

- COUNTERINSURGENCY - SELECTED WORKS -



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Editor in Chief MAJ MARK A. REEVES

Managing Editor CHRISTY BOURGEOIS

Commandant BG DONALD M. CAMPBELL, JR.

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September-October 2008, Vol. CXVII, No. 5

Features

- 6 Welcome to the Counterinsurgency Century by Retired General Donn Starry
- 11 Sadr City: The Armor Pure Assault in Urban Terrain by Captain John C. Moore
- 18 Task Force Iron Dukes Campaign for Najaf by Lieutenant Colonel Pat White
- 24 Integrating Armor into Personnel Recovery Operations by Captain Romeo P. Cubas, U.S. Marine Corps
- 28 Retaking Sa'ad: Successful Counterinsurgency in Tal Afar by Major Niel Smith
- 38 The Roots of Insurgent Warfare by Captain Christopher L. Center
- 47 Armor in Urban Terrain: The Critical Enabler
 by Major General Peter W. Chiarelli, Major Patrick R. Michaelis,
 and Major Geoffrey A. Norman
- 53 Platoons of Action: An Armor Task Force's Response to Full-Spectrum Operations in Iraq by John P.J. DeRosa
- 59 A Report on the 11th Armored Cavalry in Southeast Asia 1969-70 by Colonel Donn A. Starry
- The Battle of Suoi Tre: Viet Cong Infantry Attack on a Firebase Ends in Slaughter When Armor Arrives by First Sergeant Christopher P. Worick
- 71 Armor Task Force to Khe Sanh by Lieutenant Colonel Carmelo P. Milia
- 75 The Battle of An Bao II by Captain Timothy J. Grogan

Departments

- 2 Contacts
- 3 Letters
- 4 Commander's Hatch
- 5 Driver's Seat



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GEORGE W. CASEY, JR. General, United States Army Chief of Staff Official:

JOYCE E. MORROW

Administrative Assistant to the

Secretary of the Army

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Preface

The U.S. Army/U.S. Marine Corps Counterinsurgency (COIN) Center at Fort Leavenworth, Kansas, would like to thank the editor and managing editor of *ARMOR* for their agreement to publish this special counterinsurgency edition. Several months ago, the COIN Center and staff of *ARMOR* agreed that the time was right to consolidate in a single edition a selection of the most valuable and instructive recently published articles on the use of armor in a counterinsurgency environment. These articles will provide units preparing to deploy a quick overview of the "best practices" associated with the use of armor in a COIN environment and perhaps lay the groundwork for future doctrinal revisions.

Such a compendium is needed in many areas, but perhaps especially with regard to the use of armor. As the professionals reading this journal understand, it has been an historical pattern that we suffer generational amnesia and tend to forget hard-won lessons, only later to pay in blood and treasure to relearn them. Among such lessons in need of reinforcement is the importance of armor in modern combat and the contemporary operational environment. The United States has had to relearn this lesson in Korea, Vietnam, Panama, and Somalia. It is a lesson that we have again had to relearn in Iraq and Afghanistan, where in the face of growing insurgencies, lightly protected vehicles became the target of choice for improvised explosive device (IED) attacks to be exploited in the world media by our enemies.

In 2006, the U.S. Army and Marine Corps published U.S. Army Field Manual (FM) 3-24, *Counterinsurgency*, a comprehensive strategic/operational-level guide for dealing with insurgencies. The analysis and historical perspectives outlined in FM 3-24 — in so far as they go — have proven extremely useful guiding Soldiers, Marines, and leaders how to think about insurgencies and approaches to defeat them. However, as useful as FM 3-24 has been, it has not filled all doctrinal requirements for those directly operating against insurgents at the tactical level.

Our goal is that this compendium will in some meaningful way both provide a practical tool for addressing a void in tactical doctrine with respect to the use of armor in counterinsurgency, as well as encourage further contributions from professionals like you who are dedicated to our Army's ongoing efforts to learn, adapt, and win.

DANIEL S. ROPER Colonel, FA Director, USA/USMC COIN Center

Points of Contact

DSN prefix – 464-Commercial prefix – (502) 624-

ARMOR Editorial Offices

Editor in Chief Major Mark A. Reeves E-mail: mark.reeves@us.army.mil	4087
Managing Editor Christy Bourgeois E-mail: charlotte.bourgeois@us.army.mil	4582
Editor Vivian Oertle E-mail: vivian.oertle@us.army.mil	2610
Art Director Mr. Jody Harmon E-mail: jody.harmon@us.army.mil	3923
Editorial Assistant Kathy A. Johnson E-mail: kathy.johnson5@us.army.mil	2249

ARTICLE SUBMISSIONS: Articles can be submitted as e-mail attachments to *knox.armormag@conus.army.mil*. Articles can also be submitted on CD or floppy disk with a double-spaced hard copy. Mail to *ARMOR*, ATTN: ATZK-DAS-A, Building 1109A, 201 6th Avenue, Suite 373, Fort Knox, KY 40121-5721. For all submissions, please include a complete mailing address and daytime phone number.

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U.S.	Army	Armor	Center

U.S. Army Armor Center				
Commanding General BG Donald M. Campbell, Jr. E-mail: donald.campbell@us.army.mil	(ATZK-CG) 2121			
Deputy Commander COL David A. Teeples E-mail: david.teeples@us.army.mil	(ATZK-DCG) 7555			
Chief of Staff COL Peter D. Utley E-mail: peter.utley@us.army.mil	(ATZK-CS) 1101			
Command Sergeant Major CSM John W. Troxell E-mail: john.troxell@us.army.mil	(ATZK-CSM) 4952			
Command Sergeant Major to DCG CSM Clarence J. Stanley E-mail: clarence.stanley@us.army.mil	(ATZK-DCG-CSM) 7091			
Special Assistant to the CG (ARNG) COL David M. Pratt E-mail: david.m.pratt@us.army.mil	(ATZK-SA) 1315			
Directorate of Training, Doctrine, and Comba COL Michael N. Smith E-mail: michael-n-smith@us.army.mil	at Development (ATZK-TD) 8247			
TRADOC Capability Manager for Heavy Briga COL Jeff B. Swisher E-mail: jeff.swisher@us.army.mil	ade Combat Team (ATZK-TS) 7955			
TRADOC Capability Manager, Platform Battle Command/Combat Identification COL Dwayne Carman E-mail: dwayne.carman@us.army.mil	(ATZK-PBC-CID) 4009			
Office, Chief of Armor	(ATZK-AR)			
Aubrey Henley E-mail: aubrey.henley@us.army.mil	5155 FAX 7585			
Assistant TRADOC Capability Manager				

U.S. Army Armor School

Soldier - Mounted Soldier System

E-mail: larry.hasty@us.army.mil

Larry Hasty

U.S. Army Armor School			
Director of the Armor School COL Jeffrey L. Davidson E-mail: jeffrey.l.davidson@us.army.mil	(ATZK-DAS) 1050		
194th Armored Brigade COL David Hubner E-mail: david.hubner@us.army.mil	(ATZK-BAZ) 8736		
16th Cavalry Regiment COL Leopoldo A. Quintas E-mail: leopoldo.quintas@us.army.mil	(ATZK-SBZ) 7848		
NCO Academy CSM Ray Edgar E-mail: ray.edgar@us.army.mil	(ATZK-NC) 5150		

(ATZK-ATS)



"Cavalry is a State of Mind"

Dear ARMOR,

My compliments to Major Daniel Davis for his concise assessment of the weakness of the current cavalry recon force in his article, "Fighting for Information," in the May-June 2008 edition of ARMOR. The heavy armored cavalry regiment, heavy divisional cavalry squadron, and the heavy separate cavalry troop, supporting corps heavy division and heavy brigades respectively, were far more powerful and survivable than any of their current replacement organizations. Throughout, cavalry employed standard combat systems. Cavalry's effectiveness came from its doctrinal employment and combined arms organization, not specialized equipment. Quite literally, "Cavalry is a state of mind!" Absent convincing evidence to suggest otherwise, future cavalry units should be similarly organized using future combat system (FCS) equivalents of the tank, infantry fighting vehicle, mortar carrier, field artillery cannon, command post vehicle, etc.

Major Davis' criticism of the future cavalry and recon is valid, but I disagree with his proposals. He merely tweaks what he has already argued to be inadequate. I contend that the cavalry of the future brigade combat team (FBCT) and combined arms battalion (CAB), though ineffective, is also far too large. An FBCT should need only a cavalry troop and a future CAB, at most, might retain a scout platoon for scout-specific missions. Seriously, just how many echelons of cavalry scouts does it take to lead a combat maneuver unit onto the objective, anyway, especially given all of the high-tech communications and situational awareness architecture built into practically every vehicle?

I see the broader problem — the emasculation and concurrent expansion of recon squadrons and troops within the FBCT and CAB is based on doctrinal confusion. It began when the Army agreed to give divisional brigade commanders an added echelon of recon capability. Unwilling to resource a heavy separate cavalry troop, they instead created the utterly inadequate brigade recon troop (BRT) of a troop headquarters and two light scout platoons. Without any combined arms capability, the BRT cannot operate independently; with only two platoons, it cannot support each of the three or four maneuver battalions. While brigade commanders applauded this added unit, the BRT had little utility in its intended role and is, as presently organized, a waste of resources.

In developing the new recon squadron for the BCT, work should have started with the existing separate brigade cavalry troop as a baseline. Instead, the U.S. Army Training and Doctrine Command (TRADOC) and Armor School chose to evolve it from the lighter BRT with all of its unresolved weaknesses and problems mentioned above. Having wished away the threat, and failing to appreciate the value of armored cavalry, FCS planners instead piled it high with military intelligence (MI)-type reconnaissance surveillance and target acquisition (RSTA) capabilities. These RSTA assets are technical combat support that may accompany forward units when the situation permits, but they are generally not suitable for scout/recon

missions under enemy fire. Thus cavalry recon grew in size and manpower while shrinking its combat power.

Related History

Before Division '86 restructuring, there was an organization called a divisional MI combat electronic warfare and intelligence (CEWI) battalion. The CEWI acronym still appeared in the 1997 U.S. Army Field (FM) 101-5-1, Operational Terms and Graphics, though without explanation. The 1992 FM 71-123, Tactics and Techniques for Combined Arms Heavy Forces: Armored Brigade, Battalion Task Force, and Company Team, still included the capability, though without the specific CEWI title, on page 2-49, "The division's task organization may allocate MI units to the brigade to collect signals intelligence in support of the brigade. If GSR [ground surveillance radar] is part of the MI unit, it is typically sub-allocated to subordinate maneuver battalions. However, GSR may sometimes be retained under brigade control."

Since then, new technologies and systems have become available, but MI never made the absurd claim that it could substitute for scouts and cavalry. The technology did not exist then, nor does it today. Unfortunately, FCS and future cavalry planners have pushed the envelope far beyond their areas of expertise while ignoring the realities of combat support and combat service support under fire. RSTA assets are definitely useful in supporting the FBCT and can be deployed as far forward as the situation warrants, but only in addition to, not as substitute for, armored cavalry.

Up until about 2 decades ago, while technology and systems always advanced, our doctrine was solidly based and directly evolved from World War II experiences and had changed little up to and through "Division '86." Since then, there has been an explosion of whimsical doctrine writing and revisions to suit emerging "future" capabilities. This period included the emasculation of cavalry noted in Major Davis' article, but also included the many failed Army-wide efforts such as armored family of vehicles (AFV), heavy force modernization (HFM), armored systems modernization (ASM), mobile strike force. Force XXI. Army After Next (AAN), interim brigade combat team, and now the current FCS.

To further muddle matters, the armor branch was the proponent for mounted maneuver doctrine, yet is now only responsible for the cavalry recon portion of FCS. The cavalry branch was finally and officially disbanded and its role, history, and traditions officially merged into armor by Congress' passage of the Army Reorganization Act of 1950. It is most ironic to watch how under FCS, armor is devolving back into the old cavalry branch. Now, how to fix this mess: the Chief of Armor needs to reassert proponency for mounted maneuver, not just the cavalry and recon portion of FCS. Secondly, the Chief of Armor must deconflict the muddled voluminous scraps that pass for "emerging doctrine" and reestablish a functioning baseline doctrine, which must reassert the true combat capabilities of heavy armored cavalry regiments, squadrons, and troops, rather than the grab-bag of techno-wizardry-based soft- and

thin-skinned reconnaissance and surveillance vehicles (RSVs) that will only report enemy contact through a default protocol of "last known location before all contact lost." The baseline doctrine should also clarify the different missions and roles of cavalry, battalion scouts, and technical recon units such as NBC and RSTA platoons. Finally, the Chief of Armor and Chief of Military Intelligence should develop a combined arms doctrinal approach for RSTA employment by heavy brigade and above and allocation to battalion and below.

If armor fails in two or more of the above, then we will soon have to question the purpose of retaining armor as a branch in the future combat force. It would be proper to finally and officially disband armor, with the mission, history, and traditions of tank battalions being absorbed by a resurrected cavalry branch, if not under MI branch. Not a pleasing prospect, I assure you. Know where you've been; know where you're going; move out!

P.S. While able to mix companies to form "battalion task forces" and platoons to form "company teams," the post-World War II Army had remained a "pure battalion-based" combat organization. Now, the proponents of FCS are very proud of *finally* achieving the creation of CABs. Well excuse me, but armored cavalry has had combined arms troops since Division '86, and before that, it had combined arms platoons (3 tanks, 5 scouts, 1 mortar, and 1 infantry armored personnel carrier). Hence, my bemusement at the ignorance that passes for "new ideas" in doctrine and combat development.

CHESTER A. KOJRO LTC, U.S. Army, Retired

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Writing letters to the editor is an effective way of sharing opinions and inspiring others to take action on issues that are of concern to the armor branch. They also serve as a quick-fire reaction to our articles. Your letters achieve results because they reach a large audience, are monitored by leaders, bring up information not addressed in doctrine, and show widespread support or opposition to an issue.

Armor leaders and other policymakers rely on letters to the editor to gauge the views of their Soldiers. Letters to the editor inspire leaders to take action that will truly make a difference in our armor force; specifically, they inspire new developments in doctrine, equipment, weapons, vehicles, tactics, techniques, and procedures that save Soldiers' lives.

Writing a letter to the editor is a way you can inspire others to take action and make a difference in countless areas. So, when you read about an issue that makes you want to get involved — don't just sit there — write to the editor!

COMMANDER'S HATCH

Counterinsurgency and Core Competencies

by BG Donald M. Campbell, Jr., Commanding General, U.S. Army Armor Center

"On 25 July 2008, Command Sergeant Major (CSM) Otis Smith, relinquished his position as the Armor Center's 20th Command Sergeant Major after 34 years of dedicated service to our Nation and our Army. During his time at the Armor Center, CSM Smith proved to be an exceptional leader who cares about soldiers. His departure is certainly a loss to our force; however, through his leadership and guidance, he leaves our force and its soldiers better prepared to meet the challenges of the battlefield both today and in the future. As a warrior, he led, trained, taught, inspired, coached, mentored, and instilled loyalty and a fraternal brotherhood within the entire Armor community. Thank you, Otis, for keeping our mounted force on the cutting edge of the battlefield, for caring about soldiers, and for the many challenges you faced and conquered for the greater good of the Armor Force.'

As we dedicate this current issue of AR-MOR to the counterinsurgent fight, I must remind the force of its need to maintain a balance between what we know as the current counterinsurgency fight and what we foresee as a future of persistent conflict. This issue compiles lessons learned from current operations in Iraq and Afghanistan and past operations in Vietnam. However, as we learned, specifically, from the lessons of the Israelis during their battle with Hezbollah in Southern Lebanon, we must not lose sight of what the armored force brings to the battlefield during highintensity operations. In short, we must strike a balance between counterinsurgency training and our core competencies.

The term "core competencies" refers to all the tasks our armored systems, of which the tanker and the scout are an integral part, conduct during high-intensity operations. It also includes the tasks our armored formations must conduct to support our armored systems, which center on the protection provided by our armor, the firepower our weapons systems bring to bear, and the maneuverability of our systems. Our core competencies include operations, such as long-range precision gunnery; platoon, company, and battal-

ion maneuver; logistics operations; maintenance, and command and supply discipline, which have been the cornerstone of armor for decades. Alas, we must concede that these competencies are slowly declining as we concentrate solely on counterinsurgency operations focused on the will of the people and not the destruction of an enemy.

While there's clearly nothing wrong with focusing on the current fight, I am concerned that the majority of our tank commanders have never qualified Tank Table VIII and that brigade commanders are reporting weaknesses in maintenance management, particularly services and property accountability, at the company level.

It is very difficult to meet everyday requirements that increase soldier survivability and our chances of success on the battlefield, but we can achieve a healthy balance much easier than one might realize.

First and foremost, the Armor School provides its Soldiers with tough, wellrounded courses that focus on full-spectrum conflicts. Each of the Armor School's courses provides the skill-level appropriate training on tasks necessary to win the fight during counterinsurgencies and major combat operations. For example, the Master Gunner Course teaches noncommissioned officers how to identify and correct for deficiencies in the M1's fire control system, and assists company commanders and battalion S3s in planning gunnery training for their units; the Scout Leader Course teaches scout leaders, from staff sergeant to lieutenant, how to be proficient in reconnaissance operations across the spectrum of conflict; and the Maneuver Captain's Career Course trains 6 out of 8 modules on conducting operations in a major combat environment. But the Armor School's training efforts do not stop there, we must train to standard everywhere and we are currently working with TRADOC to bring mobile training teams to our Soldiers in the field.

We are also developing new doctrine that spans the spectrum. Prior to the re-



lease of U.S Army Field Manual (FM) 3-0, *Operations*, we were reviewing our doctrine, and later this year, we will release FM 3-20.21, the *Heavy Brigade Combat Team (HBCT) Gunnery Manual*. We are also in the process of staffing FM 3-90.1, *The Tank and Mechanized Infantry Company/Team*, and FM 3-20.98, *Reconnaissance and Scout Platoon*.

Further, we are consistently working to improve our armored systems, such as the Abrams tank, which enable us to remain the premier armored force well into the future. We also continue to explore upgrades to sights, armor packages, and ammunition to maintain our systems' lethality. We are working to improve target identification and prevent fratricide through our work in combat identification.

Finally, we have been directed to holistically review our force design updates to ensure the survivability, lethality, and capabilities of our reconnaissance formations and ensure they have the right balance. We have learned from our operations in Iraq and Afghanistan that armor and cavalry, whether it be Abrams, Bradley, or HMMWV mounted, will always be relevant and we must continue to make improvements in these systems to maintain our overmatch.

As most of us realize, the current fight will eventually end; however, there is great concern that the force's institutional knowledge base on CMETL tasks have atrophied. Therefore, it is important that we maintain balance and ensure our core tasks do not get lost to the tasks of the day. I am certain the armored force will need these skills in the future to remain the "combat arm of decision."

Forge the Thunderbolt!



Armor Center Welcomes 21st Command Sergeant Major

by CSM John W. Troxell, Command Sergeant Major, U.S. Army Armor Center

Greetings to all soldiers of mounted warfare! I am Command Sergeant Major John Wayne Troxell, the new U.S. Army Armor Center's command sergeant major. My wife, Sandra, and I are excited to be on the team and look forward to our tour at Fort Knox.

First and foremost, I want to thank Brigadier General Campbell for selecting me to be the 21st command sergeant major for the Armor Center. I am truly humbled by the selection and will not take this position lightly. Each and every day, I will bring what I call the "4 Es" to this job: energy, enthusiasm, education, and enforcement. I will be energetic in everything I do and enthusiastic about how I conduct business. I will educate the field and myself on the challenges we face as a mounted force and will find solutions to those challenges. Finally, I will learn and enforce all policies and standards both on the installation and throughout the force.

This issue of *ARMOR* focuses on counterinsurgency (COIN) operations, and as an Army, we face a foreseeable future of persistent conflict and continuous deployments. COIN operations will continue to be the type of operation we will face in Iraq and Afghanistan. We cannot forget that all the potential threats we could face are not necessarily radical terrorists with a twisted ideology; we must still be prepared for full-spectrum, high-intensity conflict, as well as COIN-type operations, which is a very daunting task for units in the field.

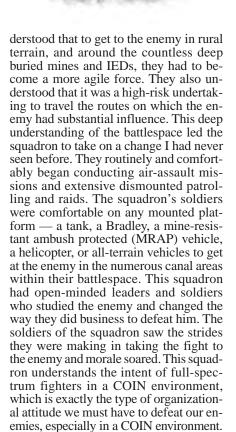
When units are on a small dwell time, such as 12 months, it is tough to simultaneously prepare for imminent and ominous conditions. Because of this, leaders, from platoon leader/platoon sergeant to battalion commander/command sergeant major, must be thoroughly knowledgeable on three critical publications: U.S.

Army Field Manual (FM) 3-0, *Operations*; FM 3-24, *Counterinsurgency Operations*; and FM 6-22, *Military Leadership*. The more leaders understand about the complexities of the modern battlefield and its ever-changing conditions, the more flexible we will be as a force to deal with those changes. Leaders must do more than just know these doctrinal manuals, they must educate young leaders and soldiers as well. Soldiers, who fully understand the atmospherics of the battlespace and realize that changes may occur without warning, are far more flexible to battlefield conditions.

As a force, we have to be open minded at all times on the battlefields of Iraq and Afghanistan. Close-minded leaders, who use the phrase, "I've been deployed before, I've got this figured out," get soldiers killed. The fight in Iraq alone differs from province to province; threats in Diyala Province are not necessarily the same as those in Sadr City or in Anbar Province. Because of this, we must be flexible and acceptable to change and understand that the way we fight today may not be the way we do business tomorrow.

I just returned from the fight in Iraq where I served as the command sergeant major, 4th Stryker Brigade Combat Team, 2d Infantry Division, in the northern Baghdad belt and Diyala Province. I would like to share with you a fine example set forth by the 2d Squadron, 3d Armored Cavalry Regiment. The squadron's very dynamic leaders, LTC Paul Calvert and CSM Mark Horsley, are strict disciplinarians who understand a straight line can be drawn from how soldiers look, act, talk, and think to their actions on the battlefield.

When the squadron arrived last November, it basically conducted normal unit operations by patrolling in tanks, Bradleys, and up-armored HMMWVs. However, the squadron's leaders quickly un-



The Armor Center continues to be the supporting effort to the main effort — our units in the fight. We will continue to assist units with challenges and provide highly trained officers, noncommissioned officers, and soldiers who are flexible to change on the modern battlefield. I look forward to seeing you all on my visits to the field.

Forge the Thunderbolt!



WELCOME TO THE COUNTERINSURGENCY CENTURY

by Retired General Donn Starry

As this is written, we are but a few steps into the 21st century. It does now appear that it may one day be characterized as the "counterinsurgency century." What might that portend?

The 21st century, even in its infancy, is obviously quite complex; perhaps even far more complex than the worlds of the 19th and 20th centuries, both of which were characterized by warfare, largely between nation states, in conflicts resulting in frightening losses in human resources, as well as other national treasure; indeed the loss of entire nation states, as well as the catastrophic devastation of others — even those said to have "won" the war.

To illustrate the complexity thesis, consider the French experience post-1939-1945, as Japanese forces withdrew and the French attempted to reestablish control over their territorial holdings in what was once called "French Indochina." It was here that the French army was confronted by a considerable and well-developed communist underground who aimed to spread communist governance into Indochina, thus beginning counterinsurgent warfare against the Viet Minh.

French army forces deployed to Indochina were far too few and not adequately equipped to accomplish their assigned mission. Recognition of those inadequacies caused French army commanders on the ground to petition the home gov-

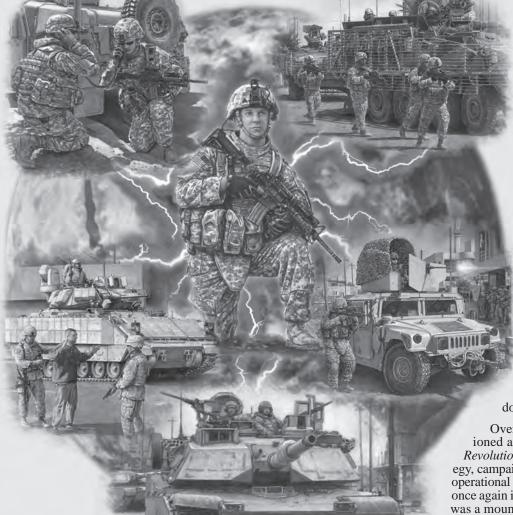
ernment for more units, weapons capabilities, and support to match. Their petitions

were largely ignored or outright denied. The best and most relevant histories of this period are set forth in Bernard Fall's books, Street without Joy and Hell in a Very Small Place. Both have been extensively read by those attempting to characterize counterinsurgency warfare in Vietnam, as they represent preludes to what took place after the Geneva Accords were signed in 1954, and, at the time, at least token U.S. involvements in Vietnam began.

Surrendering at Dien Bien Phu, the French army leadership considered the rug pulled from beneath them by their political masters, who, from the soldiers' viewpoint, had neither tried to understand the situation nor respond to the entreaties of on-site commanders for help. The army literally withdrew into seclusion in army schools and colleges to begin the construct of a relevant counterinsurgency doctrine — at strategic, operational, and tactical levels in an attempt to determine what they should have done, strategically, operationally, and tactically; what had gone wrong; and how they might have

done better.

Over the next few difficult years, they fashioned an operational concept titled La Guerre Revolutionaire, which included concepts for strategy, campaign, and tactical operations. With its new operational concept, the French army went to war once again in a French colonial holding where there was a mounting insurgent movement. It was, however, an involvement quite different from that in Indochina. Algeria had in fact been a French colonial holding; however, it was to most French people part of the homeland — metropolitan France. It



was acceptable to give up some colonial involvements, but never the metropole. General Paul Aussaresses, in *The Battle of the Casbah*, provides a striking account of what happened as *La Guerre* — doctrine went to counterinsurgency war.

The campaign ended in 1962 when a French government under General Charles de Gaulle signed an agreement with the National Liberation Front (FLN) granting Algeria independence from France. France thereby gave up a vast colonial holding in North Africa — nearly one million French citizens were forced to abandon their possessions and flee, there was admission to the deaths of nearly 30,000 French citizens, and perhaps as many as half a million Algerians died. Once again, French military leaders considered the rug pulled from beneath them by political masters, the senior of whom was this time one of their own. History had been provided a counterinsurgency situation considerably more complex than had been prepared for, despite the fact that French military doctrine in support of national goals had been drawn from the French army's own bitter experience in Indochina.

It is not at all difficult to transfer from the French experience in Indochina to that of U.S. forces in Vietnam. Once the November 1968 U.S. elections made clear that there would be a Republican in the White House in 1969, it was also clear that there would soon be a move made to redeploy U.S. forces from Vietnam. Further, it was anticipated in Saigon that by some official means redeployment would be ordered soon after the 1969 installation of the new government. This particular directive arrived in the form of National Security Study Memorandum 36 in April 1969.

The commander, U.S. Military Assistance Command Vietnam (COMUSMACV), General Creighton Abrams, had already assembled a very small group of officers and enlisted and begun planning for the inevitable. The redeployment was called "Vietnamization." There were public pronouncements that U.S. forces would turn over conduct of the war to Republic of Vietnam Armed Forces (RVNAF). Further, it was announced that funds would be made available to provide RVNAF with capabilities which were insufficiently robust in its existing forces to support its force structure. In the main that meant fire support means artillery and air, and logistics support of all kinds. Funds were appropriated by the U.S. Congress, earmarked for that support. General Abrams' instructions were quite clear, "We have been directed to do this. There is considerable pressure from Washington to just cut and run. We must therefore very carefully examine the situation — the enemy's and our own, and propose redeployments that do not jeopardize the Vietnamese army's ability to continue successful combat operations against regular NVA forces attempting to infiltrate into South Vietnam, and infiltrations to support the remaining Viet Cong infrastructure in the south."

The first redeployment increment of 25,000 troops departed Vietnam in the summer of 1969. Subsequent increments for redeployment were planned beginning in late 1969, all pursuant to General Abrams' guidance. However, two significant obstacles were thrown into the works by directives from Washington. First, General Abrams and his planners had developed a plan to redeploy by unit rather than by individual.

