enemy general used a cell phone to speed-dial a number of Iraqi air defenders.<sup>17</sup>

The Iraqi pre-planned air defense network allowed paramilitary forces to respond quickly throughout the area with well-aimed, random fire. As a result, many Apaches took hits in the tail rotor and cockpit areas. U.S. aviators reported that they had encountered a hornet's nest of enemy antiaircraft fire delivered by small arms, rocket-propelled grenades, and antiaircraft iron-sight guns. As the aircraft approached their attack-by-fire positions, the entire power grid system below them went black, which was a signal for Iraqi air defenders

to begin the antiaircraft ambush. The long wall of concentrated fire damaged 34 Apaches.

When describing this deep attack to the media, Wallace said that the attack helicopters "did not meet the objectives that I had set for the attack."<sup>18</sup> However, this was only one mission during the war, and the Army and the attack helicopter community adapted techniques to defeat an enemy more resolute and treacherous than originally estimated.<sup>19</sup> Wallace said, "[W]e learned from our mistakes. We adjusted and adapted based on what we learned, and we still used the Apache helicopter in a significant role during the course of the fight."<sup>20</sup>

After 23 March, the Army V Corps continued the offensive with a series of limited objective attacks. On 28 March, V Corps assigned the 101st Airborne Division (Air Assault) to conduct a deep attack against the 14th Brigade of the Medina Republican Guard Division. However, learning from the lessons of 23 March, the 101st's attack helicopters altered tactics, essentially conducting an in-depth zone reconnaissance, clearing the zone while attacking northward. When they encountered organized small-arms fire similar to the type used during the night of 23 March, they pulled back and directed Air Force CAS to eliminate enemy resistance.

For the remainder of the war, Apache helicopters adopted a close shaping role instead of conducting deep attacks and provided aviation close fires in support of ground maneuver forces. Commenting on the shift from the deep-attack role to the close combat attack, close support role, the V Corps commander stated, "When the 3d Infantry Division attacked through the Karbala Gap and subsequently into Baghdad, in addition to its own attack helicopter battalion, it had 21 Apaches from the 11th Attack Helicopter Regiment under its operational control (OPCON), amounting to a total of 39 Apaches for continuous 24-hour operations to provide close combat attack or close support of ground forces."<sup>21</sup>

The 101st's helicopter attacks after 23 March destroyed 866 targets, including tanks, infantry fighting vehicles, artillery, air defense artillery (ADA), and missile launchers. In addition, the 3d ID's attack helicopter battalion destroyed 25 tanks, 27 infantry fighting vehicles, 6 artillery pieces, and 52 ADA pieces as it provided aviation close fires during the march to Baghdad.

To adapt to an enemy employing asymmetric tactics from urban-centric dispositions, the 3d ID's attack battalion mission profile transformed from battalion-massed or phased attacks against armor and artillery to continuous close combat attacks in support of the division's main effort brigade combat team (BCT). The Apache's close support role dur-

An Apache AH-64 lands to re-arm during combat operations near Baghdad.



US Army

ing the war's principally orthodox, formation-against-formation phase signaled the rebirth of aviation in a close fires role and represented a paradigm shift from a decade-long infatuation with deep attacks. After U.S. forces seized Baghdad, the Apache continued to perform in a close support role, but in an expanded battlespace and against a more dispersed and unorthodox paramilitary foe employing Maoist hit-and-run techniques.<sup>22</sup>

### The Close Fire Role Against Irregulars

*We must make war everywhere and cause dispersal of [enemy] forces and dissipation of his strength.*—Mao Tse-tung<sup>23</sup>

After the fall of Baghdad, TF Ironhorse cleared and expanded the large, nonlinear AO in northern Iraq. Instead of fighting Republican Guard divisions, the task force cleared the AO of elusive, intransigent NCFs. In this milieu, attack helicopters, working in teams of two, performed cordon and search, armed aerial reconnaissance, airborne reaction force, and patrol operations. These roles were similar to the successful, responsive attack helicopter tactics employed during the Vietnam war.

While TF Ironhorse's aviation brigade's civil affairs element was trying to restore water and electricity to local villages, its attack helicopter crews, operating with the 1st BCT, were attacking the various elements opposing the new order: hard-core members of Saddam Hussein's government, criminal bands, Iranian agents, suicide bombers, and

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power-hungry Iraqi factions determined to seize control. This period represented an overlap between war and stability operations.

Stability operations, the current Army lexicon for what used to be operations other than war and low-intensity conflict, encompass a wide range of tasks, including countering insurgencies. Intensity is relative and contextual; however, when the term "low-intensity conflict" was in vogue, an aphorism offered, "It is not low intensity to the platoon engaged in a firefight with insurgents."

In today's vernacular, Somalia would be categorized within the realm of stability operations. However, anyone who has read the book or seen the movie *Black Hawk Down* realizes the acute intensity of the Battle of Mogadishu on 3-4 October 1993.<sup>24</sup> V Corps chief of staff Brigadier General Daniel Hahn described this environment when he said, "It will look at times like we are still at war," and "stability operations are characterized by momentary flare-ups of violence."<sup>25</sup>

**To preempt and unhinge any NCF effort to attack the aviation brigade's base camp, AH-64s, integrated into combined-action teams comprising military police, tactical human intelligence teams, and Bradley ADA Linebackers, conducted raids, ruses, and feints in the 5-km area beyond the wire. . . . As a result, the enemy conducted no successful attacks against the Camp Speicher base cluster.**

At the beginning of the war with Iraq, the United States and coalition forces aimed to destroy Republican Guard divisions so as to remove Saddam Hussein's regime. After the regime's collapse, the new mission statement required TF Ironhorse to clear the AO of NCF; to interdict the acquisition and proliferation of weapons; and to establish a secure, stable environment in northern Iraq. In this landscape, the Apache proved to be an effective weapons platform for reconnaissance, detection, and interdiction of NCF.