Despite brisk exchanges of traffic on the matter, General Westmoreland, U.S. Army Chief of Staff, overrode General Abrams and redeployment was to be done by individual. General Westmoreland's decision meant that once redeployment began, there would be a constant readjustment in Vietnam to fill the ranks of

units, still in country and fighting, and replace the long-tenure people in those units who had been redeployed as individuals. The inevitable result was an on-station Army in Vietnam considerably less combat ready than it had been and needed to be. Secondly, as redeployment progressed, the U.S. Congress reneged and withdrew appropriations programmed to provide adequate fire support, transportation, and logistics support to the RVNAF once U.S forces were redeployed. Many military members, and others, serving in Vietnam when this happened were, and remain, convinced that had the United States lived up to its commitment; the RVNAF could quite likely have won the fight against the NVA intrusion from the north. It was that close. A better description is to be found in Lewis Sorley's excellent book about General Abrams, *A Better War*.

One recurring conclusion from the examples cited above, along with many others, is that military forces can perhaps no longer cope with more than part of war. Many counterinsurgency requirements stem from political, social, demographic, religious, and other situations not directly resolvable by military operations. At the outset then, there should be serious consideration of precisely what is being attempted, what capabilities are required (what are we trying to do), and how might the total capabilities of the nation be assembled to achieve whatever desired outcome has been decided on. However, if one then looks to departments of a federal government for help and finds employees who refuse to serve in an expeditionary environment, then what?



"Surrendering at Dien Bien Phu, the French army leadership considered the rug pulled from beneath them by their political masters, who, from the soldiers' viewpoint, had neither tried to understand the situation nor respond to the entreaties of on-site commanders for help."



Photo courtesy ECPAD FRANCE

General Eisenhower, during his time as President, created an undertaking titled *Project Solarium*. It was an attempt to focus the U.S. Government executive branch's resources on a select agenda of likely situations with which the President could be confronted and postulate coordinated solutions to those situations. If, however, it is considered that the military forces of the nation are the only resource available for deployment — in a counterinsurgency or any other situation demanding action on the part of the United States — then there must be a defining statement in the National Security Strategy that stipulates this fact. It is only out of defining statements that force structure, manpower, and equipment capability requirements statements, prescribing the size and shape and equipping of the nation's armed forces, can materialize.

The examples cited above also represent involvement of officials in national political infrastructures in the conduct of military operations in the field, which those political entities had directed be undertaken at the outset. Some who have suffered the effects of those intrusions would call it "meddling." And so it is; unfortunately, it may continue to be. Indeed, the increasing complexity of counterinsurgency operations quite likely invites that type of intervention. In the United States, the tendency to attempt to direct operations of a deployed military force in the field from Washington offices has been a serious problem since the Spanish-American War. The problem has been aggravated by the growing ability to almost instantly move information, in considerable

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volume, from places far distant from one another to far more people than truly have a "need to know."

Advances in information technology have created an information glut that defies description, as well as inhibits intelligent decisions based on analysis of available information. There is more information available than can be digested in a reasonable amount of time, enabling a decision that is relevant to the situation. In other words, there is not time to sort out and think about what all that information conveys. Fur-

ther, the media — print as well as video — now has a parallel information glut to that in "official" channels. There is "investigative reporting" by people who are neither qualified "investigators" nor good reporters.

A hand goes up in the back of the room! "Is the peacekeeping function considered a mission for counterinsurgency forces? If so, is doctrine for such operations to be found in an appropriate field manual, or elsewhere?"

Several fairly recent events prompt such question. Most dramatic, although now a matter of tragic, but nearly "ancient" history, is the United Nations' Assistance Mission that deployed to Rwanda in 1993 and 1994 to referee the confrontation between the Tutsi and Hutu. The force commander was Canadian forces Lieutenant General Romeo Dallaire, a brilliant, brave, and con-



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cerned soldier with an impossible mission. In a long overdue book, *Shake Hands With the Devil*, General Dallaire recounts his experiences, his reports to United Nations' Secretary General Kofi Annan, his requests for more forces (all denied), the tragic deaths of 15 of his soldiers (4 officers and 11 enlisted), and the tragic deaths of nearly 800,000 natives in the massacre that ensued. The U.N. failed; humanity failed.

As U.S. forces concluded redeployment from Vietnam, the obvious question became, "What to get ready for next?" Several considerations made answering the question much more difficult than necessary. First was the early decision not to mobilize Reserve Component units for Vietnam. Army Chief of Staff General Harold K. Johnson frequently recounted that he had gone to the White House seeking Presidential approval to mobilize, only to be rebuffed by President Lyndon B. Johnson some five times on the basis that mobilization would threaten the LBJ Great Society program, therefore, it was not an acceptable course of action.

The Army then simply created three new divisional structures then filled them with a combination of draftees and cadre from existing units. Absent mobilization, the authorized end-strength was then considered inadequate to support a 1-year tour for those deployed to Vietnam. So the entire Army, CONUS-based units, as well as those located in Europe, Korea, and elsewhere, became the rotation base for Vietnam. This resulted in unit turbulence rates well beyond any threshold necessary to achieve and sustain readiness.

Especially hard hit was the noncommissioned officer (NCO) corps — NCOs stationed in Europe could leave families there, deploy to Vietnam, and return after a year, only to find themselves back in Vietnam again in about 18 months. On an average, this occurred three times, and the NCO would retire, divorce, or both. Most unit NCO academies shut down for lack of students as well as cadre. Morale was rock bottom; military jails were full to overflowing; and equipment readiness rates were

seldom above the 50-percent level due to lack of parts, mechanics, and trained crews. Units deployed to NATO Europe did not believe themselves capable of successfully defending against an attack by Group Soviet Forces Germany (GSFG), let alone capable of "winning" against such an attack.

On the other side of the inner-German border, it was apparent that the Soviets understood what was happening in U.S. Army Europe and elected to take advantage of the situation. In the roughly 10 years that we concentrated almost solely on Vietnam, GSFG fielded new operational-level doctrine. The new doctrine, "mass, momentum, and continuous land combat," featured reorganization of heavy units, fielding of two and a half generations of new tanks, seven new field artillery systems (six of them nuclear capable), other technically improved equipment, and shorter timelines for follow-on echelons to move forward to reinforce the first echelon fight. It was a new force; it obviously cost them dearly. GSFG exercise data revealed that they intended to concentrate on the northern most three of NATO's deployed corps. Two of those corps were not deployed; one was only partially deployed. It appeared that they hoped to bring down those corps before the 16 NATO nations could reach a nuclear decision, and do so with conventional weapons. But if NATO did give a "yes" to nuclear employment, GSFG was ready to go nuclear at the tactical and operational levels of war. It was quite clear that the threat from GSFG was much more urgent than anyone could remember, making resuscitation of U.S. forces, especially Army forces in Europe, a first-order requirement.

On the other side of the coin was the U.S. Army's traditional practice after every war of getting ready to fight it over again, only better. This line of reasoning led to a need to determine what we had learned in Vietnam and develop revised doctrine, new force structure and manpower requirements, and new equipment requirements, all for fighting the counterinsurgency war, as well as the war against NVA regulars like those we had just left behind in Vietnam.

One of General Abrams' first challenges as Chief of Staff, having redeployed from Vietnam early in 1972 and been confirmed as Army Chief of Staff later that year, was to resolve the issue of "back to Europe first" versus the pressing need for counterinsurgency doctrine. The best advice was while we did know a lot about counterinsurgency, we had not yet digested what we knew to the point from which we were ready to write doctrine and spell out equipment requirements, organizations, and related requirements; hence, the decision to fix the U.S. Army in Europe first. Reflecting that decision, the Army returned to its pre-Vietnam 16-division structure, but with a manpower base of more than 200,000 smaller than the pre-Vietnam 16-division Army. Manpower of course is money, and the best advice seemed to be to take what could be had and ask for more as time and circumstances allowed. So it is that the 2008 Army does need greater end-strength and that need is a holdover from the post-Vietnam decision to return to 16 divisions, but without trying to settle the end-strength problem at the same time. Relative to that was the decision not to seek renewal of the draft law, which expired the



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end of July 1973. We knew we would be short end-strength, but we had no experience as to how many volunteers we could recruit. Today's Army lives in the shadow of those long-ago decisions.

In this special issue of *ARMOR*, the reader will find a potpourri of writings relevant to the question of counterinsurgency doctrine — tactics, techniques, and procedures; equipment; and force structure — all considered relevant to operations in an insurgency environment. The U.S. Army and U.S. Marine Corps Counterinsurgency Center at Fort Leavenworth, Kansas, has set forth a new doctrinal statement on the subject. This new Counterinsurgency Center product is, of course, not the first attempt at providing relevant counterinsurgency doctrine. Indeed, in his Preface to this issue of *ARMOR*, Colonel Dan Roper, Director, USA/USMC Counterinsurgency Center, notes the emphasis on tactical doctrine rather than strategic- and/or operational-level doctrine, which was the focus of earlier counterinsurgency writings.

In that regard, it is necessary to remember that as the Army redeployed from Vietnam, while there were many problems, two demanded immediate resolution. One was the rather dismal condition of U.S. Army units deployed and on station in NATO Europe, as described earlier. Second, was the advent of a volunteer Army reflecting the decision not to seek extension of the draft law, which expired in July 1973. Given the decision to reconstitute a credible U.S. Army in NATO Europe, that requirement became the focus of doctrine, equipment, force structure, organization development, and fielding for nearly 17 years from 1973 to 1990.

For the Army that went to war during Operation Desert Shield/Storm, and performed so very well, was the product of two doctrinal evolutions that characterized those busy years — Active Defense (c.1976) and AirLand Battle (c. 1982). Desert Shield cum Desert Storm were together the field test of all elements of that doctrinal evolution. And while not all of it worked precisely as its authors had intended, whatever shortcomings there may have been were overcome by the synergy of sound tactics, well-trained soldiers, and well-led units. As a general rule, really good work is not done overnight.

Finally, some relevant observations about mechanized (armored) forces in counterinsurgency operations are appropriate; Vietnam, for example, where both French and U.S. forces employed a varied assortment of armor(ed) equipment and units. The story commences with armor in Vietnam in the years immediately following the 1939-1945 war. The French, attempting to reestablish their pre-war colonial hold in French Indochina from 1945 to 1954, when French forces surrendered at Dien Bien Phu, experienced a generally unsatisfactory experience with mechanized forces, all equipped with 1939-1945 war vintage equipment.

Observing the French experience, U.S. Army planners in Washington were convinced that armored forces could not operate successfully in Vietnam. There was considerable misunderstanding concerning the monsoon climate, jungle, mountains, rice paddies, weather, the Mekong Delta, not to mention the enemy in all those venues. As a result, when U.S. forces, primarily infantry, deployed to Vietnam in the early 1960s, infantry units deployed without their organic tank or armored cavalry battalions or squadrons; once there, they realized that they needed their mechanized components, and sent back to have them deployed after the fact.

At the same time, however, considerable investment was underway to create an armored command for the RVNAF, includ-

ing necessary equipment, and a cadre of U.S. advisors. On balance, it was a quite successful effort. Forthcoming from the Naval Institute Press is a scheduled publication of a full-up history of the RVNAF armor command, titled *Steel and Blood*. Written by Colonel Ha Mai Viet, a distinguished member of that command, it is a well-written, authoritative account of RVNAF armor command operations against insurgents, as well as regular NVA forces.

However, it was not until 1967 that the report of the Mechanized and Armor Combat Operations, Vietnam (MACOV) study group, led by Major General Arthur L. West Jr., chartered by General Abrams, then the serving Vice Chief of Staff of the Army, reported that after several months of in-theater evaluation, armor units were very effective in a counterinsurgency environment. Further, that the most cost-effective force in the field during all kinds of operations in Vietnam was armored cavalry, best represented by the 11th Armored Cavalry Regiment (Blackhorse). Thus, after 8 years of fighting over terrain considered impassable to tanks and other armored vehicles, where climate and weather were said to severely inhibit armored vehicle movement, where fighting an elusive enemy whose tactics put armored forces at considerable disadvantage, the mechanized force especially armored cavalry — stood front and center not only in close combat, but in pacification and security as well. In 1969, that evidence led General Abrams' redeployment plan to hold off redeployment of armor and mechanized units until the very last.

The remnants of war most often leave behind invaluable lessons to be deciphered and applied in an effort not to repeat the same mistakes. In the case of the aforementioned examples, two undeniable lessons were at least taught: in all categories of operations required of U.S. forces in Vietnam, armored units represented, more than any other force and by wide measure, more firepower and mobility for the least manpower exposure; and especially evident in the Cambodian incursion of 1970, when NVA regular units faced U.S. armor units — especially the Blackhorse — the mobility, firepower, and combined arms capability of the attacking armor force inevitably caused NVA commanders to order their troops to break and run. Herein lies the very important question: Were those lessons well learned, or were they not?

Postscript:

- 1. A salute to Colonel Dan Roper and his cohort at the Counterinsurgency Center for a masterful job of doctrine writing an undertaking with which I, amongst many others, have extensive and frustrating experience. Well Done!!!
- 2. A salute to *ARMOR* for undertaking the imposing task of assembling the ongoing reasoning about this important subject.
- 3. A proud salute to Soldiers, Marines, Sailors, and Airmen of our magnificent Armed Forces.



General Donn Starry, U.S. Army, Retired, served as commander, Task Force 1st Battalion, 32d Armor, U.S. Army Europe (1963-1964); commander, 11th Armored Cavalry Regiment, U.S. Army Vietnam (1969-1970); chief of armor (1973-1976); commander, V Corps, U.S. Army Europe (1976-1977); commander, U.S. Army Training and Doctrine Command (1977-1981); and commander-in-chief, U.S. Army Readiness Command (1981-1983). He coauthored, with and for General Abrams, the MACV plan to Vietnamize the war (1969); and is the author of *Armored Combat in Vietnam*, Arno Press, NY, 1980.

Sadr City:The Armor Pure Assault in Urban Terrain

by Captain John C. Moore

(Reprinted from November-December 2004)

Baghdad, Kut, and An Najaf were scenes of concerted attacks by the Mahdi army throughout Iraq on 4 April 2004. On that afternoon, elements of the Mahdi army engaged multiple elements of 2d Battalion, 5th Cavalry Regiment (2-5 CAV), 1st Cavalry Division, nearly simultaneously throughout Sadr City in northern Baghdad. Twenty soldiers from Comanche Red Platoon, 2-5 CAV, had become isolated in the northern central portion of Sadr City, and available vehicle assets prohibited the unit's exfiltration. Soldiers from C Troop, 2d Battalion, 37th Armor (Crusaders), attached to the 2d Armored Cavalry Regiment (ACR), conducted a hasty attack into Sadr City to relieve the isolated infantry platoon.

The Crusaders had been operating in Sadr City since October of 2003 when an ambush in the city killed and wounded a number of troopers from 2d Squadron, 2d Armored Cavalry Regiment (2/2 ACR). From October 2003 to April 2004, constant operations in Sadr City had familiarized the 2d Battalion, 37th Armor (2-37 AR) with the local terrain, which proved vital during the attack.

The 2/2 ACR redeployed to Fort Polk, Louisiana, in March, and the Crusaders began to work for 2-5 CAV (Lancer), which had assumed responsibility for Sadr City. The Crusader's carried out two major combat operations to relieve Comanche Red, which led to a 3-kilometer fight out of Sadr City to evacuate the platoon and its casualties.



The Initial Attack by Crusader Blue Platoon

Crusader's third platoon, with four M1A1 tanks, stood by as a quick reaction force (QRF), on order from the commander of 2-5 CAV, as a result of perceived higher tensions in Sadr City.

At approximately 1630 hours, following Lancer's decisive contact throughout Sadr City, Lancer Main called Crusader X-ray and informed Crusader to ready the QRF immediately and send it northeast of routes Delta and Copper to relieve Comanche Red, which had suffered casualties and was isolated and in continued contact. Crusader Blue left its operations base at the Martyrs' Monument within 10 minutes and proceeded northeast along route Aeros and then northwest along route Florida to begin its attack northeast up Delta to relieve Comanche Red. Crusader Blue turned northeast on Delta and had initial contact just north of the district advisory council (DAC).

Crusader Blue fought for several minutes traveling northeast up Delta toward route Gold and received several rocket-propelled grenade (RPG) rounds from the buildings on the eastern side of Delta, none of which hit the tanks. Small-arms fire was very intense however and came from both sides of the street. All four Crusader Blue tanks engaged the enemy on both sides of the road with coax, .50-caliber and M240 loader's machine guns, M4 carbines, and M9 pistols. Many of these attackers were dressed in Iraqi police uniforms, and third platoon substantially reduced the attackers' numbers.

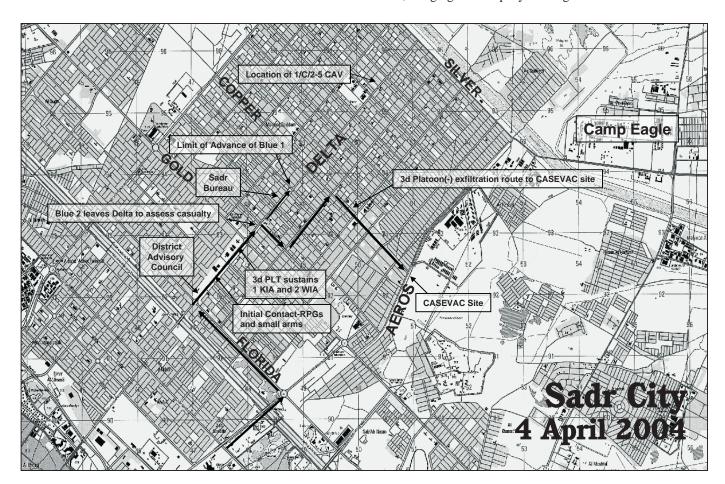
Blue 1 ordered the platoon to continue to fight north. After fighting past route Gold, RPG and small-arms fire continued, and about 500 meters northeast of Gold on Delta, Crusader Blue suffered three casualties. Blue 2 decided to move off of Delta

to get to a position where he could assess the casualties. He turned southwest off of Delta between route Gold and the Sadr Bureau, then traveled southeast to route Charlie. Crusader Blue followed his move. Blue 1 ordered his platoon to follow his move back to route Delta and continue the attack. At the same time, Crusader 5 informed Crusader Blue that they should move their casualties to a hasty casualty collection point (CCP) at the intersection of routes Aeros and Copper. Blue 1 brought his tank back to Delta and turned northeast, but the remainder of the platoon continued to the hasty CCP. Blue 1L informed Blue 1 that the other tanks in the platoon had not followed. Blue 1 immediately ordered the tanks to consolidate at the DAC and continue their attack.

The platoon's other three tanks moved to the CCP to conduct casualty procedures. After the casualty exchange and receiving several hundred rounds of 7.62mm ammunition from Crusader White in an up-armored high mobility, multipurpose wheeled vehicle (HMMWV) platoon, the three Crusader Blue tanks returned to the DAC and consolidated with the unit. As the C Troop commander, I was at Camp Cuervo, battalion headquarters, during this operation and immediately returned to the Martyrs' Monument to ready the three remaining tanks to join Crusader Blue to form a larger element with which to conduct a subsequent company attack.

Crusader Attacks

On arrival at Martyrs' Monument, I mounted my tank with my crew and proceeded to the DAC using the same route as Crusader Blue. A section of two tanks from Crusader Red also arrived, bringing the company's strength to seven tanks. Both ra-



dios on my tank were not working, so I jumped to Blue 1's tank, which had communications on both company and battalion nets. Blue 1 became my loader and Blue 1L went to my tank. I knew Comanche Red had been isolated for almost an hour and wanted to start the attack immediately. After Blue 1 explained the situation, the company was organized into a staggered combat column, which I led on the left and Red 1 led on the right. I organized the platoon sergeants to follow with their tanks to bring up the rear of the six-tank staggered combat column. Crusader Blue 3 remained at the DAC to secure the site, which had a number of 2-5 CAV soldiers there with one of their HMMWVs destroyed. I called Lancer 6 and gave him my capabilities concerning vehicles, weapons, and ammunition and requested permission to attack. Lancer 6 gave the order to attack northeast up route Delta. We attacked immediately.



"Gunners on the forward four tanks killed at least 15 enemy soldiers, all at ranges under 100 meters. Blue 1 and I engaged attackers in the south with carbines as close as 20 to 30 meters, while the infantry platoon readied to load on our tanks. Duke 6 arrived with his tank and distributed ammo to our tanks as we were going black on both 7.62mm and .50-caliber ammo. I remained on the ground and went back to the infantry platoon and supervised as casualties were loaded onto my tank. Comanche Red had three HMMWVs; one had been destroyed and burned to its frame."

We came under intense small-arms contact 300 meters north of the DAC from both sides of the road, just as Crusader Blue had experienced earlier. We fired coax and .50-caliber to kill and suppress the enemy and continued to move. Two to three hundred meters south of route Gold, we received RPG fire, and small-arms fire began to accurately hit our tanks. Red 1G returned fire with 120mm high-explosive antitank (HEAT) rounds at RPG positions on the southeast side of Delta, 500 meters to our front.

The hydraulic servo valve (Delta P) went out on my tank and I was forced to fight in emergency mode, which meant stopping to stabilize the main gun and coax machine gun for the gunner. Given the constricted terrain and better position for command and control at the front, I was not willing to send another tank to assume the lead of the left file. After we passed Gold, fire intensified with the company receiving more than a dozen RPGs, none of which hit. All of them seemed to hit short and the overwhelming majority of them came from ground level. There was an attempted top attack on my tank from the southeast that missed long.

The enemy primarily concentrated on using alleyways, shop windows, and low roofs of one-story buildings to assault. They were very persistent and were very difficult to suppress. Many of them had good tactical patience and waited until we were within 150 meters to fire. Their fires were more effective, but their close proximity meant they usually could not escape down alleyways or through shops before we engaged with either .50-caliber or coax fire. We fired three HEAT rounds during this portion of the fight. They almost always engaged from the front flanks in the more open terrain southwest of the Sadr Bureau.

This changed as we approached the Meredi market area and the large traffic circle with the large al-Sadr mural north of the Sadr Bureau. In this area, there are a large number of kiosks and commercial stands that encroach on the street, providing cover and concealment for the enemy. I fought open hatch the whole way and ordered Red 1 to do the same, as we were very vulnerable from the flanks as we approached the market and could not traverse our turrets. Blue 2 also went open hatch because he was ordered to bypass on the left and establish a support-byfire (SBF) position on the company's left flank to facilitate left flank security as we inclined to the right up Delta toward the mural.

The dense shop stands forced our company into a file on the northeast side of Delta as we proceeded to the northeast. The market area was the scene of very heavy fighting with coax, .50-caliber, M4 carbines from turrets, M240 loader machine guns, and M9 pistols. We received heavy small-arms fire and engaged and destroyed the enemy as close as 20 meters on our flanks as we broke out of the market to the northeast. Blue 2's SBF allowed Red 1 to take the lead from the right and I followed though the canalized section of Delta at the Meredi market. Blue 2, Red 4, Blue 4, and Crusader 6G followed in file until we could break out to the northeast and resume a staggered combat column.

During this time, we received confirmation of Comanche Red's location in a section of buildings northwest of Delta. I coordinated with Comanche Red 1 on the battalion command net for our arrival and he updated me on the situation. We coordinated nonstandard casualty evacuation, which would be done on our tank turrets, and prepared his platoon for our arrival. We continued the attack to Comanche Red's position under intense fire. The sun had started to go down when we began the Meredi market fighting and it was very near end evening nautical twilight (EENT) when we arrived at Comanche Red's location. The fight through the market near the Al Thawra Iraqi police station was brutal and very close to a great number of barriers and burning barricades.

The company attack from the DAC to Comanche Red's location was 4 kilometers and took more than an hour and a half to fight. My primary concern was to preserve my force and remain focused on killing the enemy and clearing the route for any additional casualty evacuation or recovery efforts. Comanche Red 1 confirmed that none of his four wounded were urgent. Additionally, Delta had very poor trafficability with dozens of burning roadblocks and roadblocks consisting of large metal objects such as air conditioners and refrigerators. These obstructions caused us to set multiple SBFs along the route to allow either Red 1 or me to maneuver on the obstacle and attempt to reduce it with our tracks. The roads and alleyways that ran perpendicular to Delta all had to be cleared by gunners before the column could advance because we identified early that the primary RPG threat was to the flanks.

On arriving at Comanche Red's location, I set far-side security with four tanks and two of my tanks provided center sector and rear security. Fire at this location remained intense for several minutes. The enemy assailed us from windows and rooftops. Our most effective weapons were carbines and loader's M240 machine guns in the center and to the south. I dismounted and ran down the alleyway where Comanche Red Platoon was defending.

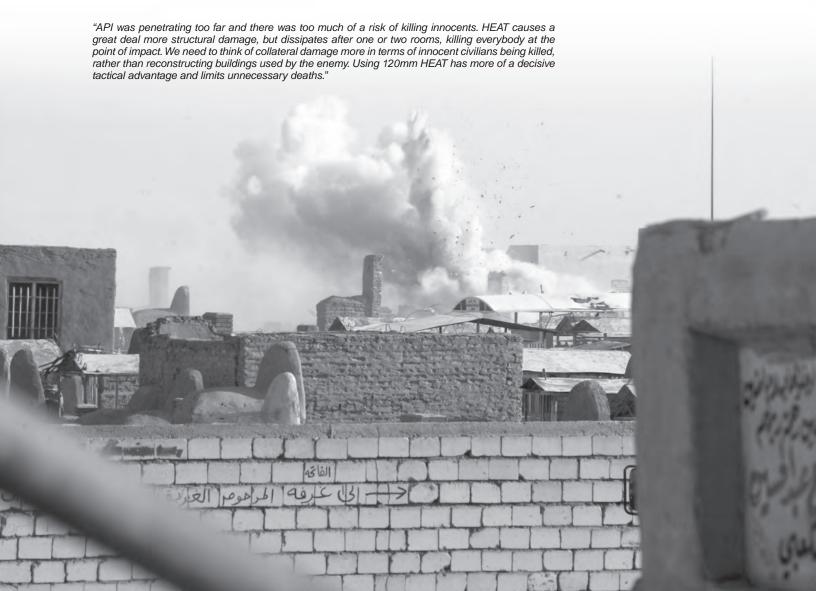
I assessed the situation and informed Comanche Red 1 to account for his men and equipment, and I would load the casualties onto my tank and lead the way out. My tank was also in closest proximity to the alleyway where they had established a platoon defense. Contact remained constant and intense to the northeast. After I dismounted my tank to coordinate with Comanche Red, Blue 1 reapportioned our defense, relocating Blue 4 to cover an exposed alley across the street on Delta from the alleyway in which Comanche Red was defending. Blue 4 killed many enemy soldiers in this alley who had been firing down the alley at Comanche Red and me.

Gunners on the forward four tanks killed at least 15 enemy soldiers, all at ranges under 100 meters. Blue 1 and I engaged attackers in the south with carbines as close as 20 to 30 meters, while the infantry platoon readied to load on our tanks. Duke 6 arrived with his tank and distributed ammo to our tanks as we were going black on both 7.62mm and .50-caliber ammo. I remained on the ground and went back to the infantry platoon and

supervised as casualties were loaded onto my tank. Comanche Red had three HMMWVs; one had been destroyed and burned to its frame.

The enemy continued to attack from the north as we were stationary. They attacked three times using cars or vans, all of which were destroyed and their occupants killed. The enemy attempted drive-by shootings with their lights off, but they did not drive quickly and were easy targets for coax engagements. Civilian cars blocked Comanche Red's path from the alleyway. They had to use their HMMWVs to push these cars out of the alleyway, which took a long time. It took us about 30 minutes at this location to develop and brief the plan, conduct casualty evacuation, and clear the alleyway to get the HMMWVs. We were in contact with the enemy the entire time.

After we accounted for all friendly personnel and equipment, we continued our attack northeast up Delta, turned southeast down Silver, and returned with casualties to Camp War Eagle. Route Silver is very narrow, so I ordered the company to close to a file and follow. I attacked with Blue 2, Red 1, and Red 4 behind me. Two of the 2-5 CAV HMMWVs followed the four lead tanks. Blue 4, the third 2-5 CAV HMMWV, and then Crusader 6G was in the rear. Contact on Silver was as intense as it was on Delta. On the northeast (left, given direction of attack) of Silver is a canal with generally open fields of fire. To the southwest



(right) there were a row of houses and shops. We had heavy contact at the intermittent shops, but little from the houses.

B Troop, 2-37 AR (Battlecat) had set a defensive position at the intersection of routes Silver and Aeros, which was to our front, so we could only engage with coax once we were fairly close to their position. Carbine engagements from tank commanders' hatches on the right side of the tank turrets proved most effective. The first five tanks and two HMMWVs fought all the way to Camp War Eagle using this method.

The infantry fought amazingly with multiple tires shot out on their HMMWVs. It was a great help to have the infantry on the turrets; they easily and effectively engaged the enemy. The last HMMWV broke down and Crusader 6G pushed the HMMWV with his tank at speeds of about 5 miles per hour for 2 kilometers to Camp War Eagle. About two-thirds of this distance was along Silver where contact persisted. Crusader 6G engaged enemy on roofs and in alleyways with his M9, M16, M203, and .50 caliber, while commanding the tank and instructing the driver on how to safely push

the HMMWV. Blue 4 returned to provide security to Crusader 6G and Duke 6 followed our march element to provide rear security.

When we arrived at Camp War Eagle, we downloaded the casualties from Comanche Red and entered Camp War Eagle to refuel and rearm. We also received some equipment that White 1 had brought to us, including more night-vision devices and a .50-caliber machine gun to replace the one that had been destroyed during the fight. I proceeded to the tactical operations center and debriefed Lancer 6 as my men refueled and rearmed. I then conducted adjacent unit coordination with Comanche Blue Platoon for a subsequent mission to move in and secure the Al Thawra Iraqi police station. This would begin the sixth day of constant intense night defenses of Iraqi police stations in Sadr City.

The Power of Experience

The company attack, relief of Comanche Red, and attack to Camp War Eagle lasted more than 3 hours. We were in constant contact the entire time. There were many salient lessons learned from this attack:

Reconnaissance by fire is very effective against strong dismounted opposition in urban terrain. The Mahdi army fought very courageously and demonstrated good tactical patience waiting to engage until we were within effective range of their weapons systems. However, the Mahdi army was not disciplined once engagements began. They rarely waited for flank shots with their RPGs, electing instead to fire at our oblique fronts so they still had time to escape. Their positions offered little or no mutual support and they had a tendency to break contact or relocate when we conducted recon by fire. This was especially critical at the Meredi market where both main gun and coax machine gun fire flushed many of the enemy out of the cover and concealment they took in the dense market stands. The enemy usually tried to exfiltrate down alleyways, but often had to run from positions of concealment to these exfiltration routes, so it



"The close proximity of light poles, vending stands, and buildings severely limited our ability to traverse the turret. The only way to cover our exposed flanks in this congested terrain was to fight out of hatch. Tank commanders and loaders were somewhat protected from the most common threat, which was ground-level fire."

was easy for us to anticipate where to kill the enemy. Tanks in second positions of the combat column could cover these exfiltration routes as lead tanks flushed these enemy elements out of concealment and cover.

During military operations in urban terrain (MOUT), tank units without infantry support need to fight open hatch. Naturally, there are terrain considerations in Iraq that would affect this, but even when surrounded by buildings three or four stories tall, it proves to be most effective, as you can fire rifles and carbines out of your turret hatches without exposing the loader and tank commander. The enemy fought primarily from ground level. We killed a number of enemy on rooftops, but constant fire from our coax machine guns and .50-caliber machine guns kept them from putting together cohesive attacks from two- and three-story building rooftops. Reflexive fire from loaders and tank commanders with carbines accounted for a substantial number of enemy casualties on rooftops at ranges under 50 meters. During this and subsequent battles, the enemy fired almost constantly from the hip. They all fired on automatic and did not appear to aim their shots. Our loaders and commanders were exposed from the shoulders up, but could deliver very accurate fires at close range and showed the discipline to do so.

The close proximity of light poles, vending stands, and buildings severely limited our ability to traverse the turret. The only way to cover our exposed flanks in this congested terrain was to fight out of hatch. Tank commanders and loaders were somewhat protected from the most common threat, which was ground-level fire. Tank units unsupported by infantry in MOUT need to assume the risk of tank-destroying systems in constricted terrain. Tank commanders and loaders can also positively identify enemy and noncombatants if they can see them from the turret, thus limiting unnecessary deaths.

Once battle was joined, Mahdi army elements demonstrated incredible commitment to recover their casualties and equipment. Once we inflicted casualties on the enemy, continuous coverage of the location where enemy soldiers were down

proved key. Mahdi army soldiers would often try to assist their comrades and expose themselves to our fire when they tried to conduct casualty evacuation or recover weapons. This is specifically effective at night because the enemy often fought in squad-sized elements. If a crew only identified a few enemy troops, there were very likely more troops close by in cover or concealment.

Mahdi army elements are inexperienced with the RPG. There was a very high dud rate on our tanks and many of the near misses were duds as well. One RPG dud bent the lip of the turret ring on my tank, but that was all. Who knows whether they failed to properly arm the RPG or if it was just poor ammunition.

I saw three RPGs launched at my tank that initially appeared to be coming right at the front of the tank, but they all dropped short, one skipped under the tank, one exploded short, and one failed to explode as it skipped into our right track and deflected across the line of march of my right file of tanks.

Mahdi army elements set many burning roadblocks that had to be destroyed immediately. After contact, Mahdi army personnel continued to roll tires and combustible objects into roadblocks. Red 1's gunner killed at least one enemy improving a roadblock just 400 meters north of the DAC at the outset of our company attack. Construction or maintenance of such roadblocks during combat operations in a hostile combat environment constitutes hostile enemy intent. After the initial fusillade of RPGs from behind the thermal concealment of roadblocks, I ordered my company to destroy any enemy who was building or

reinforcing obstacles, whether or not they had observable weapons. Reconnaissance by fire at these locations is critical.

Mahdi army elements are intimidated by 120mm main gun engagements. As soon as we began destroying enemy forces with 120mm main guns, they broke and ran. These engagements were often at short ranges where the concussive effect of the cannon was lethal, even if the enemy was not directly hit by the rounds. This proved to be the case during the nights of continuous Iraqi police station defenses.

120mm HEAT is better than .50-caliber for limiting collateral damage. Commanders at all levels need to understand this. Tanks engaged snipers firing from windows with .50-calibers, and dust was flying from windows, six windows down from the point of impact. This was particularly true of tanks firing armor piercing incendiary (API).

We need .50-caliber ball with tracer. API was penetrating too far and there was too much of a risk of killing innocents. HEAT causes a great deal more structural damage, but dissipates after one or two rooms, killing everybody at the point of impact. We need to think of collateral damage more in terms of innocent civilians being killed, rather than reconstructing buildings used by the enemy. Using 120mm HEAT has more of a decisive tactical advantage and limits unnecessary deaths.

All tanks require two radios. Leaders need to be able to fight from any tank with dual-net capability. We drove our tanks a fleet average of over 4,000 kilometers during this tour and maintenance was always intensive. The mileage requirements during a year of combat operations in Iraq are eight times the average



annual mileage allotment. Tanks will be down for maintenance at a higher rate than usual. The decentralized nature of combat in urban terrain requires several units to operate on the battalion command net. Tanks need the ability to have one radio on the most relevant command net for combat action and one for internal coordination. This would not be expensive and would facilitate command and control.

Air ground integration (AGI) during company-level attacks is critical. Lancer Battalion (and particularly Lancer 3B) did a great job with AGI. Comanche Red was isolated, had casualties, and insufficient vehicles to exfiltrate. The intelligence received from the aero scouts on the battalion command net was essential for gauging whether we could remain force oriented in our attack northeast up Delta. If it appeared that Comanche Red was in danger of being overrun, we would have to bypass very stiff resistance at great risk to relieve them immediately. Although Comanche Red was unable to move from its position, it was very defensible, and the aero scouts told me they did not appear to be in danger of being overrun, despite continued contact in very close quarters.

Communications net selection in MOUT must remain flexible. We fought the entire attack on the company command net. This was necessary as the compartmentalized terrain caused us to change formations frequently, making it impossible to keep platoons in set piece formations without fragmenting the attack's tempo. Also, given the proximity of the enemy with RPGs, we all needed to hear crews calling out new threats, if we could not kill the enemy immediately. There was not time for relaying information from platoon net to company.

The company executive officer listened to one net at our command post and determined what we needed to continue combat. This allowed me to take consolidated reports on company command regarding battle damage, as well as make class V requests without having to stop fighting. Crews cannot crowd this net. Tank crews fought and reported, but always cleared the net, just in case I had something critical. The tempo of close quarters urban fighting is too fast to relay traffic from wing tanks to platoon leaders/platoon sergeants and then to the commander or XO.

The battalion staff must constantly update maneuver commanders on the fluid friendly situation in urban terrain. Lancer Battalion's staff gave us advanced warning of each of the three times we gained visual contact with friendly forces in Sadr City. Lancer 3B told me when a Bradley QRF would be visible in the vicinity of Route Gold, which enabled me to warn my unit that we would have friendly vehicles and potentially dismounted infantry to our right flank as we attacked northeast up Delta. Lancer told us precisely where Comanche Red was isolated so we could adjust our fire-control measures to mitigate the risk of friendly fire casualties. We inflicted no friendly fire casualties and sustained none despite the intensity of this 3-hour fight.

Commanders must constantly update their crews on rules of engagement (ROE) as the fight develops. Many of the situations we faced demanded the subjective decision to fire or not to fire. There was a large volume of civilians in the battlespace as this combat zone was a densely populated urban area. It is not always intuitive when to shoot or not shoot, and commanders need to assume the responsibility of ordering which targets are engaged and which ones are not.

The commander must constantly update fire-control measures in urban terrain. Frequent formation changes, shaped

by both the enemy and terrain, forced the commander to constantly reapportion fires to facilitate security. Tanks at the front of the march column must concentrate on the front, but threats from alleyways meant tanks had to handoff as they passed alleyways to ensure the enemy did not use them to assail our flanks. In these concealed locations, the enemy detected us as we passed, but usually did not engage lead tanks. The enemy moved to attack after our forward element passed, meaning the trailing tanks took the brunt of flank attacks. The enemy remained focused on approaching tanks and failed to realize the threat imposed by tanks that had already passed. The loaders and tank commanders on tanks that had already passed by the enemy took the enemy by fire as the enemy exposed their flanks to these tanks.

Commanders and platoon leaders should lead from the front of attack formation even when in file or column when fighting in urban terrain. Doctrine places leaders in the middle of the formation to facilitate command and control in most cases. But in urban terrain, where combat is all close quarters and only leader tanks have the ability to talk to higher headquarters, these tanks are the logical choices to lead from the front. This technique also inspires confidence in the men. This is especially the case during unplanned operations, such as quick reaction force missions during which subordinates may have a limited understanding of the situation as it evolves. During six task force attacks in An Najaf and Kufa in subsequent months, this also facilitated better adjacent unit coordination with sister companies and troops, as leader tanks with two radios could drop to the adjacent unit net or contact the adjacent unit on battalion command to establish that we had gained visual contact with them or audio contact of their fight.

Combat in urban terrain is very fast. Besides, the enemy gets to vote much quicker and it is not often possible to fight in accordance with the plan. A unit can accomplish any mission if everyone understands the task, purpose, and desired end state. Flexibility is the key to success. Commanders must cultivate a command climate where the most junior enlisted soldiers feel comfortable reporting on the company net. Given the tempo of the close quarters fight, commanders must also trust subordinates and empower them to act within the constraints of the commander's intent even before reporting to the commander what actions the element is taking. A challenge for commanders and leaders in the urban armored fight is to develop innovative techniques and ensure soldiers understand them. Commanders must explain the necessity for adaptation to subordinates so they clearly understand how the commander wants to fight.

This article is dedicated to the heroic actions and memory of three Crusaders: Staff Sergeant Mike Mitchell, Specialist Nick Zimmer, and First Lieutenant Ken Ballard.



Captain John C. Moore is a student at the Russian Basic Course, Defense Language Institute. He received a B.A. from San Diego State University. His military education includes Armor Captains Career Course and Armor Officers Basic Course. He has served in various command and staff positions, to include commander, C Company, 2d Battalion, 37th Armor Regiment, 1st Brigade, 1st Armored Division (1AD), Germany; tank platoon leader, battalion adjutant, and mortar platoon leader, 1st Battalion, 12th Cavalry Regiment, Fort Hood, Texas and Bosnia; battalion maintenance officer, 2d Battalion, 72d Armor Regiment, Camp Casey, Korea; brigade S4, 1st Brigade, 1AD, Germany; and S3 Air, 2d Battalion, 37th Armor Regiment, 1st Brigade, 1AD, Friedberg, Germany.

Task Force Iron Dukes Campaign for Najaf

by Lieutenant Colonel Pat White

(Reprinted from November-December 2004)

On 22 April 2004, Task Force (TF) 2d Battalion, 37th Armor, 1st Brigade, 1st Armored Division, the 'Iron Dukes,' assumed mission from 3d Brigade, 1st Infantry Division, in the holy city of An Najaf, Iraq. The enemy, known as Muqtada's militia, controlled An Najaf and neighboring Al Kufa. The mission statement appeared simple: destroy the militia and restore order to An Najaf/Kufa to allow transition of authority to a legitimate Iraqi government; and, on order, transfer security responsibilities to Iraqi security forces (ISF).

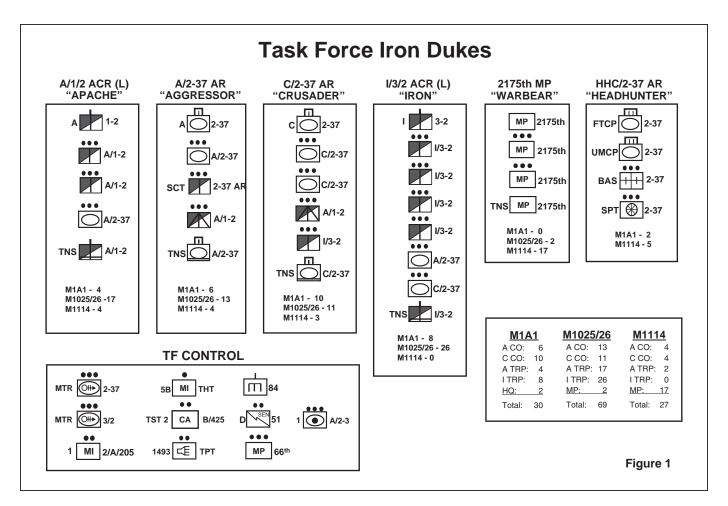
When the fighting stopped and the smoke cleared on 4 June 2004, TF Iron Dukes had battled nonstop for five weeks and broken the enemy's will to fight, destroying over 600 militia and wounding countless others, capturing or destroying all types and calibers of weapons, successfully detaining two top aides to Muqtada al-Sadr, and seizing weapons caches in the holy cemetery and Sahla Mosque.

For the Iron Dukes, the road to An Najaf began on 28 May 2003. The Iron Dukes were cross attached to the 'Dragoons,' 2d Armored Cavalry Regiment (ACR). The Dukes accepted attachment of one light cavalry troop and one detached tank company. For the next 10 months, the Dukes would perform combat missions, peacekeeping missions, and recruit and train 500 Iraqi police and an Iraqi civil defense corps battalion in southern Baghdad.

Between 4 April and 10 April 2004, the Dukes fought in Sadr City, Baghdad, under tactical control of 1st Brigade, 1st Cavalry, followed by fights in Al Kut on 10 April and Ad-Diwaniyah on 17 April. These actions successfully prepared the Iron Dukes for one of the most intense urban battles since the Iraq ground war in 2003.

The fighting in Najaf began on 28 April 2004. Available combat potential for the fight included: two M1A1 Abrams integrated management (AIMS) organic tank companies, comprised of companies Aggressor and Crusader; two light cavalry troops, made up of Apache Troop, 1st Squadron, and Iron Troop, 3d Squadron; one Paladin battery with fire-finder radar, Assassin, 2d Battalion, 3d Field Artillery; one military police (MP) company (minus), Warbear, 2175th Battalion, Missouri National Guard; one MP platoon, Renegade, 66th MP Company, Fort Lewis, Washington; one light combat engineer company (CEC), 84th CEC, 2d ACR; one psychological operations team; two civil affairs teams; an electronic warfare platoon; and an organic headquarters and headquarters company.

The task force organized forces into four maneuver teams, as shown in Figure 1. These forces were arrayed across the battle-space in three forward operating bases (FOBs), separated by approximately 40 kilometers. Headquarters and headquarters company (minus) operated from FOB Duke, a dusty patch of ground



in the middle of the desert. One tank team and the Paladin battery were located at FOB Hotel on the northern outskirts of An Najaf. The rest of the task force collocated with an El Salvadorian battalion in the heart of An Najaf at FOB Baker/Golf. The task force also integrated into operations aerial scout weapons and almost every mosque and school was being used as a cache for weapons or mortar firing points.

Again, the mission statement *appeared* simple. In reality, the

task force would be challenged daily, balancing application of

force with the complexities of the battlefield. First and teams (OH-58D Kiowa Warriors), an AC-130 gunship, F-16 foremost, consideration had to be given to collateral Fighting Falcons, unmanned aerial vehicles, Iraqi counterterdamage on holy sites, inrorism forces, and an operational detachment A (ODA) team alcluding the Imam Ali ready operating in An Najaf. Shrine, which is a religious symbol for The enemy was made up of trained and untrained militia. The over 5 million trained militia members were organized into four companies. Shi'ite world-Two companies were employed as defensive companies and conwide and headtrolled key terrain around the Ali Shrine and Kufa mosque, while quarters for Ayatwo companies were employed as attack companies throughtollah Sistani, out Kufa and Najaf. Cleric Muqtada The untrained militia roamed the streets and executed al-Sadr, and more 'opportunity attacks' on coalition patrols and Iraqi citizens. Additionally, throughout the city, Sadr lieuthan 500 militia tenants resided with personal security detachments, fighters; and the Kufa Mosque, which is second only in religious significance to the Ali Shrine and is the stronghold of the militia with more than 600 fighters.

To the north of the Ali Shrine, lies the largest Shia burial ground in the world. This area was infested with insurgents from the Ali Shrine and Kufa, and was used as a weapons cache, and as the task force would later learn, a sensitive site requiring precision fires.

This article shares lessons learned and methods developed during the fight in Najaf/Kufa. Although, the fight will never be labeled a modern 72 Easting, or spearhead into Iraq by the 3d Infantry Division, the intensity, tempo, and constraints have application for future employment of armor forces in urban terrain.

Tempo and Campaigning

Understand the complexity of the battlefield. In the case of Najaf and Kufa, considering political backlash from damaging holy sites and creating unnecessary collateral damage was paramount in all planning and execution. Soldiers were well aware of the cascading effects a hole in the golden dome or a city block razed during counter fire would have on the Shia population; in essence, defeating the campaign's purpose. From the onset, these constraints became a leader challenge and commanders executed to perfection. Soldiers adapted engagement techniques and chose appropriate weapons systems to destroy the threat, with little or no damage to significant holy sites. The staff identified holy sites during the military decisionmaking process and planned around them by using precision fires, nonlethal fires, or bypassing the site.

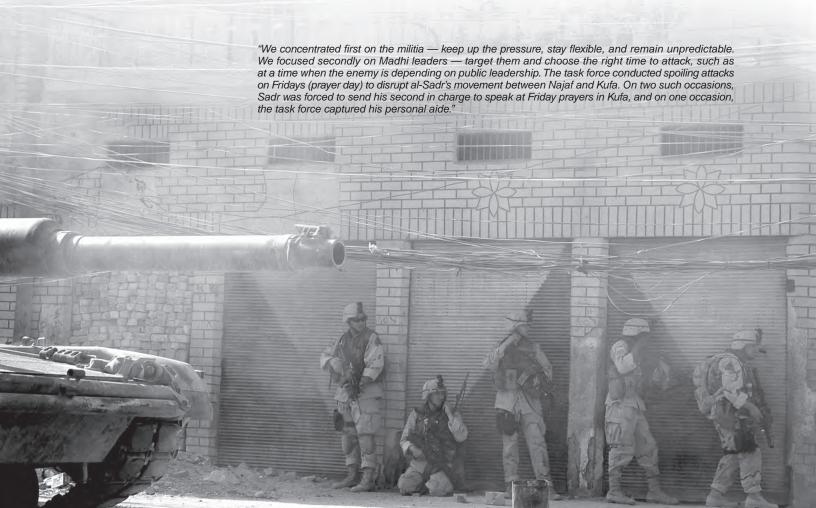
Have a plan. On this complex battlefield, tempo is probably the most important factor a staff and commander consider when developing the campaign plan. Do not be overzealous; realize you will lose equipment, soldiers to wounded in action, and energy

as you continue to fight, day after day. Take the end state, and shape your plan. In Najaf, we focused on three areas, and integrated these areas into continuous attacks.

We concentrated first on the militia — keep up the pressure, stay flexible, and remain unpredictable. We focused secondly on Madhi leaders — target them and choose the right time to attack, such as at a time when the enemy is depending on public leadership. The task force conducted spoiling attacks on Fridays (prayer day) to disrupt al-Sadr's movement between Najaf and Kufa. On two such occasions, Sadr was forced to send his second in charge to speak at Friday prayers in Kufa, and on one occasion, the task force captured his personal aide. Even when unsuccessful in capturing high-value targets, the fact the task force disrupted enemy movement and communications became crucial for follow-on missions. For example, about two weeks into the campaign, the task force began targeting Muqtada and his top three lieutenants. Our end state was capture, but in the process, we found that we directly affected the enemy's ability to coordinate, communicate, and maintain the initiative, which allowed the task force freedom of maneuver throughout the area of operation. Finally, we concentrated on weapons caches. We specifically targeted enemy supply lines and ammunition caches.

In effect, these three areas caused the militia to fight in multiple directions, and forced him to choose priorities. By forcing the enemy to make choices, we gained the initiative, forcing the enemy to consolidate his forces to protect his high payoff targets, allowing the task force to focus on destroying the militia. If a commander fails to campaign, the task force can easily become mired in reactive mode and lose focus on the end state.

Watch your soldiers and equipment. We have the best soldiers in the world, and they are 'can do' all the time. Rely on platoon leaders and platoon sergeants to gauge soldier effectiveness. We stared hard and aggressive, and within a week, we were losing the



"We have the best soldiers in the world, and they are 'can do' all the time. Rely on platoon leaders and platoon sergeants to gauge soldier effectiveness. We stared hard and aggressive, and within a week, we were losing the attention-to-detail battle. We began pacing operations so that a troop/company had a 12-hour period in which to rest and refit. The campaign plan took this timeline into consideration, and allowed the company/troop to execute company-level offensive operations as well as task force operations."



attention-to-detail battle. We began pacing operations so that a troop/company had a 12-hour period in which to rest and refit. The campaign plan took this timeline into consideration, and allowed the company/troop to execute company-level offensive operations as well as task force operations. The task force chaplain and medical platoon are also excellent sources for determining the effect of continuous operations on soldiers.

The battalion maintenance office and battalion maintenance technician are important in predicting Class IX needs and surging mechanics. Over the first three weeks, task force tanks began chewing up track, hubs, and road arms. The task force XO sent up a red flare and we received phenomenal support from 1st Armored Division and theater assets.

Precision Engagement, Lethal Fires, and Shaping the Battlefield

The most precise weapons system in the task force was the M1A1 main battle tank. The coaxial-mounted M240 machine gun is precision at its best. Outrange the enemy RPG gunner and you can conduct precision recon-by-fire in urban terrain while minimizing collateral damage. The tank also has the most accurate and deadly system available — the 120mm main gun. Tank commanders learned early on that firing a multipurpose antitank (MPAT) round, a high-explosive antitank (HEAT) round, or an obstacle-reducing (OR) round immediately silenced enemy massed formations due to tremendous psychological effects. A tank can fire a main gun round through a window and destroy the enemy while damaging only one room, minimizing collateral damage. Tanks can also create entry points for scouts or infantry by firing a main gun round into the wall of a school or directly into the side of a building. OR and MPAT rounds are ef-

fective in destroying hasty obstacles, and the task force even used the MPAT round to suppress enemy dismounts on the street.

The task force relied on main gun after experiencing the effects of the tank commander's .50-caliber in close urban terrain. Armor-piercing incendiary (API) .50-caliber rounds are devastating and accurate, but cause a significant amount of collateral damage. The API round will pass through four to five buildings without slowing down. The round demolishes concrete structures and sets flammable materials, such as palm and date trees, ablaze. During one fight, an RPG gunner was hiding behind an Alaska barrier, which is concrete, reinforced with rebar, and 12 feet high, and instead of using a main gun round, he shot 50 rounds of API into the base of the Alaska barrier, killing the RPG gunner and clearing the area.

During rehearsals, commanders focused on weapons system employment, integrating fire control measures, such as main gun tight from target reference point (TRP) 1 to 2, and .50-cal tight TRP 3. You still have the loader's M240 for suppressive fires down alleyways, and each loader and tank commander carried M4s on top of the turret, which we used multiple times in killing or suppressing an enemy rifleman or intercepting an RPG approaching the tank from an adjacent alleyway.

Snipers are critical in the urban fight. This is common sense, but a tank battalion does not have snipers, so we developed our own by using soldiers that were 'long shooters' or we integrated trained snipers from an attached light cavalry troop. In Najaf and Kufa, we could not position snipers in town unless the area was cleared and supporting forces were available for extraction. Our method was to move into an area, clear a building, drop the team, and continue forward movement. The sniper team was assigned

specific targets, and time on station. Snipers were very effective in destroying RPG gunners along the walls of the mosque or in the minarets.

Use every combat system available. During the Dukes' five-week fight in Najaf/Kufa, the task force employed AC-130 gunships, Kiowa Warriors with Hellfire missiles, and Copperhead, as well as variable time (VT) and time fuse delayed (TFD) 155-mm and 120mm. Each had a specific purpose built into the plan. AC-130 fires were deadly for clearing bunkers, destroying RPG gunners in the palm groves, and in canalizing the enemy. After the first few engagements, the enemy decided it was not wise to stay outside while the sound of the AC-130 circled overhead. We used this advantage in either driving the enemy back inside to allow us closer maneuver, or keeping him off station while an unmanned aerial vehicle (UAV) located a strongpoint, passed grid location, then called in the AC-130 to destroy his strongpoint.

The Kiowa Warrior has a fantastic weapons platform. When resourced with Hellfire, a commander can engage those hard-to-reach targets. Additionally, an armed UAV becomes the weapon of choice when engaging an enemy moving around urban terrain. During one of the task force's last battles, an enemy mortar man, using a pickup truck with a 82mm mortar in the back, was conducting attacks on FOB Golf. The UAV was brought in; it identified, followed, and when conditions were right, destroyed the mortar, mortar man, and truck, with absolutely no collateral damage.

Paladin fires were critical to our success. We fired all types of munitions. Later in the campaign, the enemy developed his own methods to counter traditional 'fire for effect' high explosive rounds. The enemy would remain inside buildings or along the roofs of sensitive targets. On occasion, we would engage enemy on rooftops or engage an enemy mortar man near a built-up area with VT. In one instance, there were enemy RPG gunners and riflemen across the river inside a second-story building preventing a troop from maneuvering into a support-by-fire (SBF) position. Six TFD rounds later, the troop established the SBF and the mission continued with the enemy destroyed.

Early in the campaign we used Copperhead with OH-58D to destroy bunkers along narrow streets and in palm groves. The system works, with practice, and allows the maneuver commander freedom of movement along lateral routes. The task force also had an opportunity to employ an Iraqi counterterrorism force, which was impressive. The enemy believed the coalition would not enter mosques because their information operations campaign had convinced them of such. The enemy's information was correct! The coalition did not enter the mosque—the Iraqi counterterrorism force did, destroying five enemy riflemen and locating and confiscating a cache of mortars, RPGs, AK47s, and hand grenades.