During the evening of 1 May 2003, scouts and a UAV working under the 1st BCT observed and engaged paramilitary elements stealing crates of ammunition from an arms cache west of Tikrit. An aerial weapons team of Apaches arrived at the objective shortly thereafter, vectored to the target by 1st BCT command post staff officers who were watching live UAV-feed. The Apaches sealed off the NCF's avenue of escape, opened fire with 30-millimeter cannon, and turned the paramilitary's vehicle into a "hunk of twisted metal," leaving 14 dead.<sup>26</sup>

Attack helicopters were effective in blocking and interdicting fleeing paramilitaries during cordon and search operations, working within the ground BCT's concept of operation. On several occasions, aerial weapons teams proved instrumental in filling holes in the cordon along inaccessible exfiltration routes. To preempt and unhinge any NCF effort to attack the aviation brigade's base camp, AH-64s, integrated into combined-action teams comprising military police, tactical human intelligence teams, and Bradley ADA Linebackers, conducted raids, ruses, and feints in the 5-km area beyond the wire. In some instances, Apaches destroyed unmanned remnant air defense systems just outside the main operating base fence line to exhibit dissuasive and credible force. As a result, the enemy conducted no successful attacks against the Camp Speicher base cluster. A final but

salient component of the rebirth of aviation close fires was a continuous relationship between attack helicopter companies and the ground BCT.

For the duration of the counter-NCF phase of Operation Iraqi Freedom, one attack helicopter company remained under each ground brigade's OPCON. An aviation liaison officer (LNO) also remained in the command post of each brigade to plan and integrate close support. One LNO was a seasoned senior warrant officer, two were career course captains, and all were Apache-qualified aviators.

The LNOs were key players in anticipating missions and in integrating air and ground operations. Also, allocating one platoon per 12-hour mission cycle allowed the attack battalion to respond to contingencies 24 hours a day, 7 days a week in the three AOs. The relationship, training, and techniques that developed between the aviation brigade and the ground combat teams were essential preconditions for success and bore exponential improvements in air and ground integration. The only disadvantage of having three attack companies under an OPCON relationship with the brigades was that this left no Apaches for a tactical combat force (TCF) or reaction-force role. A potential remedy for this was to either embed a TCF team in each company or to rely on the corps attack regiment for the TCF. In such an expansive AO, maintaining one central and principal operating base was necessary for sustaining a high tempo.<sup>27</sup>

## The Importance of Concentration

*Every lost battle is a principle of weakness and disorganization; and the first and immediate desideratum is to concentrate, and in concentration, to recover order, courage, and confidence.*—Carl von Clausewitz<sup>28</sup>

*And if I concentrate while he divides, I can use my strength to attack a fraction of his. There, I will be numerically superior. Then if I am able to use many to strike few at a selected point, those I deal with will be in dire straits.*—Sun Tzu<sup>29</sup>

These quotes by two of the most renowned philosophers of war show the importance of concentration. The words of Clausewitz and Sun Tzu also contrast the distinctly Western and Eastern ways of war. Modern military history shows that the West and its military forces have generally dominated and monopolized the conventional paradigm of war, usually winning when the East or the South decided to fight according to this paradigm. The philosophies of military strategists Henri de Jomini, Clausewitz, and Russian general Alexandr A. Svechin are embedded in the cultures of these militaries. As a re-

sult, the West has embraced the direct use of military force, combining maneuver and firepower to mass combat power at a decisive point, which usually equates to the destruction or annihilation of an enemy force or army.

The problem is that the enemy U.S. forces are most likely to fight is one who has for centuries embraced a different philosophy of war. Potential adversaries are from Asia and the Near East—cultures that generally embrace an Eastern tradition of war. Moreover, the Eastern way of war, which usually stems from the philosophies of Sun Tzu and Mao Tse-tung, is distinguished from the Western way of war by its reliance on indirectness, attrition, and perfidy. In other words, the Eastern way of war is inherently more asymmetric.

Employing attack helicopters in a close combat role where intransigent adversaries adopt asymmetric techniques is particularly germane for the U.S. military in its war against al-Qaeda. Since the 19th century, the United States has embraced the conventional paradigm and marginalized the unconventional one. After victories against Iraq in two conventional Persian Gulf wars, it is unlikely that another second-tier power will fight the United States according to its paradigm.

The implication for using attack helicopters in the future is evident; the U.S. military needs to cultivate the mindset, doctrine, and techniques that combine attack helicopters with small, ground-maneuver elements operating in a dispersed AO. Attack heli-

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copters also should be able to concentrate small teams rapidly at the critical time and place to provide lethal fires.

Learning these lessons and techniques is important because asymmetric warfare is not ephemeral. The Army has historically viewed irregular warfare as a temporary anomaly. As a result, it has not done a stellar job of retaining asymmetric warfare techniques in its institutional memory. One expert on the history of the Army and guerrilla warfare feels guerrilla warfare is so incongruous to the natural methods and habits of a well-to-do society that the Army has tended to regard it as abnormal and to forget about it when possible. Each new experience with irregular warfare has required that the Army learn appropriate techniques all over again.<sup>30</sup> **MR**

### NOTES

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