The impact of nonlethal fires is integral to any campaign. The task force was well armed with a tactical psychological team (TPT), two civil affairs (CA) teams, two attack/bomb dog teams, PROPHET, engineers, and several media sources. For example, the task force would target neighborhoods identified by electronic warfare assets that indicated local people were undecided on coalition support. We would move in and project a positive message with the TPT, followed by CA teams, who developed projects on the ground. We also sent in the TPT and CA teams during the 'mitigation phase' of operations to assess public sentiment and collect information on collateral damage.

The bomb/attack dog teams were used on every operation involving suspected arms caches or mortar firing positions, and the engineers were critical in building force protection around FOBs, Iraqi police stations, and other highly sensitive targets. The task force also used the engineers to recover jersey barriers employed by the enemy along trench lines and to fill in enemy trench lines and fighting positions.

The media should be treated like family because they target the international community and keep higher echelons of command happy. The information provided before and immediately following the operation determined how successful the story got out. Normally, the task force commander briefly described the operation, concept and target, and placed the reporters in a vehicle (M1114 or M113), which trailed one of the companies. After the fight, a quick recap of what happened, maybe an inter-

view for clarification, and the story is done. In some instances, commanders need to 'go live' during a fight, to ensure the press does not make assumptions. In all cases, treating the press with dignity and respect paid huge dividends.



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Combat Leaders

Lead by example. In urban terrain, commanders discover that to visualize the battlefield, they absolutely have to be in the middle of the fight. A commander can best gauge intensity and tempo by being in the middle of the decisive effort and the company's main effort. This has implications, and subordinate com-

manders will need a while to become familiar with this course of action, but it was successfully employed in Najaf.

Never be without communications. Commanders have a need to dismount in urban terrain — yes, even tank battalion commanders. Get caught without coms while on the ground and you instantly lose situational understanding and the information passed on the command net between crosstalking company commanders.

Rule one: The command net is the command net. This takes practice. The main function of the command net is to facilitate commanders' crosstalk. The tactical operations center (TOC) monitors and passes necessary intelligence updates or announces combat multipliers arriving, but it should not be used for the battalion XO, battalion S3, and battalion commander to carry on conversations about the fight.

Rule two: During the fight, the visible commander on the battlefield helps steady the force. This is not as obvious as one might think — based on personal experience, it is a learned skill. It is much harder for a commander to be present and commanding during the fight, than when executing simulations or training at combat training centers. Commanders must be mentally prepared before the fight, visualize where they want to be to influence the fight, then adjust fire if the fight shifts.

Confidence and demeanor. Never doubt yourself, your commanders, or your soldiers. Maintain confidence in your equipment and the ability of your entire team to keep combat systems in the fight. We train on intent, and we succeed by sticking to what works. A leader who micromanages in battle will produce disastrous results. Let your subordinate commanders develop and execute their plan in conjunction with your commanders intent; no matter how much you want to, do not tell a subordinate how to "suck the egg."

Know your subordinates' abilities — can do; can't do (but really can). This is something that is developed over time. Commanders already have an 80-percent solution on how subordinate commanders react under stress. The battlefield reveals how they react to success or to losing a soldier. Learn and apply this knowledge in future fights. An aggressive commander may push too far when success is achieved quickly in his sector, not seeing the entire battlefield. A commander may even hesitate if he loses a soldier or vehicle, not understanding the impact of this



delay on adjacent units. Most of these issues should be addressed in the task force combined-arms rehearsal, but the task force commander will ultimately make his decisions based on an intimate understanding of his subordinate's capabilities and limitations.

The three most important lessons learned in the fight for Najaf will be applicable in future battles. Commanders and staffs must first develop a campaign plan, taking into consideration a realistic timeline for achieving the end state, then visualizing the pace or tempo required to sustain the fight. Consideration must be given to combat potential, applied in a deliberate fashion, and integrated into the campaign's end state. Additionally, the U.S. Army's combat systems are unbeatable. Every system applies precision and becomes deadly when properly employed with a little ingenuity. Finally, combat leaders bring everything together. Technically and tactically proficient commanders and soldiers win the day, but they are not tireless, and they will make mistakes. A commander must constantly gauge the effectiveness of his soldiers and leaders, a knowledge gained through experience and trust.

The fight for Najaf was an intense and bloody affair. The five-week battle again validated that our soldiers and leaders are the best in the world, we have the best equipment, and doctrine is just that, doctrine! Most importantly, the Najaf fight proved armor remains relevant and is a lethal force in urban terrain.



Lieutenant Colonel Pat White is currently the G3, 1st Armored Division (1AD), Wiesbaden, Germany. He received a B.A. from Claremont College and an M.S. from Central Michigan University. His military education includes Armor Officer Basic Course, Field Artillery Officer Advanced Course, U.S. Army Command and General Staff College, and Joint Professional Officer Course. He has served in various command and staff positions, to include commander, Task Force (TF) Iron Dukes, 2d Battalion, 37th Armor, 1AD, Operation Iraqi Freedom; chief, current operations, J3, Joint Forces Command, Norfolk, VA.; S3 and XO, 2d Battalion, 70th Armor Regiment, 3d Brigade, 1AD, Fort Riley, KS; opposing force tank company commander, D Company, 1st Battalion, 4th Infantry, Combat Maneuver Training Center, Hohenfels, GE; and commander, C Company, 2d Battalion, 32d Armor Regiment, 1st Brigade, 1AD, Kirchgoens, GE.

Integrating Armor into Personnel Recovery Operations

by Captain Romeo P. Cubas, U.S. Marine Corps

(Reprinted from July-August 2007)

The 507th Maintenance Company mistakenly entered the city of An Nasiriyah on the morning of 23 March 2003. Iraqi soldiers, al Quds militia, and Saddam Fedayeen fighters would ambush the lost unit, killing and wounding 21 soldiers and taking six prisoners. Over the next week, while Task Force Tarawa continued to fight a determined resistance, the U.S. Army, Air Force, Navy, and Marine Corps prepared to conduct what would be the first successful rescue of an American prisoner of war since World War II. Marine Corps M1A1 tankers contributed to this joint operation by bringing additional shock, awe, and firepower to an already impressive combined arms force. Operation Iraqi Freedom saw tanks exponentially prove their worth in the urban environment, and the role of armor would expand into personnel recovery (PR) operations.

Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3270.01A defines personnel recovery (PR) as "...the recovery and return of U.S. Military, DOD civilians, and DOD contractor personnel who are isolated or missing while participating in a U.S. Government-sanctioned military activity or missions in an uncertain or hostile environment, or as determined by the Secretary of Defense." The Army's PR philosophy is one of leadership and accountability and every command makes every effort to ultimately recover 100 percent of its personnel.

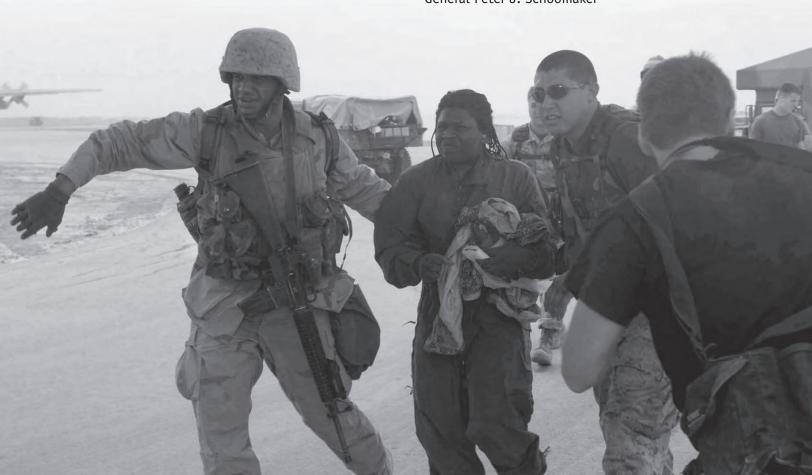
In April 2003, during the battle for An Nasiriyah, Iraq, I commanded 3d Platoon, Alpha Company, 8th Tank Battalion, Task Force (TF) Tarawa, 2d Marine Expeditionary Brigade (MEB). This tank platoon, along with Marine artillery, aviation, force reconnaissance, and infantry, participated in a truly joint PR operation alongside special operations forces (SOF) from the U.S. Army, Air Force, and Navy. Operation Iraqi Freedom saw tanks exponentially prove their worth during urban operations and expand their role to include PR.

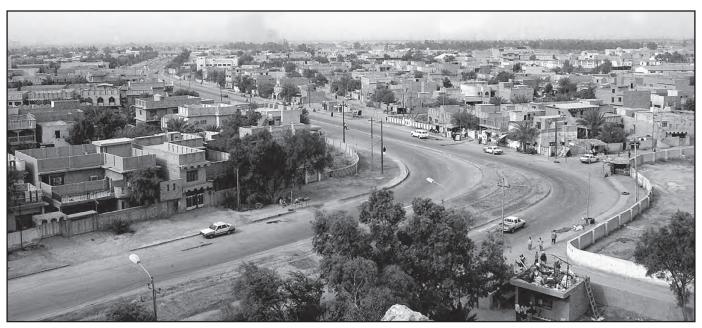
Experience Context

During Operation Desert Storm, Iraqi military commanders learned that in open land warfare they could not match the technological superiority of the United States military machine. If the Iraqi army wanted a different outcome in a future war, the fighting would have to be waged in the streets of Iraqi cities. If Saddam

"We need to focus on Soldiers being able to take care of themselves, then able to take care of their buddies, then able to take care of their larger team...It's all part of the Warrior Ethos: Place the mission first, never accept defeat, never quit, and never leave a fallen comrade."

— General Peter J. Schoomaker





"If Saddam Hussein were to be removed from power, the U.S. military would have to move into Baghdad. Iraqi generals decided that the most logical defense along a southern approach would have to occur in Iraq's fifth largest city and home of the 11th Infantry Division. An Nasiriyah would provide cover from U.S. air superiority, since Iraqi commanders seriously doubted that Americans would bomb 500,000 Iraqi citizens."

Hussein were to be removed from power, the U.S. military would have to move into Baghdad. Iraqi generals decided that the most logical defense along a southern approach would have to occur in Iraq's fifth largest city and home of the 11th Infantry Division. An Nasiriyah would provide cover from U.S. air superiority, since Iraqi commanders seriously doubted that Americans would bomb 500,000 Iraqi citizens.³

The city of An Nasiriyah was heavily defended by an entire Iraqi army brigade along its southern portion bordering the Euphrates River. Another brigade dug in inside the city, and a third brigade was located north of the Saddam Canal. Technicals, armored personnel carriers (APCs), mortars, artillery, anti-aircraft artillery (AAA) guns, and tanks were spread throughout the city in well-planned and well-fortified positions. Arms and ammunition caches were located in strategic locations and included mosques, schools, and hospitals. Five hundred of Uday Hussein's fanatical henchmen, the Saddam Fedayeen, were sent to the city to ensure the 11th Infantry Division and the local al Quds militia remained loyal and motivated.

Members of the Ba'ath party militia also had a great deal at stake in defending the city, since they controlled and lived a luxurious life at the expense of the local Shia population.⁴ In and around An Nasiriyah, the combined strength of regular and irregular forces was somewhere between 6,000 to 10,000 men. Iraqi commanders

had planned a deliberate defense and were ready to draw approximately 2,000 U.S. forces into a deadly urban fight.⁵

Unfortunately, the first unit to face this defense was a logistics company from Fort Bliss, Texas. 6 The 507th Maintenance Company was part of an impressive U.S. Army supply line, and its primary mission was to provide maintenance, supplies, and support to a patriot missile battery that would advance north toward Baghdad with the 3d Infantry Division. The 507th's company commander entered the Army as a dental assistant and eventually worked his way into commanding mechanics, cooks, computer technicians, and clerks who lacked basic military fighting skills. He did not expect these support troops to see combat and even had his soldiers' hand grenades and AT-4 antitank weapons collected and locked up prior to combat operations.⁷

The 507th departed Attack Position (AP) Dawson, just south of the Kuwait-Iraq border, at 0700 hours on 20 March. Due to the rough cross-country travel, the unit only moved 35 kilometers in 4 hours before stopping to rest. The next evening, they traveled 80 kilometers northwest across the barren desert and the convoy soon began to feel the effects of off-road travel in southern Iraq.8 Darkness, disorientation, soft sand, and flat tires mired the convoy causing it to drop farther behind from the rest of the logistics train.

On the evening of 22 March, as the 507th drew closer to An Nasiriyah, TF Tarawa, 2d MEB, from Camp Lejeune, North Car-

olina, was tasked to conduct a relief in place (RIP) with the 3d Brigade Combat Team (BCT) near Talill Air Base at 0430 hours on 23 March. The 3d BCT felt it was unnecessary to move north on Highway 7 and clear the southern end of An Nasiriyah, as had been planned. Instead, it proceeded along Highway 1 to the Euphrates River and turned left on to Highway 8 to continue its move toward the west.

The Army had not heard anything about a possible capitulation from the 11th Infantry Division and had no intention of going into the city to seize its eastern bridges. Marine commanders were worried about the condition of the Highway 1 bridge located north of the Euphrates River, since it was a new highway with some portions still under construction. The 1st Marine Division had recently left the southern Al Luhays oilfields and was charging toward Baghdad on Highway 1. The commander of I Marine Expeditionary Force (I MEF) determined it was critical to develop a second avenue of approach, in the event Saddam Hussein ordered an attack on advancing Marines, and chose Route 7 as the second route.9 TF Tarawa was assigned as the main effort and ordered to seize the bridges along that route by 230700Z (1000 hours local time).

The 507th Maintenance Company was to proceed north along Highway 8, "Route Blue," and turn left at the intersection with Highway 1, "Route Jackson," avoiding An Nasiriyah altogether. A manned check-

point had been put in place to direct stragglers to the detour, but by the time the 507th arrived, it had been abandoned.¹⁰

At approximately 0600 hours, the 507th's convoy crossed over a railroad and traveled past a company of dug-in Iraqi tanks, and an outlying industrial area composed of oil storage tanks, power lines, a gas station, and a garbage dump. At a significant intersection with clearly marked signs, Highway 8 went off to the west through the southern portion of the city toward the Highway 1 bridge.¹¹ The 507th missed that turn, drove straight through downtown An Nasiriyah, and was ambushed with a "torrent of fire." 12 Eleven members of the 507th would eventually perish as a result of combat actions that morning. Seven others would become Operation Iraqi Freedom's first prisoners of war (POWs).13

The PR Operation

Within days, a concerned local Iraqi lawyer confirmed that an American POW was being held at the Saddam Hussein hospital. After 2 days of gathering intelligence, he brought five different and very detailed maps that he and his wife had made. The illustrations pointed out the exact room of the captured soldier. The lawyer also provided the security layout, reaction plan, and times of shift changes. Through his surveillance, he had counted 41 Iraqi soldiers or insurgents at the hospital, with four in civilian clothes guarding the captured soldier's room. He mentioned that they were armed with Kalaschnikov AK-47 assault rifles and carried radios. His reconnaissance further determined that the building's rooftop could support a helicopter landing.14 After all the human intelligence had been received and authorization was granted from the highest military authorities, preparations for a personnel recovery operation were underway. The U.S. Army would take command of the rescue mission, turning TF Tarawa's command post into a sophisticated reconnaissance operations center.15

A Marine 2d Force Reconnaissance team moved in from the west close enough to observe and listen to activity from the Hussein Hospital grounds, and reconnaissance snipers were positioned to prevent enemy forces from thwarting the rescue.

TF Tarawa began relentlessly attacking the enemy with overwhelming artillery and precision air strikes from AV-8B Harriers and Air Force Special Operations Command (AFSOC) AC-130 Spectre gunship howitzer rounds. ¹⁶ By early morning on 1 April, civilian communications equipment, to include satellite phones and computer connections, were blacked out. ¹⁷ Shortly before midnight, electrical power was cut and only the hospital's emergency generators provided light. Real-time images of the area were

provided by a Predator unmanned aerial vehicle (UAV) circling overhead, improving the situational awareness of the joint operations center. ¹⁸ The battlefield had been prepared and the planning stages of the POW rescue operation were nearly complete. While air supremacy and overwhelming reconnaissance was achieved, heavy armored combat power was still lacking.

To fill this void, a tank platoon from Alpha Company, 8th Tank Battalion, was needed to escort a convoy of 18 vehicles carrying elite forces from the U.S. Army and Navy into the center of the city. Due to a shortage of readily available parts and continuous combat operations, the maintenance status of tracked vehicles in theater was less than desirable; however, with three tanks, Alpha Company's 3d Platoon (Blue) had enormous combat power and shock effect.

As soon as the tank platoon received its warning order to conduct a POW mission, the tankers began preparing their vehicles. Marines immediately performed track maintenance and refueled their vehicles. Tow bars were already in place and ammunition was evenly cross-leveled, but nonessential items, such as rucksacks, meals ready to eat (MRE) boxes, and fuel cans were unloaded to avoid any accidental losses or fire hazards.

Special operations commanders coordinated with tank platoon commanders to



"Armor is a force protection asset clearly feared by the insurgents. Tactically, tanks in sector signify a powerful deterrent and provide additional ground combat elements the freedom of maneuver they need to conduct missions."

seek advice on how to position vehicles to effectively block enemy avenues of approach from the center of the city. Satellite imagery aided the tank platoon in identifying possible individual vehicle positions and gave direction on where to place target reference points to properly control direct fire. Accurate imagery and thorough map rehearsals allowed all three tanks to share a common operating picture.

As soon as the Marine tank platoon was attached to the SOF unit, the tank commanders ensured they had positive communications with each other and the rest of the rescue team. Loading radio frequencies onto three tanks would take approximately 45 minutes, since the Army Ranger radio operators were unfamiliar with the Marine PRC119. Once radio checks were performed, the tankers were ready to lead the convoy.

Around 1130 hours on 1 April, a convoy of three M1A1s and four Pandar SOF vehicles, 12 M1114s, and two Marine seven-ton trucks carrying soldiers from the 75th Ranger Regiment, departed for the northwest Saddam Canal Bridge near the intersections of Highways 7 and 16. Alpha Company from 1st Battalion, 2d Marine Regiment, was ready to assist the main effort as a quick reaction force (QRF) to avoid a repeat of the Mogadishu disaster or the aborted rescue attempt in Tehran.¹⁹

At 1155 hours, Blue 4, assigned as the platoon's plow tank for the operation, cleared a route near the Saddam Canal bridge through cars that had been placed along the northwestern portion of Highway 7 earlier in the week to block enemy vehicles. As the plow tank pushed a disabled vehicle off the road, the remaining two tanks led the convoy across the Saddam Canal bridge toward the Saddam Hussein hospital, a distance of approximately 3 kilometers. The plow tank commander counted the vehicles as they passed by and quickly followed in trace to provide rear area security for the convoy.20

Near simultaneously in the southwest portion of the city, the 15th Marine Expeditionary Unit (MEU) conducted a diversionary attack, along with Charlie Battery, 1st Battalion, 10th Marines, on the headquarters of Saddam's Ba'ath party. This massive eruption of firepower was used to deceive enemy fighters, causing them to think that an attack would occur along the western Euphrates bridge, while the main effort maneuvered from the northwest. Marine and Air Force aircraft provided close air support (CAS)

while UAVs circled above the hospital, providing real-time data back to the joint command center. Marine CH-46s ferrying a company of Army Rangers, Army CH-47s, and MH-6 Little Bird helicopters from the 160th Special Operations Aviation Regiment rushed to their target. After dropping their personnel, the Little Birds and Black Hawks stood ready to provide additional CAS and evacuate personnel.

A dozen Navy sea, air, and land (SEAL) sailors assaulted the six-story hospital, encountering limited resistance from Iraqi guards.²¹ Using explosive charges to disorient any occupants, the SEALs moved quickly through the hospital and found the captured soldier.²² Within a matter of minutes, the soldier was quickly loaded onto the helicopter waiting on the rooftop and lifted into the sky.

As the aerial assault developed, vehicles from the ground combat element raced to their assigned positions, traveling at approximately 45 kilometers per hour. Three tanks immediately secured the southwest, southeast, and northeast corners of the Saddam Hussein complex. Gunners scanned assigned sectors of fire and even picked up their wingman's scan when thermal receiver units (TRUs) overheated. Loaders and tank commanders used night-vision goggles (PVS-7s and 14s) to scan for potential targets.

Once the perimeter was secured, SEALs and Rangers spread throughout the complex to search for more American soldiers. The hospital's staff informed the search team that several Americans had been buried on the hospital grounds.²³ As the intelligence was shared on the command net, Blue 2 identified large mounds of dirt and immediately relayed the information to the search team. The Marine tankers directed the Rangers to the location of what appeared to be freshly dug graves. The soldiers dug up the area using their hands and a large shovel given to them by Blue 2. Once their task was complete, SOF returned to their vehicles and aircraft, and the tanks pulled out in reverse order, escorting ground forces north of the Saddam Canal. The mission concluded just before daybreak, with the convoy returning safely across friendly lines.

That morning, seven Americans were uncovered and two more were found in the hospital's morgue. In the building's basement, SOF found rifles, ammunition, mortars, maps, and a detailed sandbox illustrating the exact locations of Iraqi defenses. There was clear evidence to suggest the building had been used to shield insurgents from American attacks.²⁴

Armor is a force protection asset clearly feared by the insurgents. Tactically, tanks in sector signify a powerful deterrent and provide additional ground combat elements the freedom of maneuver they need to conduct missions. At the operational level, tanks are a reflection of serious combat power; their presence resonates across military lines, allowing human intelligence teams and civil affairs units to shape and stabilize areas of responsibility.

Personnel recovery is not a task normally assigned to a tank platoon.²⁵ However, tank, infantry, and air integration, especially in the joint environment, has improved and is continually evolving. These changes are built on doctrine and enhance each branch's capabilities. Regardless of the technological supremacy of the U.S. military, it is ultimately the disciplined, innovative, and flexible nature of its soldiers, sailors, airmen, and Marines that instills fear in the enemy.

Lessons Learned

The personnel recovery operation had the added benefit of lessons learned. When shared with comrades in arms, these lessons are invaluable, especially when they save lives.

Breaching obstacles in an urban environment:

Observation: A plow tank is an excellent piece of equipment to breach through obstacles and move vehicles.

Discussion: A plow tank moved vehicles into position as part of an obstacle plan to prevent insurgents from running through blockades. When conducting the personnel recovery mission, a plow tank was used to create a lane for SOF vehicles to travel through en route to Saddam Hussein hospital.

Recommendation: In an urban environment, every tank platoon should have a minimum of one tank plow to emplace or breach obstacles.

Personnel recovery:

Observation: When conducting a PR mission, it is beneficial to carry equipment to potentially dig up the remains of soldiers.

Discussion: In An Nasiriyah, U.S. Army Rangers had to use their hands to dig up the remains of soldiers outside the Saddam Hussein Hospital.

Recommendation: When preparing for a PR mission, SOF should carry shovels

Continued on Page 46



Counterinsurgency is difficult. As a force, we have only begun to rediscover and process the hard lessons of the past, which we largely discarded in our march to build the perfect maneuver and combat force. As a result, the Army is struggling with "nonkinetic" operations — the Army's entire force structure is designed for kinetic operations, leaving commanders at all levels with few "nonkinetic" tools at their disposal.

During 2006, Team Battle, 2d Battalion, 37th (2-37) Armor successfully set conditions that resulted in pacifying insurgent-dominated territory without fighting any major pitched battles in Tal Afar. The soldiers of Team Battle applied principles learned from training, scholarship, and hard experience to achieve short-term, and hopefully long-term, success in one of Iraq's most difficult cities.



Following Operation Iraqi Freedom, the northwestern border and farming city of Tal Afar was a relatively peaceful and stable haven in Iraq. During 2004 and 2005, the city emerged as both a hub of insurgent infiltration from Syria to Mosul and as a refuge for insurgents fleeing the campaigns in Anbar province. The city was cleared during a major operation in November 2004 by 2d Squadron, 14th Cavalry Regiment, and again in September 2005 by the 3d Armored Cavalry Regiment (ACR) accompanied by the 3d Iraqi Army (IA) Division. The 3d ACR followed up on its success by establishing company- and platoon-sized U.S./IA outposts throughout the city to restore order and allow the reformation of civil government and security forces to rebuild. The conflict also included a bitter campaign by Sunni supremacists to exterminate the Shia presence in town, which had the effect of polarizing the populace along sectarian lines.

Our unit, Team Battle, 2-37 Armor, assumed responsibility for west and southwest Tal Afar on 14 February 2006. The team consisted of a motorized tank platoon, a dual-purpose tank/motorized platoon, a mechanized infantry platoon, and a combat engineer platoon. The team's specific tasks included ensuring mobility on the alternate supply route (ASR) in its sector, developing IA and Iraqi Police (IP) capabilities, and defeating the insurgents' ability to operate in its area of operations (AO). Approximately half of the sector was occupied by friendly tribes, mostly Shia, who formed a partnership with coalition forces to protect their interests and restore a fair government to Tal Afar.

We were fortunate to take over from Fox Troop, 2d Squadron, 3d ACR; they had developed extraordinary relationships with the

local populace and tribal sheiks in our sector. Fox Troop had also established U.S./IA platoon-sized patrol bases at strategic locations throughout its sector. By combining aggressive patrolling, engagement of local leaders, and development of human intelligence (HUMINT) from the local population, 3d ACR virtually eliminated insurgent control in the southern and extreme western parts of Tal Afar, and had begun building inroads to the mixed tribal and sectarian neighborhoods of central and northern Tal Afar at the time of their relief in place.

As a new commander, I was faced with a number of opportunities and potential courses of action to build on Fox Troop's success. It appeared there were three possible directions to take. The first involved continuing efforts in the mixed Sunni/Shia central area, known as the Wahda neighborhood. Although Fox Troop had some measure of success in that area, there were limited options to improve the situation, other than increasing Iraqi Security Forces (ISF) presence. Additionally, the neighborhood was difficult to isolate and was bordered by insurgent support zones to the north and east. The neighborhood was almost fully occupied with a mixed population of 60 percent Sunni and 40 percent Shia, which resulted in a great deal of tension. Fox Troop managed to largely pacify the neighborhood and ISF managed to maintain the uneasy peace between the tribes and sects. Although the temptation to expand the "oil spot" was extremely tempting, focused effort in that area would not have led to major gains elsewhere in sector.

The second option was to begin operations in the central portion of our sector, a heavily Sunni area known as Rubiyah, where



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there was a strong insurgent cell focused on attacking the Iraqi police. One of the greatest advantages in this area was a local sheik who was willing to cooperate with coalition forces behind closed doors. However, intimidation was high and local support was not especially strong. Complicating the situation even further was the difficult task of isolating the area and limiting insurgent freedom of movement.

The third neighborhood was known as Sa'ad, a mostly empty battleground neighborhood that had seen extensive fighting over the past year. The neighbor houses were nearly two-thirds empty and the remaining residents were almost all Sunni, after the Shia residents had been displaced during the fighting. It was a known hotspot of insurgent activity and support. However, it was easily isolated, bordered the other two neighborhoods, and we could leverage existing tribes to remigrate into the neighborhood, if we provided adequate security. A plan to enter this neighborhood was not to be undertaken lightly; many coalition forces and ISF casualties had been taken. Additionally, there were few local informants or residents to co-opt.

Of the three options, we decided on Sa'ad because it possessed some unique characteristics that could be exploited. First, the

neighborhood could easily be isolated using existing barriers and security forces, and the natural wadi system reinforced the obstacle plan.

Geographically, the neighborhood was triangular shaped and slightly less than a 1-kilometer square. The ASR bordered on the west; the main supply route, a major eastwest city road, bordered on the south; and a deep, but passable, wadi system provided easy infiltration from the insurgent-dominated neighborhood of Quadisyah from the east.

A further analysis of the human terrain was also striking. The neighborhood was once almost evenly divided between Sunni and Shia families. The neighborhood originally began in the late 1980s as an upscale area for Baathist supporters and their families. During 2004 and 2005, insurgent and sectarian tensions caused all but a handful of Shia families to flee the neighborhood after an intense sectarian intimidation campaign. Many Sunni families fled to avoid being caught in the ensuing crossfire between insurgents, police, U.S. Army, and sectarian groups. By October 2005, the neighborhood was approximately 65 percent abandoned. These structures allowed freedom of movement, bed-down locations, meeting rooms, and cache storage for insurgents. The neighborhood also bordered ASR Santa Fe, the main logistics line to forward operating base (FOB) Sykes and an improvised explosive device (IED) hotspot.

The history of the area also affected the unit's mission. The 3d ACR patrolled the neighborhood regularly, but the density of empty houses occupied by an intimidated populace allowed the enemy to operate relatively freely in the area. Numerous armored vehicles were lost or damaged in the neighborhood and immediate vicinity due to large IEDs. Houses that may have been used as ISF outposts or by Shia supporters to meet with coalition forces were often destroyed using bags of urea nitrate fertilizer. The city's fledgling Iraqi police force refused to operate in the neighborhood due to the perceived strength of insurgent forces there. A lone Iraqi army patrol base occupied the area, but was largely ineffective at curbing insurgent operations in the area due to its small size and isolated location. One abortive attempt in late 2005 at establishing a second U.S./IA patrol base in the neighborhood resulted in a vehicle-borne IED (VBIED) attack,

which was fortunately intercepted and detonated prematurely due to an alert Iraqi army soldier. Following the VBIED attack, the base was removed and the unit returned to regular patrolling in the neighborhood and prepared for relief in place with 2-37 Armor.

What really tipped the scale was the risks-and-benefits analysis of investing fully in each neighborhood. The analysis was conducted using three main criteria: the effect on insurgents if we succeeded/the effect on insurgents if we failed; suitability of the urban and cultural terrain; and the ability to execute with forces available. When applied against these standards, completing success in Wahda would consume too many resources without significantly affecting insurgents' ability to conduct operations elsewhere in sector.

Rubiyah's chances of success were assessed as low due to the lack of ability to rapidly "change" the cultural terrain, which was based on a populace that supported anti-Iraqi forces (AIF) and the difficultly of controlling access in and out of the area.

Despite its status as the most dangerous area in our AO, Sa'ad was our best chance for success. First and foremost, insurgents

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would lose a major support zone, which would limit their ability to maneuver in the northwest part of the city, store tactical caches, and use bed-down locations. It would also remove the "support zone" for AIF operations in the Wahda neighborhood to the south, and limit the AIF's ability to destabilize that neighborhood. Finally, it would remove the IED threat from approximately a kilometer of our ASR, increasing the security of coalition forces and logistics convoys.

Visualizing the Fight

Once we decided where to act, the question turned to strategy. First, we knew intelligence would be key to success and allow us to conduct targeted operations. With a neighborhood of displaced people, HUMINT would be critical to discerning AIF from intimidated civilians. We needed to disrupt the insurgents' ability to counter our initial actions by clearing the area prior to follow-on operations; otherwise, we risked losing any initial toeholds into the neighborhood.

Following my first tour in support of Operation Iraqi Freedom (OIF), the emphasis became withdrawing to larger bases further removed from the population with the intent of taking away the "irritant" of coalition force presence. While well meaning in practice, we abandoned many areas to insurgent patrols by failing to provide daily security before ISF were capable of standing up.

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enabling ISF to take the lead; however, the real problem was ensuring ISF was competent and capable of conducting local counterinsurgency operations. The Iraqi army was largely tasked out maintaining their existing operational set, given their liberal leave policy. Fortunately, the city was in the process of receiving over 1,500 new Iraqi police officers who were trained at the Jordanian police academy. Once established, they would be the focus of our main security force, since they were drawn from the local community and some were displaced residents of Sa'ad. Our task would be to ensure they were well prepared and equipped for the task at hand.

Finally, we realized that the ultimate goal and arbiter of longterm stability in the sector would be the return of displaced families. Besides being a humanitarian and positive information operations goal, the remigration of friendly families under an umbrella of joint security would prevent terrorists from using neighborhoods to support their purposes. To do this, we had to leverage relationships established with local tribes.

After considering the above, we settled on the following campaign strategy:

- Phase I included recruiting and developing local informants from the displaced populace to provide an accurate picture of AIF supporters, safe houses, and cache locations.
- Phase II consisted of a cordon and search of the neighborhood to locate insurgents and disrupt insurgent logistics in the neighborhood.
- Phase III established a platoon-sized U.S. patrol base in the sector to provide continuous presence and security to the populace.
- Phase IV consisted of establishing an Iraqi police station and transitioning daily security to ISF.
- Phase V was to convince the tribes representing displaced families and civilians to return to their old neighborhoods under the new security umbrella.

Phase I: Building the Picture

Developing our intelligence picture was the first major hurdle. This usually difficult task was made easier for us by our predecessor unit. We were fortunate to inherit a large network of informants and contacts developed by 3d ACR during their operations. Despite this, we lacked a cohesive current intelligence picture of the threat facing us in the Sa'ad neighborhood. In fact, we knew very little about the insurgents in that area. We were also reluctant to rush into a dangerous area until we felt comfortable operating in our sector — the unit's first and last 30 days in Iraq

are the most dangerous. We implemented an aggressive reconnaissance and surveillance plan to learn the neighborhood while conducting patrols throughout the AO.

Using established relationships from Fox Troop, we spread the word that we were seeking knowledgeable individuals who knew the Sa'ad neighborhood and its resident insurgents. To directly reach the people, we identified areas where displaced Sa'ad residents resided and spread the word during dismounted patrols that we were seeking information to drive out the insurgency. In coordination with our tactical HU-MINT teams (THT), we slowly developed a more specific intelligence picture of the neighborhood, but still did not have the details required to begin operations effectively. To compensate, we increased patrolling in Sa'ad, attempting to elicit information from its residents. Despite great effort, it was apparent that the residents were unable or unwilling to cooperate with us due to terrorist domination of the area.

A breakthrough success occurred when a new informant contact was introduced through a friend. He heard we were seeking to clear the neighborhood and represented a loose coalition of 20 displaced families. The informant produced a spectacular hand-drawn map of the neighborhood, identifying each house. Annotated in Arabic were the locations of known AIF supporters, possible cache locations, and friendly residents. We were excited to get this information, but wary of its details, especially from a first-time informant. In conjunction with our other informants and the S2 shop, we were able to substantially confirm the information's validity.

With information in hand, we began to set the tactical conditions by reinforcing an obstacle plan set by 3d ACR in the neighborhood. We reinforced existing obstacles and blocked all exit routes from the neighborhood, with the exception of one, which was manned by an Iraqi army checkpoint. This operation forced all vehicles to be searched before they entered or exited the neighborhood. Isolating the neighborhood allowed us to better cordon the area and at least restrict infiltration of more weapons to the neighborhood.

Phase II: Cordon and Search

There is some argument in the military community over the applicability and usefulness of large scale "cordon and search" or "cordon and knock" techniques. However, we found that when properly executed, they are useful tools during counterinsurgency operations when combined with intelligence, a clear task and purpose, and targeted information operations. We envisioned an initial cordon and search as an enabler that would allow us to potentially trap known terrorists inside the neighborhood and flesh out existing caches. The disruptive effect would provide us the opportunity to establish our operations base inside the neighborhood.

Having an intelligence picture provided us with the ability to plan a detailed cordon and search of more than 200 houses. We integrated with 1st Battalion, 2d Iraqi Army Brigade, 3d Division to execute the operation. The battalion's acting commander planned the operation in strict secrecy, in conjunction with Battle Company, beginning 2 weeks from execution. We decided to conduct the operation on a Friday to catch as many people at home as possible and selected 10 March as our target date.

The plan was relatively straightforward. Three U.S. platoons, integrated with three IA companies, would establish a cordon at 0630 hours around the neighborhood to prevent possible escapes. Once established, two IA companies, accompanied by one of our infantry platoons, would conduct a deliberate block-by-block clearance of all houses. All males between ages 13 and 70 would be directed to report to the centrally located primary school, which would serve as the command post for the operation. Having the males report to the school served two purposes: it prevented terrorists from maneuvering inside our cordon; and alerted search teams to regard any male found in a house, on the streets, or hiding as suspect after the cordon was in place.

One of our tank platoons and the company trains were assigned to secure and operate the screening process. A carefully selected panel of informants, in conjunction with our "blacklist," would identify insurgents and their supporters for further questioning by a mobile interrogation team (MIT), which was on site to gain actionable intelligence. Those not identified as insurgents would be given the opportunity to speak with a THT.

Tactical psychological operations (PSYOPS) teams would provide initial broadcast messages and later help distribute information operations (IO) messages to screened personnel for effects mitigation. An explosive ordnance detachment and military working dog team would assist in detecting and reducing any ordnance found. Finally, aviation would provide support and observation during the cordon and search process, especially in the critical early phase. We planned to screen 200 to 300 males, based on our population estimate in the neighborhood.

A detailed combined arms rehearsal was secretly conducted in an empty warehouse at our joint U.S./IA company base. Each participating element and IA commander rehearsed their roles in the mission, which later proved invaluable during the critical cordon establishment phase. Having had coordination difficulties in prior operations with our IA counterparts, the detailed rehearsal proved vital in ensuring IA leaders understood their roles in the plan.

The raid was executed as planned at 0630 hours on 10 March. Tactical surprise was achieved as the cordon was emplaced, effectively sealing the neighborhood. The search forces deployed while the school was being set up as a processing center. Our infantry platoon and the IA companies began their search in conjunction with the tactical PSYOPS team's broadcasts. By the end of the search, more than 500 males had been processed, which nearly doubled our estimate. Screening and processing the males took more than 8 hours at the school and we kept the cordon in place the entire time. As it turned out, we severely underestimated the number of residents and the time it would take to process them. An IED cache and a 500-pound unexploded joint direct-attack munition (JDAM) were discovered during the operation. Although we learned many lessons for future cordon and search procedures, the basic template used during this operation was the foundation used for operations elsewhere in the city.

A grand total of 63 detainees were identified for further investigation regarding insurgent activity. We subdivided the group

into three categories: AIF leaders, AIF soldiers, and common criminals. The leaders were taken into immediate U.S. custody, the soldiers into IA custody, and the criminals were handed over to the police. The breakdown was 11 into U.S. custody, 20 into IA custody, and 32 into police custody. Statements were immediately solicited from the detainees.

Following the operation, we circulated names and photos of the detainees to ISF, who provided witness statements regarding the detainees. Almost one-half of the detainees, including 9 of the 11 U.S. detainees, were sent to prison for eventual trial by Iraqi authorities. Among the detainees were alleged financiers, IED manufacturers, and direct-action cell leaders.

The operation achieved its intended purpose — disrupting insurgents operating in the neighborhood. The time provided by this operation would allow us to occupy a patrol base in the neighborhood. There was not an enemy-generated significant event in the neighborhood for the next 7 days.

Phase III: Building the Patrol Base

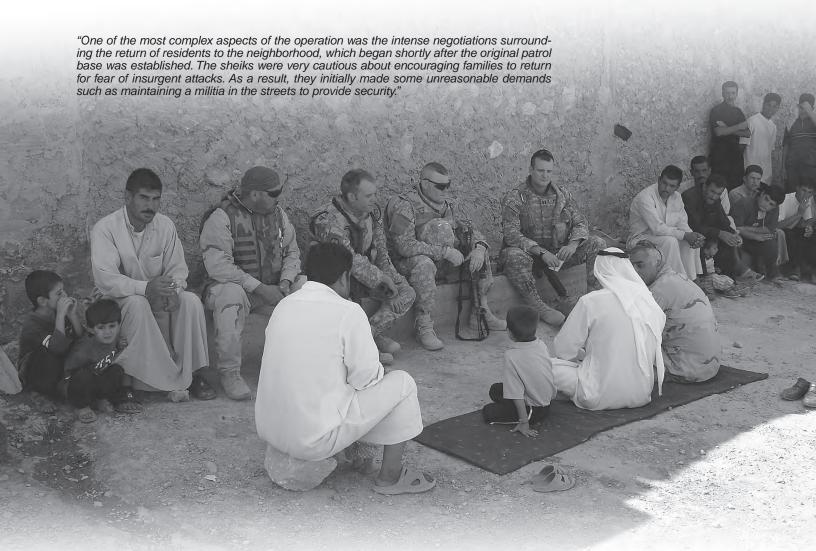
With the insurgent leadership and direct-action cells disrupted in the Sa'ad neighborhood, we had a small window of opportunity during which to establish our patrol base. A patrol base established in the heart of the neighborhood would allow constant patrols and limit insurgent freedom of movement. It was also a visible demonstration of our commitment to win over insurgents and provide security in the neighborhood.

On 14 March, we established Patrol Base Battle Dwarf (because of its small size), which was occupied by our infantry platoon. Located in the most dangerous section of the neighborhood, we emplaced barriers along three sides of the patrol base and a wire/spike-strip combo to protect against VBIED attacks such as the one Fox Troop endured. We reinforced our building's windows and roof with sandbags. Kevlar blankets were draped against the windows to guard against shrapnel from mortar attacks or VBIEDs. A platoon quick-reaction force (QRF) was maintained and on standby for quick response to any attack. We rehearsed multiple routes and alternate entry locations to reinforce the base, attempting to avoid "first responder" attacks.

The platoon primarily conducted dismounted operations from the patrol base at random intervals. The patrols conducted thorough searches of empty houses, drank chai (tea) with locals, and distributed the IO message that we were there to stay and to remove insurgent forces. In the first 3 days, major weapons and IED caches were found, including Motorola radios, homemade rocket-propelled grenades, and plastic explosives.

On 18 March, the enemy struck for the first time. A dismounted patrol had just returned and noted that there was no one present on the streets. Several adjacent houses and a small store had closed down midday. Our S2 also reported that an attack was underway somewhere in the city. This information led to an increased awareness and alerted the guards at the patrol base.

Suddenly, the roof guards indicated that some children, who usually played along the protective wire on the mounted avenue of approach, pulled back two strands of concertina to create a small opening in the wire. Immediately, a small car drove at high speed through the hole and across the protective spike strip emplaced about 70 meters from the patrol base, which failed to stop the car. The car was immediately engaged from the rooftop with M240B machine gun fire. The car hugged the extreme side of the near wall as it approached, allowing the rooftop gunner to engage only the passenger side. The soldiers on guard called for everyone to take immediate cover. As they did, the VBIED rolled



to a stop near the front door of the base and after a 2 to 3 second pause, detonated. The blast collapsed the outer wall and shattered every window on the block.

Thankfully, all the carefully emplaced force-protection measures held. The Kevlar blankets draped over the windows stopped the shrapnel, and the sandbags and concrete construction protected the soldiers from the explosion. Due to the alert guards, everyone was able to seek some measure of protective cover. Pieces of the car were found more than 100 meters from the point of detonation.

The company QRF responded to the event, as rehearsed, within 5 minutes, and assisted in establishing a perimeter around the site. The remainder of the company quickly followed and nearby units from Company A, 2-37 Armor responded immediately. The IA and IP closed all checkpoints into the area to prevent a possible secondary attack on the responding elements. Post-blast analysis indicated that the explosive was a combination of military rounds and homemade explosives.

No one was killed in the explosion, but four soldiers received minor wounds. We immediately began reconsolidating the gear and equipment inside. After consulting with the battalion commander, we decided to immediately re-establish a new base to reinforce the message that we would not be deterred. The new base would be manned by our engineer platoon while the infantry reorganized from the blast and took a break. Prior to establishing Battle Dwarf, we had explored several houses as potential base locations and chose one of these as our new base, which was located about a block from the VBIED site, and provided a commanding view of the area. The battalion headquarters company brought an emergency class IV push and reinforcements

from A Company, 2-37 Armor provided initial security during the establishment of our new base, aptly named "Battle Phoenix."

The enemy did not expect us to re-establish so quickly. They likely anticipated that we would withdraw from the area, as their attack in December had achieved. Patrols immediately resumed and located caches and IEDs almost daily. A HUMINT tip led to a suspected IED on 21 March, and as it was being explored, it detonated and caused minor injury to one soldier and destroyed a multifunctional agile remote-controlled robot (MARCBOT).

On 25 March, our infantry platoon was conducting a routine patrol when a homemade IED exploded against a dismounted patrol, causing minor injuries to a soldier's hand. In this case, the patrol identified the triggermen and chased them as they fled across the wadi to the east. The IA apprehended the individuals and turned them over to our patrol. One of the two individuals was a battalion target and an IED cell organizer. Their detention resulted in a quiet phase in the neighborhood and we continued to expand patrol frequency and duration, resulting in the discovery of several caches. Other significant finds included a cell member who later provided critical information, leading to the detention of other high-value targets.

On 6 and 7 April, the base received 60mm fire from a mortar team in response to the arrival of IP to our patrol base. On 8 April, a patrol was sent to establish an ambush on the likely point of origin (POO). A buried 120mm mortar, with homemade explosives, exploded against a dismounted patrol that was sent to investigate the POO, killing one soldier and severely wounding another.

The enemy patterned us and used our tactics, techniques, and procedures (TTP) against us. Another IED attack, against an

M113 sent to investigate a possible IED, wounded one of our soldiers. We did not let these tragic events deter us from the objective; however, we evaluated and shifted our tactics to better employ IED countermeasures, reduce predictability, and increase ISF cooperation.

At this stage, we began to notice subtle changes in the neighborhood. People were becoming friendlier and more receptive, although HUMINT tips were not increasing. Our company leaders determined that we had reached our limit with U.S.-only forces and more ISF were needed to move the project forward from its current tense stalemate, which was consuming one-third of the company's combat power that was beginning to be needed elsewhere in sector.

Phase IV: Transition and Partnership with Iraqi Security Forces

After nearly a month of operations, we were setting the conditions for the IP to re-enter the neighborhood. When we began operations, the city was still receiving, equipping, and integrating new police. Additionally, they had very few officers and experienced police; however, by mid-April, enough police had arrived to establish operations in Sa'ad under our supervision and support. The city police chief arranged for an initial force of 50 IP to conduct joint operations. We established a police outpost on 4 April, which was collocated with Battle Phoenix. The local police station chief ensured his most experienced and aggressive police officers occupied the base, even replacing those who failed to perform to standard. They soon began combined patrols with U.S. forces several times a day.

Given the largely Sunni neighborhood and mostly Shiite police force, there existed a large possibility for sectarian tension, revenge attacks, or further violence. We were extremely fortunate to work with someone of the caliber of the local police chief. He

deftly walked the tightrope of being firm, but fair, with the residents, and disciplined the police if they operated inappropriately. He was a local from the neighborhood and was well respected in the community. More importantly, he sincerely cared about bringing security to Tal Afar and wanted his neighborhood families to return to their homes.

Over a 2-week period, we shifted from U.S.-led and -dominated patrols to independent IP patrols. We noticed residents becoming more positive and we soon began receiving tips and intelligence from them. Initially wary, the locals soon warmed and later embraced the new IP presence once it was established that they were not a sectarian hit squad. We once again saw progress in the neighborhood after stalling in early April.

The police chief was so enthused by the success in Sa'ad that he moved his police headquarters into the neighborhood. He requested we place a triple-strand concertina barrier across the eastern wadi to canalize AIF movement to the north or south, where he would establish IP checkpoints. We resourced the wire and emplaced it as a joint operation with the IA and IP to build cooperation between the forces. Al-

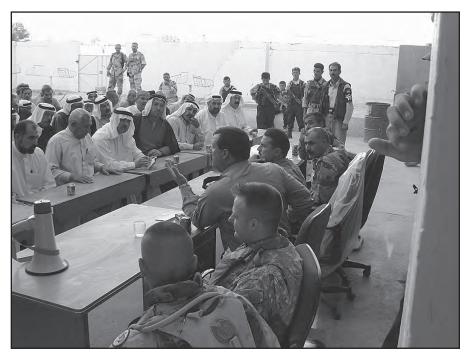
though we initially doubted the effect of the barrier, we were pleasantly surprised when the locals reacted positively to the wire and insurgent activity dropped measurably.

On 22 April, we began transitioning Battle Phoenix to the IP following 2 weeks of joint train-up. The IP continued constant mounted and dismounted operations around the area while we supported daily from Combat Observation Post (COP) Battle. Their independent operations resulted in many additional cache finds and a few detentions, but most importantly, we had achieved a major goal — transitioning primary responsibility to ISF while supported by U.S. forces. This had major positive effects in the community and among the local police forces. The only remaining challenge was to convince the displaced populace to return home.

Phase V: Returning Displaced Civilians

One of the most complex aspects of the operation was the intense negotiations surrounding the return of residents to the neighborhood, which began shortly after the original patrol base was established. The sheiks were very cautious about encouraging families to return for fear of insurgent attacks. As a result, they initially made some unreasonable demands such as maintaining a militia in the streets to provide security.

Convincing local sheiks that the area was safe was no small undertaking. In Iraq, perception is reality and the locals heard about casualties and car bombs, but not about the enemy fleeing the area in response to our operations and that ISF were controlling the neighborhood. This was another one of those areas in which the local chief of police played an invaluable role. Since he was a local resident and related to several powerful local personalities, his assistance was critical in gaining support from the tribes. He did so at considerable risk to his own prestige; if the



"Maintaining our success was as big a challenge as achieving it. Securing the neighborhood required daily attention from the unit. In mid-June, we felt security conditions were permissive enough to conduct a town hall meeting, with leaders from the neighborhood, to elect a muktar (mayor) and address any grievances that local leaders may have. We conducted our first meeting on 20 June with great success."

endeavor failed, his position in the community would be reduced and his job imperiled.

After some intense negotiations between security forces, the city mayor, and the sheiks, an agreement was reached. The persuasive arguments by the police chief and mayor won the day. Only males would return to a limited portion of the neighborhood in the beginning to "test the waters." The IA, IP, and U.S. forces would provide route security to the neighborhood (a concern for residents), and the residents were allowed to keep AK-47s in their homes to protect themselves. If the neighborhood was as secure as they were told, they would return more people and families.

Our first attempt at moving in individuals on 18 April was a failure. The males that returned brandished their weapons in the streets and caused some trouble with local residents. A severe sandstorm and IED reduced the number of forces we were able to provide. The sheiks, angered by a perceived lack of support and under pressure about the weapons incidents, withdrew from the area.

Negotiations over returning the residents soon began again and after some delays and mediation, a more detailed and specific agreement was reached. Heavy security would be provided by U.S. and ISF forces units for the first 48 hours, and in return, the returning residents agreed not to brandish weapons or cause any trouble with existing residents. The chief of police proved critical to reassuring the Iraqis about providing enough security from ISF.

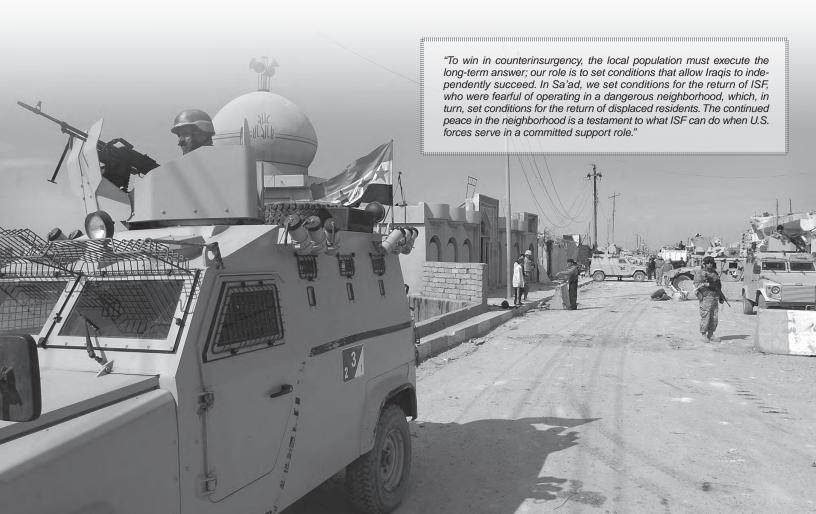
On 27 April, approximately 50 males returned to the southwest portion of the neighborhood under heavy U.S. and ISF security, including aviation. Eager to avoid a repeat of the attempt nearly 10 days earlier, I collocated with the main Shia Sheik at the site to immediately resolve any problems. Fortunately, the entire move took place without incident. During the initial 2 weeks, we maintained constant vigilance in the neighborhood, especially cautious about sectarian violence or retribution between the returned residents.

Continuing Stability

Maintaining our success was as big a challenge as achieving it. Securing the neighborhood required daily attention from the unit. In mid-June, we felt security conditions were permissive enough to conduct a town hall meeting, with leaders from the neighborhood, to elect a muktar (mayor) and address any grievances that local leaders may have. We conducted our first meeting on 20 June with great success.

Fortunately, none of our fears came to pass. AIF activity remained minimal to nonexistent in the neighborhood. As word spread, families arrived daily, with some returnees traveling over 150 kilometers to reoccupy their homes. The ISF maintained a constant presence and manned checkpoints in the neighborhood. U.S. forces maintained almost daily joint patrols in the area, but refocused on developing the logistics and administrative skills of the IP and IA bases. The ongoing security of Sa'ad now rests almost entirely in Iraqi hands with U.S. forces providing "overwatch."

The operation had great second- and third-order effects in the Wahda and Rubiyah neighborhoods. Removing the insurgent base in Sa'ad denied insurgents easy entry into Wahda. In Rubiyah, residents petitioned for a police base similar to the one in Sa'ad. Our unit and the local police were happy to comply and the program was expanded in other company sectors.



Strategically, the operation became well known throughout Tal Afar and the reputations of the local IP and IA were enhanced by its success. We began focused civil-military operations (CMO) projects to support returning residents, which included "start up money" to repair homes damaged by heavy fighting over the past year. We paid nearly \$15,000 in claims to assist the families courageous enough to return.

Currently, employment projects are underway with the support of the muktar and the ISF to provide an economic base for residents, including a water well, school refurbishment, and street lighting. Despite this progress, gaining reconstruction dollars is a slow and bureaucratic process, and often the expectation of the Iraqis cannot be met by U.S. forces under the current funding model.

Lessons Learned

Like most successful operations, a clear commander's intent was vital to our success. When the intent is practical and clear, soldiers can tailor their actions to achieve the mission. Likewise, a clear vision in the commander's mind of what he expects the endstate to be assists in evaluating and processing variations and changes to the tactics while maintaining the overall strategic focus.

The presence of force in neighborhoods and communities is fundamental to a successful counterinsurgency. By living among the people and learning their way of life, we gained credibility and demonstrated resolve to stay and solve problems. The enemy expended great effort to expel us from the neighborhood because we were a threat to their operational base. Once the terrorists and residents realized we were not leaving, we gained the confidence of the people, who trusted we could protect them from the terrorists. Eventually, we transferred that confidence to their local police force, which was a huge change. If we had not established bases inside the neighborhoods, we could not have achieved as much as we did.

Living in the city requires careful assessment of how to protect soldiers against the threat. As demonstrated by patrol base Battle Dwarf, force protection can be underestimated and the enemy will analyze and target your weaknesses. The structure of urban neighborhoods and houses make it nearly impossible to guard against every threat — from a thrown hand grenade a few houses over to a suicide VBIED attack. Operating inside a neighborhood assumes some soldier risk in the short term for long-term security. When casualties began to mount, I doubted the wisdom of the strategy. Perhaps sensing my unease, a young infantry soldier told me: "Sir, if we weren't in the neighborhood, we'd just be getting blown up more outside it." His comment unwittingly framed the issue perfectly.

There are key measures ground commanders can take to minimize risks and casualties. Commanders must understand and employ their IED countermeasure systems properly. These systems must be strategically placed in all patrols — planned and deliberately placed much like a crew-served weapon. We also learned that a .50-caliber machine gun is required at all entry control point (ECP) locations or potential VBIED sites. Barriers and other obstacles must be reinforced; local residents must be briefed and warned of the potentially lethal consequences of tampering with defensive obstacles. Children must be ruthlessly kept away from all ECPs and guard points. Finally, dismounted patrols and mounted patrols must vary routes, times, and movement methods such as wall-hopping, bounding teams, and roof-top jumping.

The ISF was key to our operational success. Understanding the capabilities and limitations of the Iraqi forces in your area is vi-

tal. Iraqi army forces in our sector were great for operations but weak in daily counterinsurgency. Iraqi police were highly effective in the daily fight, but due to discipline and equipment problems, were incapable of undertaking large operations. Joint patrols and training at all levels reinforce their legitimacy and ensure their balance regardless of sectarian orientations. Taking ISF key leaders to bilateral meetings (BILATs) and developing direct relationships with local leaders resulted in major atmospherics improvement in our area. Some Iraqi army leaders are not accustomed to "answering to" or "working with" civilians. Direct contact between local sheiks and Iraqi leaders eliminated potential sectarian differences and resolved issues much more effectively than playing the "middle man," which allowed both sides to scapegoat U.S. forces and avoid accountability. Sometimes compromise with Iraqi leaders may be necessary to accomplish the objective — even using methods you may not agree with. Keep in mind that the Iraqis have to live with the result; allowing the Iraqis to "design the solution" creates ownership and facilitates success.

To win in counterinsurgency, the local population must execute the long-term answer; our role is to set conditions that allow Iraqis to independently succeed. In Sa'ad, we set conditions for the return of ISF, who were fearful of operating in a dangerous neighborhood, which, in turn, set conditions for the return of displaced residents. The continued peace in the neighborhood is a testament to what ISF can do when U.S. forces serve in a committed support role.

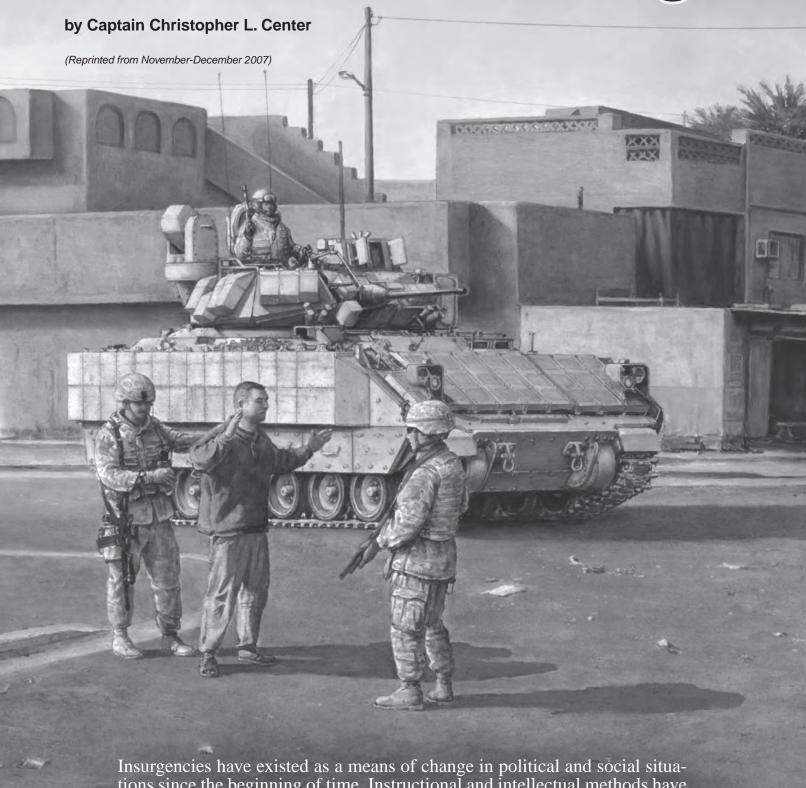
Finally, economic prosperity is the motivator for maintaining success in a counterinsurgency environment. A competent and targeted CMO effort to reward those who took risks and gave information helps win the fight. To paraphrase: dollars are the same as bullets in counterinsurgency, but are often extremely difficult to get quickly. A colleague summarized it well, "I have almost unlimited capacity to employ violence, but little ability to employ nonviolence." Gaining nonkinetic economic support remains the biggest challenge to commanders throughout Iraq, and will continue to be a major issue until there is an improved process that empowers front-line commanders to employ dollars as easily as they employ bullets.

The Sa'ad neighborhood campaign was an ambitious attempt to re-take ground held by the enemy. The success of the operation required us to "break the FOB" mentality and live among the people. Respectable locals will unhesitatingly support U.S. and ISF forces, if they are provided security. It is correct to say that Tal Afar had a unique set of circumstances that assisted in our unit's success. Deployed units can help themselves by assessing ethnic and tribal histories and dynamics to shape a strategy for success. I hope commanders and planners can apply the principles we learned at a heavy cost in Tal Afar to protect other areas from insurgent control.



Major Niel Smith is currently the operations officer, Army-Marine Counterinsurgency Center, Fort Leavenworth, KS. He received a B.B.A. from James Madison University. His military education includes Armor Officer Basic Course, Armor Captains Career Course, Airborne School, and Combined Arms and Services Staff School. He has served in various command and staff positions, to include assistant S3, 1st Brigade, 1st Armored Division, Ramadi, Iraq; commander, Team Battle, 2d Battalion, 37th (2-37) Armor, Friedberg, Germany, and Tal Afar, Iraq; S4, 2-37 Armor, Friedberg, Germany; AST commander, Camp Vitina, Kosovo; assistant S3 plans, 1st Brigade, 1st Armored Division, Friedberg; XO, Headquarters and Headquarters Company, 25th Infantry Division (Light), Hawaii; and platoon leader, Apache Troop, 3d Squadron, 4th Cavalry, Hawaii.

The Roots of Insurgent



Insurgencies have existed as a means of change in political and social situations since the beginning of time. Instructional and intellectual methods have allowed for these vehicles of change to evolve in their asymmetric concepts of warfare for the state and the insurgent. This article discusses the "roots of an insurgency" and how the military of the state has countered insurgent warfare through intellectual and instructional methods.



Evolution takes analysis and relies on the military historian to provide the analysis and research in any conflict. Conflicts or war can be grouped or categorized in various ways. My instructional education has taught me the difference between "total war" and "limited war." "Total war," as described by Dennis Showalter in Lecture 9 of Introduction to Military History, is "generally understood as war in which resources, human and materiel, of the combatants are committed to a conflict, admitting neither rules nor restraints in military operations, and the outcome of which places the defeated entirely at the mercy of the victor." In this short definition of total war, we see two sides committed to a particular conflict who will stop at nothing to accomplish their aims. There is no operational, logistical, or human expense that will be spared to accomplish either participant's desired end state. An example of this particular type of warfare is World War II. Conflicts, such as Vietnam and the Revolutionary War, take on many traits of "total war," but in many ways, it is a contest of "David vs. Goliath."

Insurgent warfare is a limited war, a contest of the weak versus the strong. The struggle is seen as an internal conflict, which involves a conflict between a government and an opponent who wants to bring about change in the current political setting through political or violent means. As Robert Tabor discusses in *War of the Flea: The Classic Study of Guerrilla Warfare*, there are four political aspects that insurgents attempt to challenge during any particular insurgency: integrity of the borders and composition of the nation state; the political system; authorities in power; and the policies that determine who gets what in society.² The insurgency is asymmetrical in nature and the tactics used to bring about change need to be understood — both sides in this type of warfare have differing capabilities. Dennis Showalter, in Lecture 10 of Introduction to Military History, describes it as one opponent trailing the other because it cannot match its enemy in

the areas of technology or instructional learning.³ This gap must be bridged; therefore, insurgents must use asymmetric tactics of terrorism and guerrilla warfare.

More often than not, insurgencies are confused with the tactics used to further their objectives. Terrorism and guerrilla warfare tactics are commonly used; insurgents may use both or neither of these tactics, however, they are not the overarching principle of the conflict. Terrorism is described as "the threat or use of physical coercion against noncombatants to create fear to achieve political objectives;" guerrilla warfare uses hit-and-run tactics against police, military, and physical infrastructures that support the legitimate government.⁴ The tactical success of an insurgency depends on the strategic plan of the insurgent, which depends on five key factors for success. Robert Tabor defines these factors as the "will to maintain the revolt; the mindset to avoid the state's strengths and attack its weaknesses; the metamorphosis of the protracted armed struggle from the strategic defensive, to the strategic stalemate, to the strategic offensive; the role the political organization plays in gaining and maintaining support for the insurgency; and the government's counteraction against the insurgency. Does the government use discriminate force or indiscriminate force when dealing with the enemy? The center of gravity, or the civilian populace, that is on the fence could decide to support the insurgency if the government uses violent means against them."5

The five strategic aspects of this particular struggle show that the typical insurgent needs to be endeared to the general public to proliferate. The internal conflict needs to be balanced between guerrilla, terrorism, and political tactics to be successful. The ordinary civilian caught in the middle between government and insurgent forces should be the main objective of insurgent or counterinsurgent operations. Civilians are the center of gravity

and the aspect of this particular struggle that can tip the favor from one side to another, thus enabling insurgents to recruit local citizens to join the insurgency, and encouraging the local populace to support the insurgency by providing a base of operations or hospitality to the insurgent, as well as financial and other means of support.

Support is vital to any insurgency, as proven during the Vietnam War when South Vietnamese villagers provided support to the Viet Cong. This insurgent army blended in with the population, which allowed them to recruit from within villages and maintain power, even when they were decisively engaged by government forces. Weapons and supplies were easily cached in villages and stored in intricate cave systems. In turn, this meant that logistics and medical support came from these villages, thereby fueling the insurgency. The fact that the Viet Cong and North Vietnamese army won over the center of gravity led South Vietnamese and U.S. forces to begin a campaign of clearing villages known to harbor such insurgents. This campaign effectively denied the insurgency its center of gravity.

The center of gravity, or people, support insurgencies because they see the government failing them in two key areas: security and basic services. These two key fac-



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tors become prevalent when human beings identify their most important needs. Abraham Maslow's "Hierarchy of Needs," clearly identifies these two factors as the base of the triangle.⁶ The two key factors are integral to human existence and can cause alliances to waiver if they are not met by the government, but are provided by the insurgent.

Hezbollah, an insurgent group from South Lebanon that has menaced the Israeli Defense Force, has established themselves not only as an insurgent group, but also a political party. Under the leadership of Sayyed Hassan Nasrallah, Hezbollah has been one of the major political parties in Lebanon since 1992. They provide education, security, medicine, food, and other basic necessities to the Shia people of Lebanon. These basic needs are provided to the people in exchange for their popular support to help undermine the government's counterinsurgency operations. The only way for a western power to defeat an insurgency is through a detailed study of intellectual and instructional methods during peacetime.

During peacetime, a western military reverts to training periods that incorporate lessons learned from past conflicts. Western military instructional and intellectual lessons in history typically revolve around high-intensity conflicts, using fire, maneuver, and air power against an enemy of near equal size and tactical ability, which tends to be the focus of study whether it is instructional or intellectual. An insurgency is a low-intensity conflict that pairs government forces against an internal enemy that cannot replicate the force structure or logistics capabilities of

its opponent. In western militaries, insurgency is usually considered an afterthought or an additional consideration and seldom considered the main conflict, thus classified as low-intensity conflict; however, government forces will typically commit maximum resources to chase down a nearly invisible enemy. The only means for a western power to tackle low-intensity conflict is through professional military education that encompasses all aspects of war and includes nonwestern thought.

Insurgency can only be defeated by a professional military and government that understands, through instructional and intellectual means, how to counter such a subversive group. The military must have an appreciation for cultures other than its own. Dr. Antulio J. Echevarria in his article, "The Trouble with History," supports such professional development within a professional military environment. Echevarria discusses "historical consciousness" and "historical mindedness," which educate the politician that votes to send armies to war or provides the professional soldier with the knowledge and appreciation of nonwestern thought that typically goes into fighting an insurgency. Echevarria further discusses the consciousness and open-mindedness to incorporate the subfactors of social, political, and economic conditions that contribute to a conflict.⁸

Social, political, and economic conditions are three major factors that contribute to an insurgency. These factors are typically not the exciting or heroic parts that the military professional pays much attention to, unless they sit inside some type of strategic planning cell. The fact is these factors allow the military profes-



"The ordinary civilian caught in the middle between government and insurgent forces should be the main objective of insurgent or counterinsurgent operations. Civilians are the center of gravity and the aspect of this particular struggle that can tip the favor from one side to another, thus enabling insurgents to recruit local citizens to join the insurgency, and encouraging the local populace to support the insurgency by providing a base of operations or hospitality to the insurgent, as well as financial and other means of support."

sional to understand the intricate details that drive a countryman to turn away from his government for ideological purposes.

Social reasons could involve anything from religion to race, which create deep divisions among all parties involved in the conflict and become sectarian in nature. If it were an internal conflict involving a government force against a sectarian group, then we would possibly find insurgents and government forces crossing lines to support the sectarian group with whom they have a religious or ethnic alliance. This was very common during the Balkan wars in the 1990s, after the former communist state of Yugoslavia divided into six independent states.

Political friction also tends to spark an insurgency. These political causes range anywhere from a particular group wanting to live under the rule of a monarch, or in the case of Fidel Castro and Cuba in 1959, a socialist movement that ended up ejecting the corrupt Batista government from power. In the case of Castro, this is very similar to the earlier discussion of the Islamic political organization of Hezbollah. The Castro movement sought to discredit the Batista government through propaganda or information operations, which was used to target the center of gravity or local populace. The main objective of this campaign was to inform the center of gravity that the Batista government was not providing basic needs to the local populace. Sustenance, medical needs, education, and basic social services would be given in return for support of the revolutionaries. This propaganda led to materiel, manpower, and sanctuary support to the revolutionaries.9

Economic reasons tend to coincide with political reasons. Poor economic conditions can cause people to give up on their government, or as a member of the bourgeoisie, can significantly impair a state's economy. In an industrial society, the bourgeoisie (middle class) would cripple a state's economy through refusing to work or consume the goods that an industrial nation produces. The Russian Revolution is an example of a bourgeoisie insurgency — the government and economy fell to the wrath of communism because the bourgeoisie was not represented and not treated fairly in the industrial complex. ¹⁰ The economy causes a nation to appear viable or broken. If other nations cease to have

faith in the market of a certain country, this might spur a revolution. The disgruntled worker has every opportunity to become an ideologue, social or political insurgent.

Dr. Echevarria believes that the military professional should understand the more intricate political and social situation in a country. This allows the military professional to understand a potential enemy and grasp all aspects of warfare, not just high-intensity conflict. The problem is this type of warfare does not appeal to the military professional because it is not just instructional; it requires an intellectual mind to figure out what is causing the internal strife — the tougher issue is developing an exit strategy from such a conflict.

During high-intensity conflicts, the combatants can always sign peace accords and return to their countries. They can also cede control of the terrain they have occupied, if it no longer appeals to their strategic interests. The insurgency does not allow for such a retreat or peace accord; the fight is person-

al because it usually involves countryman against countryman. These feuds normally reignite century after century, and potentially can only be prevented through the use of peacekeepers.

Serious intellectual thought, coupled with instructional methods, are the only way to fight these small-scale wars. Most western countries and militaries have taken part in trying to extinguish the flames of insurgent conflict, but why have they failed more times than not?

The United States, Russia, Great Britain, and France have, at one time or another, been faced with an insurgency. The problem is that armies do not plan for this phase of combat operations, and tend not to be focused on a civilian enemy that rejects their occupation of a country they have no right to occupy. The key term is "occupy" because it highlights the fact that occupying forces are not welcome and are forced to occupy a country through the means of invasion, whether sanctioned, or not, by the world community.

The western world has typically had difficulty containing or eliminating insurgencies. Jeffrey Record in *Beating Goliath*, *Why Insurgencies Win*, presents 12 characteristics the United States and other western countries exhibit. These characteristics, which equate to 12 "tragic flaws," continuously cause western countries to struggle when dealing with insurgencies. These countries tend to be: apolitical; astrategic; ahistorical; problemsolving, optimistic; culturally ignorant; technologically dependent; firepower focused; large scale; profoundly regular; impatient; logistically excellent; and sensitive to casualties.¹¹

To facilitate a successful counterinsurgency, one must understand the usefulness of Record's 12 characteristics, for starters: *apoliticalness* describes how a country ventures into war without considering the political outcome of the country occupied; and *astrategic* is the bridge between the war and post-war rebuilding operations, which requires developing a plan of how to get from combat operations to stability operations. Record agrees with Dr. Echevarria's assertion that military professionals need to study all aspects of military history (*ahistorical*) during peacetime. He also believes that western countries do a poor

"The fact that the Viet Cong and North Vietnamese army won over the center of gravity led South Vietnamese and U.S. forces to begin a campaign of clearing villages known to harbor such insurgents. This campaign effectively denied the insurgency its center of gravity."



job of studying all aspects of war, especially small-scale wars such as insurgencies. *Problemsolving* takes an approach of attempting to find a quick fix or engineering strategy to solve the problem (*optimistic*). Western countries do not understand that in a culture where there have traditionally been conflicts that involved groups with different ideologies, such as in the former Yugoslavia, there is no "quick fix." Likewise, being *culturally ignorant* does not allow the western country to gain an appreciation of its nonwestern enemy. These characteristics are social in nature

The characteristics of technologically dependent, firepower focused, large scale, and logistically excellent are examples of how western countries use their technological and materiel-based strengths to preserve their dominance over nonwestern countries. Western countries are technologically dependent on weapons that engage an enemy at long range. This presents a dilemma during an insurgency because the enemy is not easily distinguished in a crowd of civilians. Soldiers should be able to engage this same crowd nonlethally; firepower amplifies the problem of being technologically dependent. As discussed before, we tend to focus on our lethal means of engaging the enemy while ignoring nonlethal means to win the hearts and minds of the center of gravity. Western countries fight wars that are large scale and logistically dependent. This presents the problem of fighting an enemy that is not as logistically strong, but free of the operational demands that come with securing a "logistics snowball."12

Finally, the final two of Record's 12 characteristics remind us that the United States and other western countries are impatient societies that demand results; they want a quick solution to a problem. Insurgencies are conditions based and take dedication to a strategy and final objective before initiating planning for an exit strategy. Western countries are *impatient* and *sensitive* to casualties. Impatience is an "Achille's heel" to most western countries; their citizens demand results and decisive victory. Record uses the example of Vietnam and the lack of counterinsurgency techniques used because the political objectives would not be met within the timetable prescribed by U.S. strategy.¹³ The other characteristic that drives impatience is the western world's sensitivity to casualties. In Beating Goliath, Record compares western militaries to their predecessor, the Roman Legions. These armies are small (compared to their strategic responsibilities), volunteer based, and expensive to train, and their soldiers are not easy to replace. The news media, which operates 24 hours a day, has brought the reality of casualties into our living rooms. The insurgent understands this and uses it to project his strategic objectives on an unwilling public. The price of human life can force withdrawal from a conflict.

After reviewing these characteristics, one must consider the words of General Douglas MacArthur's address to the U.S. Congress in 1951. "When war has been forced upon us, there is no other alternative than to apply every available means to bring the war to a swift end. War's very object is victory, not prolonged indecision. In war, there is no substitute for victory." This very quote highlights the western attitude, which exemplifies the above-mentioned characteristics.

Conversely, another western general cautioned against this attitude: Carl von Clausewitz asserted that "War is simply a continuation of political intercourse, with the addition of other means." The rejection of swift victory is evident in this quote and it needs to be understood that politics and war intertwine. One must make political concessions to end war and when con-

cessions are not readily available, war might be the extension of politics. Political strategy must be part of the planning process in war. Instructional and intellectual thought on the part of officers, such as MacArthur, would prompt realistic strategies and objectives, post-invasion or occupation.

These characteristics provide the reader with a sense that western countries, especially the United States, do not always consider the political implications of post-invasion strategy. This strategy requires coordinated input from any country's state and defense departments. This is the period when the invaded and occupied country is politically weak and needs some type of strategy to prevent a "grab for power" by various groups within the country that have a stake in its political future.

Insurgents, on the other hand, must also continue to be educated through instructional and intellectual means to succeed. However, their studies must be asymmetrical because they are not funded by a state that has an interest in making them a trained and professionally educated army. Therefore, their instruction must come through other means such as other popular insurgent leaders and conflicts. They must learn how David successfully beat Goliath, and the way to do that is to follow the nonwestern teachings of famous military strategists such as Sun Tzu, Mao Tse Tung, or Ho Chi Minh.

John Keegan, in *A History of Warfare*, supports the difference in instructional and intellectual thought concerning war between western and eastern cultures. Nonwestern armies have been taught to fight using tactics such as evasion and delay. They were taught to wear an enemy down and fight from distance. Sun Tzu describes this type of warfare in *The Art of War*. The Chou kings fought the Shang dynasty because the dynasty failed to lead the people in a fair and just way. Sun Tzu describes the Chou tactics as evasion and delay, which is how they were forced to fight because the Shang dynasty was superior in both resources and manpower. Sun Tzu also stresses that the logistics support from other people and states also helped the Chou. ¹⁷

The Art of War has transcended generations and has been used by nonwestern warriors to learn how to fight and be successful in an insurgency. Post-World War II set the conditions for this type of warfare to proliferate from 1945 to 1972 in East Asia, leaving the colonies there in a power vacuum. Colonies, such as Burma, Indochina, and Malaya, followed the example of Mao Tse Tung and his insurgent army's defeat and overthrow of the legitimate Chinese government of Chiang Kai-shek during the civil war of 1948-50. Mao learned how, through traditional nonwestern means, to defeat a superior enemy. Mao titled his method of making war as "protracted war." This concept was based on ambush, piecemeal offensives, and rapid disengagement. 18

The Viet Minh and their leader, Ho Chi Minh, learned instructionally and intellectually from the example of the Chinese communists. Through the study of history and instruction, the Vietnamese were well versed on how to defeat the western Goliath, France. The terrain of Indochina supported ambush, piecemeal offensives, and rapid disengagement. ¹⁹ The war raged on for nearly 10 years. The French eventually fell victim to the insurgency because they had just fought a conventional war; this elusive enemy's tactics were directly opposite of those with which they were most familiar. The Viet Minh defeated the French because they controlled the center of gravity. The will of the common people was behind them; the will of the French people did not support continued counterinsurgency operations in Indochina.

Our insurgent enemies are not funded directly by a government; they do receive instruction or intellectual thought to fight a war from a central government. They have plenty of examples on how to defeat a western enemy and they continue to master the techniques that make them successful. Western countries have participated in their own insurgencies such as the American Revolution.

Instructional and intellectual study teaches students that the American Revolution is an example of an insurgency. The colonists of the original 13 colonies rejected British rule because of issues such as "intolerable acts" and notions such as "taxation without representation." Do we consult these lessons when studying insurgent methods? Yes, we do. Professional U.S. Army journals solicit articles from the Army community on issues that affect the branch or the study of military art. These topics cover

everything from emerging doctrine and new weapons systems to the study of previous conflicts.

The American Colonies established militias to fight against the French and the Indians in the frontier areas of the new British Colony. During wars, such as the French and Indian, which occurred in the middle of the 1760s, American Colonists learned tactics such as ambush, piecemeal offensives, and rapid disengagement.²⁰ These practices were learned through fighting with and against Native Americans. This nonwestern style of fighting is not typically the standard for western armies or people, but is it western or nonwestern in nature? I believe it is simply a means to an end. The smaller army, with minimal logistics support, that fights a conventional army must practice these techniques to survive the larger army's constant and unrelenting offensives. The insurgent army must put the conventional army on the defense and force a political decision. This is what American Colonists did against the British army.



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The word "insurgent" leads to negative connotations within our western culture, but we need to understand that this is how we attained our independence from Britain. Leaders, such as George Washington and Francis Marion (the swamp fox), fought the British by using the tactics mentioned above. The term "swamp fox" in itself alludes to the fact that he was a rebel leader who used his homegrown knowledge of South Carolina's countryside to continuously ambush and wear down British forces by preventing his forces from being decisively engaged.

Johann Von Ewald describes the American insurgency in *Diary of the American War: A Hessian Journal*. The Hessian officer was trained in the traditional western style of war. The tactics he observed of the colonists were very nonwestern and he could not understand how such a force could beat one of the best armies in the world. After the war ended, he paid visits to the American garrisons that lined the Hudson River Valley. Upon his visit to the garrison at West Point, he witnessed an American force that was shoeless and not well supplied. This was

the force that had defeated the British army. He was amazed and knew that this insurgent army would instruct other people across the globe on how to create similar conditions to gain their own independence.²¹

The American Revolution would become an instructional and intellectual lesson to other western insurgents. The colonists of South America and the bourgeoisie of France would execute their own revolutions.²² Western countries have experienced insurgencies internally and externally; many have served as examples for nonwestern insurgencies. Instructional and intellectual study must consider these examples when studying this aspect of war.

Technology has a devastating effect on war: it may allow one force to subdue another, or it may hinder that same force if it is overly reliant on its benefits. The only thing that technology can assure in war is "mutually assured destruction." The creation of the nuclear weapon after World War II delivered this world into a new era of fighting wars. In some ways, we have entered a second age of military revolution with the presence of nuclear weapons.

The insurgencies that erupted in Malaya, Algeria, Vietnam, and South and Central America after World War II put the ultimate military weapon, which assured immediate victory, on the shelf. Technology can be used as a force multiplier in counterinsurgency, but the conflict must be fought by winning a political advantage over the insurgent. As mentioned before in this article, government forces must have the support of the local populace to succeed. The use of weapons of mass destruction or even basic indirect fire weapons does not guarantee that innocent civilians will not be killed. The military terms this as "collateral damage," but it needs to be seen as creating favorable conditions for the insurgent. Collateral damage results in government forces committing to long-term counterinsurgencies.²³

The center of gravity, or the average person, caught in the middle of an insurgency does not understand that laser-guided bombs are more precise than the firebombing that occurred in Dresden,



"We need to understand the intricate parts of an insurgency and counterinsurgency. Goliath needs to understand what effects technology and outside interference by other nation states have on this type of conflict. Western countries need not go far to study these conflicts because many of these countries have, at one time or another, participated in one. They are not glorious or even highly intensive conflicts, but they have shaped our world today."

Germany, during World War II. The only thing they see is a western power using its technology to kill fellow countrymen, friends, or even family members. This causes people to join an insurgency out of shear revenge for the intolerable acts committed. Be reminded of the Boston massacre and the nationalistic fever that spread due to this type of action. This situation is no different — when a government force committed to fighting an insurgency creates collateral damage, in the eyes of the populace, they have failed to provide security, which creates an even stronger demand for change.

Technology will never be the absolute answer to fighting wars. Soldiers on the ground are the main weapons against an insurgency; if they act as ambassadors to the local populace and understand cultural norms, they will win the center of gravity. The insurgent's main objective is a drawn-out conflict in an attempt to prevent a technically superior government from having any impact on their purpose. The insurgent must hold out and win small victories, which give credit to an insurgency in the eyes of foreign states. In this case, the foreign state will provide logistics support to assist the insurgent fight against a common enemy.

Machiavelli said, "the prince who has more to fear from the people than from the foreigners ought to build fortresses, but... the best possible fortress is — not to be hated by the people, because although you may hold the fortresses, yet they will not save you if the people hate you, for there will never be wanting foreigners to assist a people who have taken up arms against you."24 This quote highlights the importance of outside assistance in an insurgency. Examples of foreign interference include the American War of Independence, the Chinese Communist defeat of the Nationalist Government, the French-Indochina War, the Vietnam War, and the Soviet-Afghan War. The insurgent must have outside help because guaranteed materiel fuels an insurgency. Political will and overall strategy do not guarantee that the conflict will continue.

Insurgencies are complex struggles that require significant amounts of intellectual thought and instructional methods to study and conquer. Comparing the western and nonwestern worlds is an unfair distinction between civilizations. The fact is: historical analysis and proof show that whether the insurgency occurs in the west or the far east, they use similar methods to fight and defeat a stronger enemy.

We need to understand the intricate parts of an insurgency and counterinsurgency. Goliath needs to understand what effects technology and outside interference by other nation states have on this type of conflict. Western countries need not go far to study these conflicts because many of these countries have, at one time or another, participated in one. They are not glorious or even highly intensive conflicts, but they have shaped our world today.

The current insurgent warfare in Iraq and Afghanistan exemplify all characteristics of insurgent intellectual and instructional thought. These two current insurgencies were not specifically mentioned in this article because military history provides many examples of these conflicts. The west's refusal to grasp this type of conflict intellectually or instructionally, prior to the conflict occurring or even during strategic planning, has led to the situation we find ourselves in today.



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²¹Johann von Ewald, *Diary of the American War. A Hessian Journal, Volume I: First and Second Campaigns, 1776 and 1777*, translated and edited by Joseph P. Tustin, Yale University Press, New Haven, CT, Chapter 1: From the departure from Hesse to the expedition in Chesapeake Bay, Parts Six, Seven, and Eight; and Supplement: From the beginning of the year 1782 up to the arrival in Hesse in 1784," pp. 17-45 and 347-361.

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Captain Christopher L. Center is currently an observer controller, Operations Group (Tarantula Team), National Training Center, Fort Irwin, CA. He received a B.A. from Norwich University. His military education includes Armor Captains Career Course, Armor Officer Basic Course, and Infantry Mortar Leader Course. He has served in various command and staff positions, including adjutant, 1st Squadron, 71st Cavalry, 1st Brigade, 10th Mountain Division, Fort Drum, NY; squadron maintenance officer, Headquarters and Headquarters Troop (HHT), 1st Squadron, 11th Armored Cavalry Regiment (ACR), Fort Irwin, CA; XO, D Company, 1/11th ACR, Fort Irwin; tank platoon leader, A Troop, 1/11th ACR, Fort Irwin; and mortar platoon leader, HHT, 1/11th ACR, Fort Irwin.

Recovery Operations from Page 27

in their vehicles or tankers should bring extra shovels since they have room to carry more equipment.

Scanning at night with defective thermal receiving units (TRU):

Observation: When a tank commander's TRU overheated, his wingman expanded his sector of fire while the tank commander's TRU cooled down.

Discussion: Loaders and tank commanders used their NVGs to provide additional observation. As expected, drivers also continued to use their enhanced night-vision sights to scan the tank's frontage. After continuous night operations, TRUs would eventually overheat and require a minimum of 5 minutes "cool down" time to once again receive a clear image.

Recommendation: Thermal receiving units should be inspected and tested prior to any type of night operation. Critical items, such as TRUs, should be readily available rather than waiting for a tank to be deadlined before the part is ordered. The supply system is not being circumvented to expedite delivery times; in-

stead, having readily available critical fire system components, prevents cannibalization, and ultimately saves lives.



Notes

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¹⁷Bragg, p. 129.

18"Leave No Comrades Behind."

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Captain Romeo Paolo Cubas is currently serving as logistics officer, 2d Tank Battalion, 2d Marine Division, II Marine Expeditionary Force, Camp Lejeune, NC. He received a B.S. from the United States Naval Academy, Annapolis, MD. His military education includes the Maneuver Captains Career Course, Armor Officer Basic Course, Ground Supply Officers Course, and the Marine Air-Ground Task Force Fire Support Course. He has served in various command and staff positions, to include headquarters company commander, logistics officer, and supply officer, Weapons Training Battalion, Marine Corps Base Camp Lejeune; platoon commander, 3d Platoon, A Company, 8th Tank Battalion, Task Force Tarawa, Iraq; aide de camp to the assistant division commander, 2d Marine Division, II MEF, Camp Lejeune; executive officer, D Company, 2d Tank Battalion, 2d Marine Division, II MEF, Camp Lejeune; and platoon commander, 3d Platoon, B Company, 2d Tank Battalion, 2d Marine Division, II MEF, Camp Lejeune.

Armor in Urban Terrain: The Critical Enabler

by Major General Peter W. Chiarelli, Major Patrick R. Michaelis, and Major Geoffrey A. Norman

(Reprinted from March-April 2005)

"...tanks and mechanized Infantry face problems in confines of urban areas that place them at a severe disadvantage when operating alone. Only together can these forces accomplish their mission with minimal casualties..."

Task Force (TF) Baghdad's adaptation to fighting in the urban canyons of Al Tharwa (Sadr City) and the cemeteries of An Najaf has been both remarkable and significant. It has proven the reality of urban combat — we can win and we can win decisively.

The new fight brings to light a cautionary message to the force — be wary of eliminating or reducing the option of heavy armor; it has proven decisive and has been the critical enabler that allowed TF Baghdad to win every fight, everyday. The enemy we fight in streets and crypts is not connected by a vast suite of electronics packages; instead, they use proven kinetic techniques, such as the rocket-propelled grenade (RPG), the command-detonated improvised

explosive device (IED), the mortar, and the AK47 in an asymmetric fashion, using the concrete valleys of the cityscape to their advantage.

This evolution in warfare is not a side note in history; it is a foreshadowing of operations to come. The mass migration of humanity to cities and the inability of third-world nations to keep abreast of basic city services relative to growth breeds discontent. It is a harvesting ground for fundamentalist ideologues.

This article should serve as a note of concern to the force. Eliminating or reducing heavy armor systems from inventory will remove valuable assets that prove decisive when moving from a maneuver war to a street war.

Al Tharwa: The Sadr City Box

During the April-June and August-October 2004 Shia uprising of Muqtada Al Sadr's militia in Al Tharwa (Sadr





"The commander's independent sight systems offset the protective measure of vehicles moving through the city with hatches fully closed. The second sight afforded another field of view, allowing the gunner to primarily observe enemy alleys. Instead of the commander being relegated to what the gunner was observing, or struggling to gain situational awareness through vision blocks, he became an integral part of the vehicle and patrol team by providing coverage of secondary enemy avenues of approach, oriented forward of the vehicle or toward the opposite flank vehicle's immediate rooftops, providing highangle coverage."

City) and An Najaf, it became clear that the ultimate task organization of choice depended on the enemy threat. Patterns of employment of the combined arms team that both solidified and challenged existing doctrine were also made clear.

The grid-like pattern of Al Tharwa presented an interesting tactical challenge to the soldiers and leaders of 2d Battalion, 5th (2-5) Cavalry Regiment (TF Lancer), 1st Brigade Combat Team, 1st Cavalry Division, Fort Hood, Texas. As Muqtada's militia began actively attacking coalition forces, TF Lancer worked rapidly to defeat the insurgent uprising while protecting its soldiers.

As its primary avenue of approach, the enemy chose side street alleys, which Bradley Fighting Vehicles (BFVs) and M1A2 sys-

Alley

Vehicle Distance: METT-TC (Alley to Alley)

Street

Figure 1

tem enhancement package (SEP) tanks could not negotiate due to sheer width and obstacles such as disabled civilian vehicles and air-conditioning units. As these vehicles progressed throughout the city, the militia would attack their flanks, seek-

ing to disable them with IEDs, RPGs, and AK47s.

U.S. Army Field Manual (FM) 3-06.11, *Combined Arms Operations In Urban Terrain*, Appendix C, states: "If isolated or unsupported by infantry, armored vehicles are vulnerable to enemy hunter/killer teams firing light and medium antiarmor weapons. Because of the abundance of cover and concealment in urban terrain, armored vehicle gunners may not be able to easily identify enemy targets unless the commander exposes himself to fire by opening his hatch or by infantrymen directing the gunner to the target."²

Initially, following standard doctrine, the task force moved throughout the city in column or staggered-column formations, assigning typical 360-degree sectors of fire to cover all enemy avenues of approach. However, with the vertical firing platforms of rooftops and the coordinated attacks on both flanks through use of alleys, the task force had to rapidly adapt to the emerging enemy threat.

The task force quickly learned to move throughout the city in protected mode (buttoned up) and maximize the capability of the dual sights provided by the M1A2SEP, equipped with the gunner's primary sight and the commander's independent thermal viewer (CITV), and the M2/3A3 improved Bradley acquisition subsystem (IBAS) with the commander's independent viewer (CIV). As shown in Figure 1, their refined movement-to-contact formation resulted in a rolling battleship of armored vehicles in a "box" formation, moving in a deliberate, methodical progression through the main streets of Al Tharwa, maximizing the protection of the armor packages. Success relied on the skill of the driver, the armor package of the M1A2 and the latest generation M2/3A3, and the dual-sight capability afforded by the vehicle upgrades.

Moving buttoned up in a pure mechanized/armor formation, the combat patrol would reposition at the release point into a rectangular formation of at least six armored vehicles. Moving vehicles parallel to each other created an artificial set of interior lines to protect the exposed flank of the opposite vehicle and allow a full three-dimensional, 360-degree coverage of the constantly shifting battlespace.

The commander's independent sight systems offset the protective measure of vehicles moving through the city with hatches fully closed. The second sight afforded another field of view, al-

lowing the gunner to primarily observe enemy alleys. Instead of the commander being relegated to what the gunner was observing, or struggling to gain situational awareness through vision blocks, he became an integral part of the vehicle and patrol team by providing coverage of secondary enemy avenues of approach, oriented forward of the vehicle or toward the opposite flank vehicle's immediate rooftops, providing high-angle coverage. See Figure 2.

Moving block by block, the patrol would travel at extremely slow speeds to allow for acquisition of targets in the alleyways and proper handoff to subsequent vehicle gunners. Although not quite a 'steady platform' for the Bradley, the standard engagement was less than 200 meters — the proximity to targets allowed for successful coax engagements. The CIV and CITV were used to scan opposite rooftops, or forward and to the flanks of the gunner's primary sector to allow immediate target handoff.

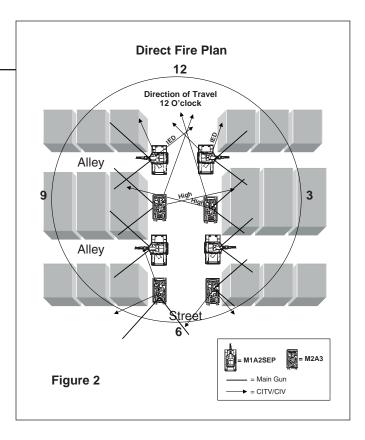
Drivers keyed off the front left vehicle for rate of movement and worked as integral members of the team to identify targets, maintain proper dispersion, and move to predetermined locations. At short halts, drivers would establish a point of domination by immediately moving to overwatch the closest alley, which was the most likely enemy avenue of approach.

"Armored forces can deliver devastating fires, are fully protected against antipersonnel mines, fragments, and small arms, and have excellent mobility along unblocked routes." 4

The success of the box in attriting enemy forces in Al Tharwa was causal to the armor packages of the M1-series tank and latest generation Bradley. This capability allowed absorption of the enemy's primary weapons system (IED), and protected infantry dismounts that spent many hours traveling in the backs of Bradleys, enslaved to the squad leader display to maintain situational awareness. This same technique, used with lighter skinned vehicles, would not have been effective in achieving the task force's objectives during movement to contact due to asymmetric advantages the enemy retains by fighting on their turf.

As always, the enemy has a vote and began adapting to the successful employment of the Sadr City box. They began to move increasingly toward using IEDs to disable vehicles and subsequently cause a catastrophic kill by using RPGs and mortars. This prompted the task force to adopt a heavier stance in the lead elements, stressing the use of the M1A2SEP to lead each combat patrol. The tank, with its armor package, could take the brunt of the effect of IEDs laid throughout the route. In some cases, crews could identify detonation wires running from hidden IEDs through global positioning systems (GPS) and CITV. Once identified, the crews could 'disable' the IED by destroying the detonation wires with direct fire or by directly firing at the IED's point of placement. Stripping all unnecessary equipment from the bustle rack and moving buttoned up allowed follow-on Bradleys to service targets that succeeded in climbing on top of tanks or getting within their deadspace.

Because of the close range of engagements in the city, the primary weapons systems on both the tank and Bradley became the coax, normally zeroed at about 200 meters. Recon by fire of suspected IED locations was authorized, but leaders always remained cognizant of collateral damage through positive identification of targets. Because of the desire to minimize collateral damage, a check in the system for using 25mm and 120mm was developed by the task force, which forced company commanders to



clear fires for 25mm and battalion commanders to clear fires for 120mm.

"Armored vehicles can move mounted infantrymen rapidly to points where, together, they can dominate and isolate the cordoned area." 5

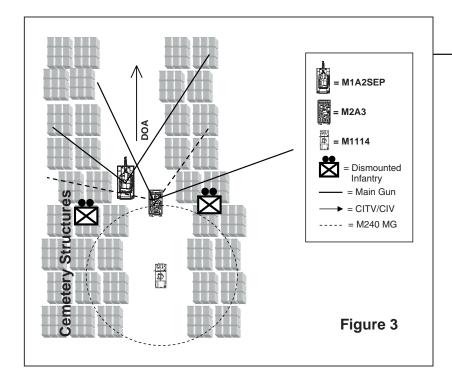
In war, bad things happen. The enemy objective in both Al Tharwa and An Najaf was to disable a vehicle and exploit it for an information operations success. Moving through the streets of Baghdad, it was inevitable that a vehicle would become disabled, leading to specific battle drills within the task force. The remaining vehicles in the box would move to provide a wall of steel around the disabled vehicle; infantrymen would dismount from the backs of the M2s to cover deadspace, either by tying into the adjacent vehicles or occupying by force a strongpoint position. M88s, escorted by a quick reaction force (QRF) patrol, would move rapidly to the disabled vehicle and begin extraction. The screen established by the initial patrol would protect the M88 crew as they extracted the vehicle.

"Decentralized armor support greatly increases a small infantry unit's combat power. However, dispersed vehicles cannot be easily and quickly concentrated." 6

An Najaf: The Combined Arms Patrol

In An Najaf, the terrain dictated different tactics while fighting the same enemy. What remained constant was the overwhelming domination of the armor/mechanized combination as *the* enabler to support the decisiveness of the mission.

In August, elements from the 2d Brigade Combat Team (Blackjack) and the 3d Brigade Combat Team (Greywolf), 1st Cavalry Division, rapidly moved south of Baghdad to An Najaf and



fought the Muqtada's militia on different terrain. Task Force 1st Battalion, 5th (1-5) Cavalry Regiment, 2d Brigade Combat Team, 1st Cavalry Division, faced unique challenges as narrow parallel trails through the cemetery and old city of An Najaf forced units to attack with multiple, section-sized elements along adjacent trails, which were often separated from mutual support.

A combined arms section became the preferred maneuver element. The section normally included a tank and Bradley attacking abreast, trailed by an M1114. The tank often advanced slightly ahead of the Bradley to absorb the initial energy of enemy ambushes. These ambushes and enemy engagements ranged from

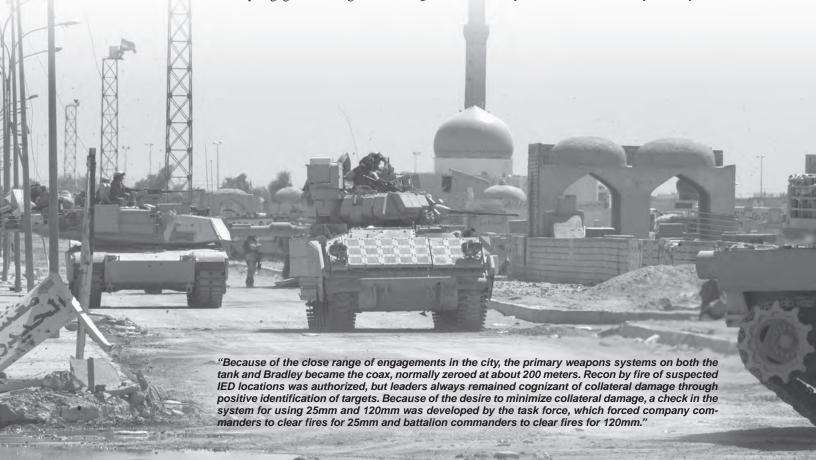
IEDs, mines, and RPGs, to mortars and snipers. The Bradleys would protect the flank and elevated shots against the tank, and the M1114 provided local and rear security for lead vehicles using its M240 machine gun. Dismounted soldiers from the Bradley and M1114 would disperse to the flanks of the section to eliminate enemy attempting to get into blind spots of the armored systems. Due to the restrictiveness of the cemetery's tombstones, mausoleums, and support buildings, maintaining visual contact with friendly forces was extremely difficult, requiring crews to maintain voice contact to keep vehicles and dismounted movement synchronized. Situational awareness was also critical in the clearance of fires, as both 120mm mortar and 155mm artillery were employed. See Figure 3.

At times, narrow trails forced the tank to move to a flank, based on traversing limitations, and allow the Bradley to engage and service targets. To mitigate risk to the tank, the infantry would move to the tank's flank to prevent the enemy from mounting from the rear. If infantry were committed or unavailable, a sniper was emplaced to over-

watch the tank, providing the same protection and early warning. The final option was to use the M2A3's CIV to cover the tank's position.

Like units in Al Tharwa, Task Force 1-5 Cavalry generally fought buttoned up. The propensity for Muqtada's militia to engage through sniper fire or by dropping hand grenades on crews from above, forced this tactic. This tactic also allowed overwatch vehicles to engage targets that moved within the vehicle's dead-space to its immediate front.

Without the armor protection afforded by the tank and latest generation Bradley, Task Force 1-5 Cavalry's ability to achieve



decisive success in An Najaf would have been characterized by higher casualties and a longer campaign. Used in conjunction with a combined arms dismounted infantry team, the tank and Bradley, having devastating effects on Muqtada militia largely attributed to the protection afforded by their armor packages, forced the enemy's hand and led to capitulation by Muqtada al Sadr.

"Due to the length of the tank main gun, the turret will not rotate if a solid object is encountered."

Southern An Najaf: The Lane Attack

Task Force 2d Battalion, 7th (2-7) Cavalry Regiment, attached to the 39th Brigade Combat Team, 1st Cavalry Division, was assigned to the southern sector of An Najaf, which was characterized by a narrow, residential grid-like road network that, unlike Task Force 2-5 Cavalry in Al Tharwa, prevented full lateral traversing of the M1A2SEP's main gun.

C Company, Task Force 3d Battalion, 8th (3-8) Cavalry Regiment, 3d Brigade Combat Team, 1st Cavalry Division, attached to Task Force 2-7 Cavalry, developed the 'lane attack' approach to application of armor in urban environments that characterized the unit's area of operations. To maximize the capabilities of the armor packages and the independent sights, the unit created section level lanes or directions of attack. Vehicles would move to "points of domination" (the intersections) to maximize the ability to traverse the turret and use the CITV. The first tank would orient low, forward, and to an unprotected flank. The second tank would be two blocks back, clearing forward and high over the lead tank. The CITV would cover an unprotected flank and rear. One block over, on a parallel street, would be a second section-level direction of attack that would be occupied by a wing tank section. This lateral dispersion of forces in extremely canalized terrain created a set of interior lines that afforded lateral security. Up to two platoons would be put on line, along four lanes, with infantry (in M1114s) in a reserve role behind the center echelon tank sections. See Figure 4.

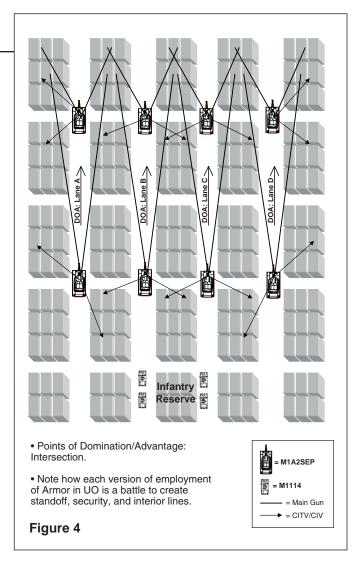
"Because of the complex terrain, defending forces can rapidly occupy and defend from a position of strength."8

Observation and Examination

Whether fighting enemy forces on home turf, on a commercial or residential grid pattern, such as in Al Tharwa or southern An Najaf, or on irregular patterns of the cemetery or old city of northern An Najaf, leaders can benefit by observing and examining these three separate units and their invaluable successes:

Adaptable leadership. Throughout each experience, our leaders consistently and rapidly adapted to enemy tactics and maintained the initiative. Although there are similar doctrinal threads in the employment of the combined arms team in each instance, it is the development and implementation of an emerging set of tactics and techniques in direct relation to enemy employment that led to its defeat.

Confidence in equipment. Current armor packages, the M1A2 SEP and the latest generation M2/3A3 (with enablers) can take the brunt of enemy weapons systems. They can survive first contact, which is critical to tactical success. However, there is a small risk associated with employment of current armor pack-



ages — enemy forces will exploit what they perceive as weaknesses. Units must take this into consideration when occupying or creating a positional advantage.

Independent sights. We no longer have the standoff envisioned in fighting a war on the plains of Europe. Instead, we fight a dirty, close fight against an asymmetric threat that uses crude weapons. It drives units to move through the urban landscape buttoned up. The CITV and the CIV give back to the vehicle unit commanders capabilities lost by operating in this posture. Units must train to conduct entire operations with hatches closed.

Points of domination. Vehicles, sections, and units move to and occupy positional points of domination (or advantage), normally an intersection, where they can best take advantage of the capabilities afforded by the M1A2 and latest generation M2/3A3 armor package (with enablers), dual sights, and weapons systems.

Create standoff. Create reaction time to allow servicing of targets. In some cases, that 'standoff' is a function of location (see points of domination). In other cases, it is a function of speed. Slowing movement allows time for acquisition, drawing out enemy forces, and servicing targets in the close confines of the urban landscape.

Create interior lines. Offensive and defensive box formations create conditions to maximize the capability of the dual sights by eliminating the need to secure a flank, which is protected by

"Due to the restrictiveness of the cemetery's tombstones, mausoleums, and support buildings, maintaining visual contact with friendly forces was extremely difficult, requiring crews to maintain voice contact to keep vehicles and dismounted movement synchronized. Situational awareness was also critical in the clearance of fires, as both 120mm mortar and 155mm artillery were employed."



the vehicle to the unobserved flank. This further offsets the enemy's propensity to execute simultaneous attacks from multiple surface and elevated avenues of approach.

We must continue the debate about the relevancy of armor. It would be wise to listen to some of our own doctrine when examining future combat systems. The trend is clear; the hardest place to fight and win — in the city — will dominate future U.S. Army operations. We cannot rely solely on a suite of electronics packages to offset the brunt of an enemy attack, which will be characterized by crude, but effective, weapons and an inherent terrain advantage due to the complexity of the city fight. The solution is good planning, the resolve of leadership, and the confidence that the equipment they fight in will protect our soldiers. The critical enabler is lethal and survivable M1 and M2/3 armored packages, coupled with increased situational awareness afforded by an independent commander's sight. These systems must remain in our inventory for immediate employment by deployed forces. Our tanks and Bradleys must not diminish in numbers, but become more capable through continuous upgrades that protect our soldiers and allow them to dominate the unseen, often unnoticed, enemy force that lurks in the shadows of alleys.



Notes

¹U.S. Army Field Manual (FM) 3-06.11, Combined Arms Operations in Urban Terrain, U.S. Government Printing Office, Washington, D.C., 28 February 2002, Appendix C.

²Ibid

³The box formation is not new to the first team. In 1993, then Major General Wesley Clark introduced and trained the box formation as the division commander. He contended it offered the same advantages in the open terrain of the National Training Center in fighting an enemy that were used the wadis and IV lines to engage attacking forces from a position of advantage.

⁴FM 3-06.11, Appendix C.

⁵Ibid.

⁶Ibid.
⁷Ibid.

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⁸U.S. Army Field Manual (FM) 3-06, *Urban Operations*, U.S. Government Printing Office, Washington, D.C., 1 June 2003, p. 6-5.

MG Peter W. Chiarelli is currently serving as commanding general, 1st Cavalry Division and Task Force Baghdad, Camp Al Tahreer, Iraq. He received a B.S. from Seattle University, an M.P.A. from the University of Washington, and an M.A. from the United States Naval War College. His military education includes Armor Officer Basic Course, Infantry Officer Advanced Course, the United States Naval Command and Staff College, and National War College. He has served in various command and staff positions, to include commander, 2d Battalion, 1st Infantry, 9th Infantry Division, Fort Lewis, WA; G3 (Operations), 1st Cavalry Division, Fort Hood, TX; deputy G3 (Operations) and director for Plans, Training and Mobilization, III Corps, Fort Hood, TX; commander, 3d Brigade, 2d Infantry Division, Fort Lewis; executive officer to the Supreme Allied Commander Europe, Supreme Headquarters Allied Powers Europe, Belgium; assistant division commander (support), 1st Cavalry Division, Fort Hood; and director, Operations, Readiness and Mobilization, Office of the Deputy Chief of Staff, G3, United States Army, Washington, DC.

MAJ Patrick Michaelis is currently serving as battle command officer, 1st Cavalry Division and Task Force Baghdad, Camp Al Tahreer, Iraq. He received a B.A. from Texas A&M University and an M.P.A. from Harvard University. His military education includes Armor Officer Basic Course, Armor Officer Advanced Course, Cavalry Leaders Course, Scout Platoon Leaders Course, Combined Arms and Services Staff School, Airborne School, Air Assault School, and Ranger School. He has served in various command and staff positions, to include assistant professor, U.S. Military Academy, West Point, NY; S4, A Troop commander, and Headquarters and Headquarters Troop commander, 1st Battalion, 7th Cavalry Regiment, 1st Cavalry Division, Fort Hood, TX; assistant S3, 1st Squadron, 4th (1-4) Cavalry, 1st Infantry Division, Schweinfurt, Germany; tank platoon leader, scout platoon leader, and troop XO, 1-4 Cavalry, Schweinfurt and Bosnia.

MAJ Geoffrey Norman is currently serving as course manager, Armor Captains Career Course, 3d Squadron, 16th Cavalry Regiment, Fort Knox, KY, and recently returned from service with 2d Brigade Combat Team, 1st Cavalry Division, Baghdad, Iraq. He received a B.S. from the United States Military Academy. His military education includes Combined Arms and Services Staff School, Armor Officer Advanced Course, Armor Officer Basic Course, Cavalry Leaders Course, Airborne School, and Air Assault School. He has served in various command and staff positions, to include small group instructor, Armor Captains Career Course, Fort Knox; observer controller, Cobra Team, National Training Center, Fort Irwin, CA; troop commander, A Troop, 4th Squadron, 7th Cavalry, Camp Garry Owen, Korea; and tank platoon leader and battalion S4, 1st Battalion, 12th Cavalry Regiment, Fort Hood, Texas.

Platoons of Action: An Armor Task Force's Response to Full-Spectrum Operations in Iraq

by John P.J. DeRosa

(Reprinted from November-December 2005)

What died on the battlefields of Iraq was the vision held by many of a homogenized army — one in which units would largely resemble one another. Instead, the Army of the future will require a large kit bag of capabilities that it can deploy and fit together, sometimes in the middle of battle, to meet the many exigencies of this new era in warfare.¹

For decades, warfare experts have predicted that the nature of warfare will change in the 21st century. The nature of warfare has already changed dramatically. As the U.S. Army continues to move toward changes that will conceive, shape, test, and field an army prepared to meet the challenges of full-spectrum operations, Chief of Staff, Army (CSA) General Schoomaker asked, "I want to know if he [division commander] can turn his three brigades into five maneuver brigades, and if I provide the right equipment, could they be one and a half more lethal than before..." Specifically, CSA Schoomaker asked for the best wartested concepts of deploying and fighting, adding that proposals must be lethal, balanced, and modular. As the armor force is steeped in innovation and transformation, a parallel debate in *ARMOR* raised the question, "Why not start with a combined-arms team at the platoon level and only scramble when nec-

essary, rather than continually re-task organize? What follows are four different answers to the challenges of full-spectrum operations centered on platoon level "units of action."

Intelligence Preparation of the Battlefield

On receipt of the mission, the S2 began a detailed terrain analysis of our proposed area of operation. Initial analysis showed a diverse mixture of terrain that would have varying impacts on maneuver operations. Task Force (TF) 1st Battalion, 77th (1-77) Armor, "Steel Tigers," was assigned a total area of over 1,000 square kilometers, and it was immediately apparent that company sectors would each require their

own unique approach to task organization based on terrain. From the open desert area south of Highway 1 to the jungle-like vegetation of Al Zourr, and the confined streets of Balad, each company would have unique terrain challenges.

The one terrain feature that would have the most impact, regardless of company sector, was the canal system. The Balad area is very agrarian and an endless system of canals criss-cross the entire region. These canals vary widely in depth and width but are not fordable and can only be crossed at existing bridge sites. The small canal roads present an additional challenge to the maneuverability of armored vehicles. In most cases, they cannot support the weight or width of the M1 Abrams. The M2 is also constrained by these canal roads, although it does enjoy slightly more freedom of movement than the Abrams. Based on this analysis, the commander decided to weight his tracked assets onto the main supply routes/alternate supply routes and the open terrain south of Highway 1.

Operationally, Iraq is a complex environment of low-intensity conflict and political and economic reconstruction. Anti-Iraqi forces (AIF) tactics are low-level and fairly unsophisticated.⁴ Their actions are usually limited to a single strike followed by an immediate withdrawal to avoid decisive engagements. The fights in Iraq are movements to contact against a relatively disorganized enemy force. Small ambushes against patrols and convoys are the preferred enemy tactic. Attacks occur in restrictive urban terrain in close proximity to businesses and homes; ambushes are initiated from orchards or dense agricultural terrain; improvised explosive devices (IED) are triggered along expanses of highways; and mortar or rocket attacks are constant.

The current operating environment (COE) requires tactical agility with emphasis on small-scale operations of infantry squads or tank sections actioning on contact. The porous nature of the COE allows AIF to become expert "exfiltrators," avoiding death or capture. Therefore, instant transition to pursuit is a necessity. More often than not, the pursuit is preceded by a transition from mounted to dismounted elements.



TF 1-77 Steel Tigers Troop to Task (U.S.)

As of 24 Aug 04

Requirement quads/Platoons)*	Frequency (Daily/Weekly)	
	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Priority
4 Platoons	Daily	High
2 Platoons	Daily	High
2 Platoons	Daily	High
3 Platoons	Daily	High
1 Platoon	1-2 times daily	High
1 Platoon	Daily	High
1 Platoon	Daily	High
1 Platoon	As necessary	Medium
1 Platoon	Daily	High
3 Platoons	2-3 times weekly	High
1 Platoon	1-2 times weekly	High
1 Platoon	3-4 times weekly	High
1 Squad	2-3 times weekly	High
1 Platoon	1 weekly	High
1 Fire Team	Daily	Medium
1 Squad	Daily	High
1 Squad	Daily	High
1 Squad	As necessary	Medium
1 Squad	Daily	High
1 Platoon	Daily	High
1 Platoon	Daily	High
2 Platoons	Daily	High
	1 Platoon	1 Platoon Daily 2 Platoons Daily

Figure 1

During operations in Iraq, it is also critical that all of a task force's elements perform reconnaissance. Operation Iraqi Freedom has accelerated the transition of the concept of the battlespace in replacing the concept of the battlefield. The COE produces critical requirements that demand commanders know their battlespace. The concept of battlespace requires commanders to navigate under limited visibility conditions, move rapidly over great distances, synchronize their movement, and communicate both vertically and horizontally. In this brief review of required capabilities, the experiences in Iraq demand an internal capability to perform dismounted operations and extensive reconnaissance.

Mission

The Steel Tigers' mission presented a nontraditional role for an armor battalion. Route clearance, counter-mortar/IED patrols, reconnaissance and surveillance, traffic control points, and raids constituted the bulk of operations. Everyday missions remained small in scale, notably by paired-down platoons. The Steel Tigers' mission set included: route clearance; counter-mortar patrols; observation posts; traffic control points; quick reaction force (QRF) for Logistics Support Area (LSA) Anaconda; civil affairs, psychological operations (PSYOPS) and human intelligence (HUMINT) escorts; TF indirect fires; explosive ordnance disposal (EOD) escort; forward operating base (FOB) protection; named areas of interest (NAI) overwatch; counter-IED patrols; react to indirect fire; convoy security; QRF for FOB Paliwoda; spheres of influence engagements; TF tactical command post (TAC); detainee transfers; and FOB mayor requirements.

As shown in Figure 1, TF 1-77 Armor required 23 platoons to meet mission requirements. However, the current TF task organization only afforded 10 platoons, as shown in Figure 2.

The Steel Tigers' combat power was a mixture of armor (M1A1), motorized tank platoons (M1114), mechanized infantry (M2A2), light infantry (M1114), engineers (M113), and field artillery (M109A6). Specific mission requirements also required the additional task organization of civil affairs, tactical PSYOPs teams (TPT), tactical HUMINT teams (THT), and aviation assets (AH-64/OH-58). In sum, the task organization of TF 1-77 Armor created severe tactical problems, which were outside the Legacy Force structure.

Task Organization

FOB PALIWODA

B/1-77 AR (REGULATOR)

C/1-77 AR (PAIN)

3/C/1-77 AR (BLUE)

2/C/1-26 IN (RED) HQ/C/1-77 (BLACK)

LSA ANACONDA

(4 M1114) (4 M2A2)

(2 M1A1)

Figure 2

Te	a	ın	n	Pain	—			
С	C	c	n	npan	ıy, 1	-77	7 Ar	mor
							. •	-

At task organization, Team Pain deployed with two motorized tank platoons of four M1114s each and one mechanized platoon of four M2A2s. Following initial deployment, the division deployed two additional companies of M1A1s of which Team Pain received two platoons. One of Team Pain's tank platoons would subsequently be task organized elsewhere in support of the brigade combat team (BCT). Therefore, Team Pain's final task organization was a mechanized infantry platoon of four M2A2s and two M1114s (Red), a tank platoon of two M1A1s and four M1114s (Blue), and a headquarters platoon of two M1114s, two up-armored M998s, and two M113s (Black). To increase the manning capa-

bilities of Blue, Pain 6 attached an infantry fire team from Red.

Some examples of common missions and how Team Pain's platoon of action (POA) was organized are shown in Figure 3.

Team Pain's M1A1s initially were used for armored protection during their Main Supply Route (MSR) Tampa clearing mission. The M1A1's superior optics and armament made it ideal for scouring the road for suspicious activity or objects. Additionally, the added armor protection was a valued deterrent against the enemy; not too many AIF are willing to taunt a 120-mm gun. The deterrent value of the M1A1 also allowed a patrol to slow its movement through dense IED locations, thus clearing the routes properly while minimizing risk. Team Pain's M1s were also very effective at traffic control points to demonstrate an overwhelming presence. The thermal sights were great for standoff against AIF, who often used the wood line to conduct ambushes.

D/ I // / III (IILGOLATOII)	
2/C/9 EN (RED)	(3 M113, 1 M1114)
2/C/1-18 IN (WHITE)	(4 M1114)
3/D/2-108 IN (BLUE)	(4 M1114)
HQ/B/1-77 (BLACK)	(2 M1A1)
C/1-26 IN (ROCK)	
1/C/1-26 IN (RED)	(4 M2A2)
3/C/1-26 IN (BLUE)	,
1/C/1-77 AR (GREEN)	,
	,
HQ 1-77 AR (TIGER)	(2 M1A1)
MTD (4 77 AD	(4.14.005/00)
MTR/1-77 AR (THUNDER	i) (4 M1025/26)
1/B/1-7 FA (BULL)	(3 M109A6)
, ,	(
S3 PSD	(4 M1114)
CDR PSD	(4 M1114)
TAC	

HHC 1-77 AR (HELLCAT) SCTS/1-77 AR (SABER) (8 M1025/26) 1/B/2-108 (HAMMER) (4 M1114)

FIELD TRAINS

TOC

Distinct tactical problems arose with Team Pain's tank platoon. Primarily, tank platoons, given their modified table of organization and equipment (MTOE), do not have the equipment to perform dismounted missions, even with M1114s. The MTOE authorizes a tank platoon eight rifles, no M203s, no manpack radios, and no crew-served weapons. Through the initiative of several company armorers and executive officers, the task force converted several of its M240s into improvised M240Bs, and leader vehicles were stripped of their second radios that were

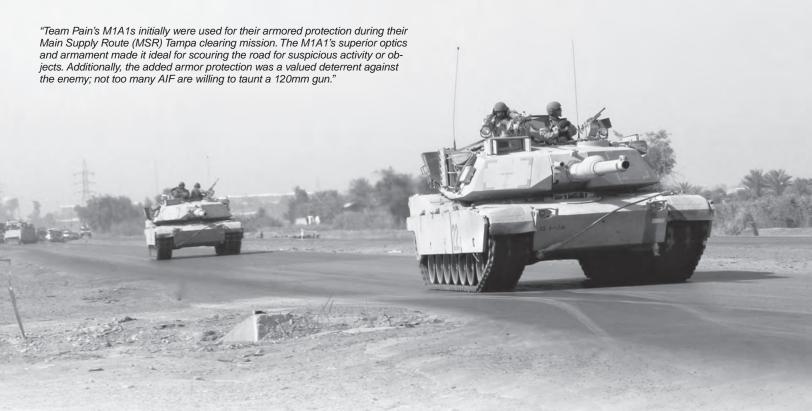
To satisfy requirements of dismounted operations, Team Pain placed challenges on its mounted elements. Dismounting M240s reduced the mounted elements' overwatch firepower. Stripping radios reduced leaders' dual net capability. Moreover, Pain 6 realized that initially his tank platoon leaders were at a disadvantage because they now had to maneuver both a mount-

used as manpacks for dismounted operations.

ed and dismounted element. However, the POA had several benefits: each platoon could conduct multiple missions, which gave the company greater flexibility; platoons were not forced to concentrate on one specific operation based on weapons platforms; platoons could maneuver on a variety of terrain; platoon leaders could task organize at the platoon level for varied mission requirements; the POA



"The Steel Tigers' mission presented a nontraditional role for an armor battalion. Route clearance, counter-mortar/ IED patrols, reconnaissance and surveillance, traffic control points, and raids constitute the bulk of operations. Everyday missions remain small in scale; notably by paired-down platoons."



ensured platoon integrity throughout the deployment; and the commander was not required to rearrange the company for every operation.

Team Rock — C Company, 1st Battalion, 26th (1-26) Infantry

One of the more innovative solutions to the challenges of task organization belonged to Team Rock. As the deployment was viewed as a marathon and not a sprint, Rock 6 did not believe that the standard 16-man tank platoon could withstand exhaustive patrol cycles, support FOB force protection requirements, or conduct independent raids.⁵

Therefore, to create parity within the task organization, Rock 6 detached one M2A2 and one fire team from each of his organic M2A2 platoons and attached them to his motorized armor platoon (M1114). In turn, he detached an M1114 and its assigned tank crew to each of his organic M2A2 platoons. This increased the personnel strength of his motorized armor platoon

Mission	POA Organization
Route Clearance	4 x M1114 (BLUE or BLACK)
	2 x M2A2 and 2 x M1114 (RED)
	2 x M1A1 and 2 x M1114 (BLUE)
Reconnaissance and Surveillance (Terrain Dependant)	Open Desert or Agricultural Fields 4 x M2A2 (RED); 2 x M2A2 and 2 x M1114 (RED); or 2 x M1A1 and 2 x M1114 (BLUE)
	MSR and ASRs 2 x M1A1 and 2 x M1114 2 x M2A2 and 2 x M1114
	Urban Terrain 4 x M1114 (BLUE) 2 x M1114 (RED) and 2 x M1114 (BLACK)
Convoy Escort	4 x M1114 (BLUE)
	2 x M1114 (RED) and 2 x M1114 (BLACK)
Cordon and Knock	4 x M1114 (BLUE)
(One to Two Houses)	2 x M2A2 and 2 x M1114 (RED)
	2 x M1A1 and 2 x M1114 (BLUE)

Figure 3. TEAM PAIN: Missions vs. POA Organization

from 16 personnel to 30. Each platoon was then able to conduct balanced patrol cycles, cycle through FOB force protection, and conduct independent raids.

Team Rock took this integration a step further by implementing an M2A2 Bradley certification program for his 19-series soldiers. Through an intensive train-up, Team Rock executed a modified Bradley Table VIII to certify tankers as M2A2 drivers, gunners, and Bradley commanders. The motorized armor platoon leader, equipped with cross-trained soldiers, could then accommodate the company's mission set.

A highlight for armor leaders is the new skill set developed by the armor platoon leader. Trained at Fort Knox, Kentucky, to command a tank platoon, these lieutenants are now proficient at integrating mounted and dismounted tactics in reconnaissance, raids, and convoy security. The POA platoon leader has a deeper appreciation for full-spectrum operations. He was also given

the challenge of leading twice the number of soldiers than a tank platoon.

The mixture of vehicles in the Team Rock POA highlights the advantages of each weapons system. Initially, Team Rock conducted route clearance of Highway 1 with a full M2A2 Bradley platoon. The intensive maintenance requirements of such employment were a serious maintenance and service burden on the M2A2s. Deploying a platoon of two M2A2s and two M1114s on route clearance reduced the overall company M2A2 mileage, minimizing the wear and tear on a high-tempo weapons system.

The M2A2 is best suited for operations in Iraq, offering firepower, maneuverability/agility, crew protection, and a dismounted infantry-carrying capacity. However, its shortcoming for not accommodating for the high mileage in the route clearance of MSR Tampa (Highway 1) was complemented by a section of M1114s. The M1114 enabled the POA platoon leader to maneuver in restrictive urban terrain and continue to provide crew protection. Moreover, Team Rock integrated the company's M113s, giving the POA platoon leader the freedom of maneuver that lighter personnel carriers offer for bridge crossings. The M113 offers the maneuverability/agility

and troop-carrying capacity of the M2A2 with a decreased height and width profile required in urban operations.

Team Regulator — B Company, 1-77 Armor

Team Regulator conducted a relief in place with a fully manned M2A2 Bradley company from 3d BCT, 4th Infantry Division. The terrain of Team Regulator's new sector demanded the extensive use of dismounts (to which its predecessor had adequate access) to clear orchards, buildings, and to man observation posts. Therefore, the dismount requirement dictated the vehicle set of Team Regulator's platoons.

For Team Regulator, the POA changes occurred during task organization. Team Regulator lost her three organic M1A1 tank platoons to support the BCT.6 Team Regulator would receive an engineer platoon of three M113s, one M998, and one M1114 (Red), a motorized infantry platoon of five M1114s (White), and a light infantry anti-tank platoon of four M1114s (Blue). The headquarters platoon of two M1A1s, two M998s, and two M113s would remain and be supplemented with two M1114s.

One of Team Regulator's enduring challenges was a sector of distinctly varied terrain — the urban streets of Balad. This Shi'a enclave of 75,000 is set along the Tigris River. Manmade structures of walls, canals, and dikes, and thick vegetation of orchards, foliage, and agriculture fields limited their maneuver space. Operations in urban Balad were decentralized and avenues of approach limited the use of Team Regulator's M1A1s. Compounding maneuver limitations was the transition from the urban alleys and streets of Balad, to the jungle-like terrain paralleling the Tigris, to the expanse of arid land alongside MSR Tampa.

To increase White's dismounted infantry-carrying capabilities, the company modified its two ambulance M113s into troop carriers and added company headquarters' and maintenance M113s into the patrol cycle. The Green carried with the same constraints as discussed above with the motorized tank platoon; therefore, Regulator 6 regularly supplemented Green platoon with M113, M1114, or M1A1s from headquarters platoon. Red alone operated within its normal platoon capabilities.

Due to the varying vehicle capabilities and soldier skill sets, each platoon had regular patrol requirements. Red, with its inherent EOD capability, primarily conducted counter-IED patrols and route clearance. White, with its dismount capabilities, focused on NAI overwatch to maximize the use of dismounted observation posts. Finally, Green, supplemented with either the headquarters tank section or M113s, conducted route clearance of the MSR and alternate supply routes (ASRs).

In reflection of the use of his headquarters tank section, Regulator 6 relied on the M1A1 to provide lethal direct fire overwatch, thermal optic capability, and act as a show of force. The restrictive terrain of Team Regulator's sector and the exhaustive requirement for dismounts limited his tank section to lethal direct fire in larger company raids or TF missions (movement to contact).

Tiger TAC — B Battery, 1st Battalion, 7th Field Artillery

The addition of an M109A6 Paladin platoon to the task force allowed the TF commander to use the TF mortar platoon (Thunder) as an additional motorized infantry platoon. Attaching a mortar section to the TAC was originally planned to offer indi-



"One of Team Regulator's enduring challenges was a sector of distinctly varied terrain — the urban streets of Balad. This Shi'a enclave of 75,000 is set along the Tigris River. Manmade structures of walls, canals, and dikes, and thick vegetation of orchards, foliage, and agriculture fields limited their maneuver space. Operations in urban Balad were decentralized and avenues of approach limited the use of Team Regulator's M1A1s."

rect fires capability to the TAC while in sector. However, the limitations of Thunder's M1064s, most notably speed, forced the increased use of M1114s and up-armored M998s. Moreover, the risk inherent of rolling a section of M1064s loaded with their high explosive basic load in a sector of IEDs, mines, and rocket-propelled grenades reduced their deployment in sector.

Therefore, to increase the number of TF platoons, Thunder was required to revert back to its infantry roots. With its MTOE M998s given add-on armor and the addition of two M1114s, Thunder took on missions, such as convoy escort, crater analysis, traffic control points, counter-IED/counter-mortar patrols, reconnaissance, QRF, and TAC personal security detachment. Moreover, Thunder provided two sections of mortars and its fire direction center (FDC) to support the TF fires mission.

The greatest challenge to Thunder 6 was to manage the troopsto-task issue. Over a 24-hour period, the mortar platoon provided a gun crew for indirect fires, fire direction control/platoon command post operations, QRF, FOB force protection, and personal security detachment for the TAC. To effectively manage his platoon and to keep his soldiers' skills sharp, Thunder 6 rotated his personnel through duties. Due to the troops-to-task, the TAC, for the most part, had to remain mounted.

In review of operations in Iraq, Thunder 6 recalls his soldiers definitely spent more time behind their M4s than behind their 120mm mortar tubes. He attributes their success here in Iraq to the mission focused training program conducted prior to deployment; it allowed the platoon to refine already present infantry skill sets.

Task Force 1-77 Armor's task was to shape her warfighting capabilities to changing circumstances. The old warfighting paradigm, which focused primarily on the military capabilities of a small set of potential adversary states, no longer addressed the entire threat spectrum. In this COE, traditional concepts of mass, speed, firepower, and maneuver were inadequate. The TF adapted in response to these new conditions just as our enemies pursued new ways to diminish our overwhelming power, as experienced AIF seldom presented a target set that an M1A1 tank platoon could fully exploit to influence the tactical fight. The tank platoon was designed for a different war on different terrain. Retired Israeli army General Yehuda Admon said of the use of Israeli armor in the urban fight, "This is not a normal way of using the tank for a low-intensive conflict. If we had something else to use, we would use it. Tanks are for mass fights."8 The tank continues to make a presence on the urban battlefields of Iraq.

AIF tactics, coupled with its task organization, created severe tactical problems, which were outside the Legacy Force structure. As tactical innovation occurs only where tactical innovation is required, four different commanders of TF 1-77 Armor applied innovation to distinct tactical problems. Where tactical innovation was not required, the commanders stayed with the tried-and-true applications of the armor platoon. In sum, the tactical problems spawned a tank platoon fighting split section with two M1A1s and two M1114s; a tank platoon fighting crosstrained as M2A2 Bradley crewmen fought split section with two M2A2s and two M1114s; a headquarters tank section crossattached with a light infantry anti-tank platoon forming a platoon of two M1A1s and two M1114s, or two M113s and two M1114s; and the creation of two additional platoons to resolve the TF troops-to-task of two headquarters tanks, a scout section, and two mortar squads operating in M1114s.

The POA, in reflection, allowed the platoons to break down into combat effective sections that could both move over narrow ground, yet maintain lethal standoff with an effective weapons system (either the M2A2's 25mm or the M1A1's 120mm). Setting the heavy tracks stationary, the lighter vehicle could maneuver under the watchful cover of the upgraded sights on both the M1A1 and M2A2. Bottom line: the POA provided commanders flexibility to accomplish mission sets.

The leaders of the POA faced varied challenges outside of those presented by the enemy. The POA platoon leader faced the challenge of knowing and understanding mounted and dismounted operations and the employment of his equipment to suit each operation. For the armor POA platoon leaders, they were forced to operate without M1A1s and introduced to M2A2s, M113s, and M1114s. Thus, tank crews must heavily train on their new equipment to be proficient.

No system to date has risen to become a war winner. However, innovative commanders routinely win battles by employing highly skilled soldiers in nontraditional formations. Reflecting on the 1973 Arab-Israeli War, General William E. DePuy noted that the Israeli tank crews (often using the same equipment their opponents used) were between three to six times more effective, "during the next 10 years, battlefield outcome will depend upon the quality of the troops rather than the quality of the tanks." True to form, the gauntlet was thrown, and the soldiers and commanders of TF Steel Tigers answered the call to arms.



Notes

¹Major General Robert H. Scales, Statement before the U.S. House of Representatives, Senate Armed Services Committee, Washington, D.C., 21 October 2003.

²Speech by General Peter J. Schoomaker, Chief of Staff, Army, at the annual Association of the U.S. Army Convention, Washington, D.C., October 2003.

 3 Colonel Bruce B.G. Clarke, "The Stryker Company and the Multifunctional Cavalry Platoon," ARMOR , July-August 2004, pp. 24-28.

⁴During the task force deployment, designation of enemy forces morphed from insurgents to anti-coalition forces to anti-Iraqi forces, signifying shifts in authority from coalition forces to the interim Iraqi government.

5The current operating environment often required the TF's platoons to transition from their preplanned missions of reconnaissance and surveillance into hasty raids. The standard "motorized" tank platoon cannot support both a mounted security element and a dismounted assault element as required of urban operations.

⁶The 2d Brigade Combat Team, 1st Infantry Division originally deployed with one M1A1 tank company, which was parceled across six task forces. The division would later deploy two additional tank companies of which TF 1-77 Armor would ultimately receive a platoon.

Modifying the medic M113s included painting over the red crosses or using "flip-style" red-cross designations that could be lifted up or down to display or not display the crosses. Brigade and division legal advisors confirmed that all modifications were compliant with the Law of Land Warfare.

⁸John Brosky, "Tank Still Has Role, But Future Uncertain." *Defense News*, 24 June 2002, p. 6.
⁹Richard Swain, ed., *Selected Papers of General William E. DePuy*, U.S. Army Command and General Staff College Press, Fort Leavenworth, Kansas, 1994, p. 71.

John P.J. DeRosa is an operations specialist, National Command Center-Raven Rock Mountain Complex, Adams, PA. He received a B.A. and an M.A. from California State University-San Bernardino. His military education includes Armor Officer Basic Course, Battalion Maintenance Officer Course, Maintenance Leader Course, Unit Movement Officer Course, Signal Support Systems Specialist Course, Basic Combat Training, and Airborne School. He has served in various command and staff positions, including assistant operations officer, Iraqi Security Forces, Task Force 1st Battalion, 77th (1-77) Armor, Balad, Iraq; executive officer, Headquarters and Headquarters Company, 1-77 Armor, 1st Infantry Division (ID), LSA Anaconda, Balad; assistant operations officer, 1-77 Armor, 1st ID, Schweinfurt, Germany; battalion maintenance officer, 1-77 Armor, Camp Monteith, Kosovo; and tank platoon leader and tank company executive officer, 1st Battalion, 185th Armor Battalion, 81st Separate Infantry Brigade (E), San Bernardino, California.

A Report on the 11th Armored Cavalry in Southeast Asia 1969-70

by Colonel Donn A. Starry

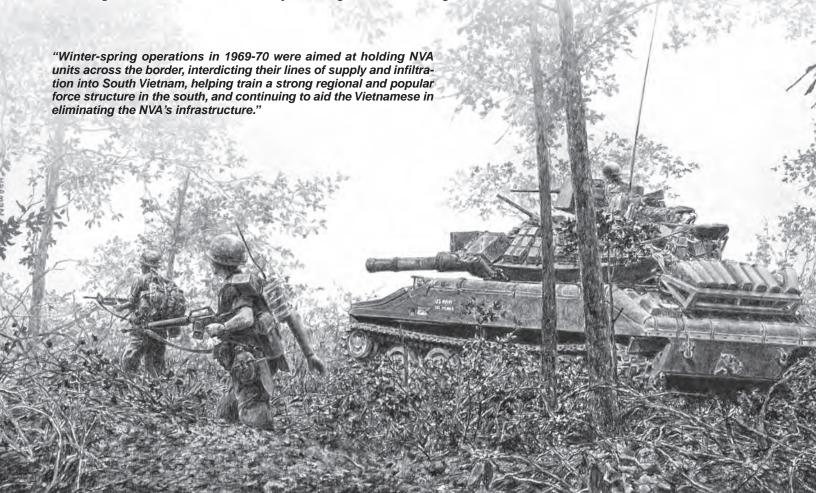
(Reprinted from January-February 1971)

ARMOR has recorded much of the chronicle of the Blackhorse in Vietnam, both in broad reports by regimental commanders and in articles by other members of the regiment, describing small unit actions. General (then Colonel) Cobb reported in March-April 1967 on early Blackhorse operations in Vietnam. In March-April 1968, Colonel Farley continued the coverage from the regimental commander's viewpoint. General (then Colonel) George Patton described regimental operations from summer 1968 to spring 1969 in the "pile on" articles in the January-February and March-April 1970 issues of ARMOR.

Somewhere between the regimental message center and the editor's "IN" box, Colonel Jimmie Leach's report on 1969 operations under his command was ambushed, and is still carried missing in action (MIA). Therefore, the present report will sketch in major events during Colonel Leach's tenure, April through November 1969, as a prelude to describing winter and spring activities during 1969-70, culminating in the entry into Cambodia during May-June 1970. This will preserve at least some of the continuity of *ARMOR's* coverage of the Blackhorse in Vietnam.

Shortly after Colonel Leach assumed command in April 1969, the regiment moved to northern III Corps, working first with the 1st Infantry Division and later with the 1st Cavalry Division (AM). From May 1969 to mid-June 1970, the regiment was operational control (OPCON) to the 1st Cavalry Division; it was, in effect, that division's fourth brigade. In conjunction with the shift in operating locale, Colonel Leach moved the regimental command post to Quan Loi in central Binh Long Province, intending to stay a few weeks; it was instead a permanent change of station (PCS) of more than a year. During that year, the regiment ranged through the northern tier of III Corps provinces — Phuoc Long, Binh Long, and Tay Ninh. Blackhorse Base Camp at Long Giao became the home of the 18th Army Republic of Vietnam (ARVN) Division in fall 1969 and the regimental rear took up temporary residence at Bien Hoa Army Base. Later, as 1st Infantry Division units redeployed, the regimental rear took over the 1st Division's Di An base, closing out of Bien Hoa in April 1970.

War Zone "C" in northern Tay Ninh Province, and most of Binh Long and northern Phuoc Long Provinces, have long been camping grounds for regular North Vietnamese army (NVA) units. Throughout 1969 and early 1970, the Blackhorse encountered most of the 7th NVA, as well as the 5th and 9th Viet Cong Divisions. Local forces in South Vietnam declined in



strength, and by summer 1970, they were capable of no more than harassment and occasional attacks by fire.

Allied operations in that area (through September 1969) could be called the "Battle for Binh Long." Once one of the rich rubber producing areas of the world, Binh Long Province had long been infested with a large number of local and regular NVA forces. At least twice during 1969, the enemy attempted to gain control of the province, attacking the population centers — especially the province capital at An Loc. In the process, Leach sustained heavy casualties and consumed most of his supplies cached along the border in Cambodia.

By late fall 1969, NVA units had been driven into Cambodia where they remained in the sanctuary to refit, receive replacement personnel from North Vietnam, and pre-stock supplies for operations in the spring and summer of 1970. By early December, when Colonel Leach left command, he and the Blackhorse had participated in a highly successful campaign to rid Binh Long and northern Phuoc Long of regular NVA units.

Winter-spring operations in 1969-70 were aimed at holding NVA units across the border, interdicting their lines of supply and infiltration into South Vietnam, helping train a strong regional and popular force structure in the south, and continuing to aid the Vietnamese in eliminating the NVA's infrastructure.

Then, on 1 May 1970, the Blackhorse led the attack into Cambodia, and for 2 months, destroyed enemy cache and base systems, and dispersed or eliminated enemy units in the transborder bases.

Four operational features characterized Blackhorse activities from December 1969 through April 1970:

- They were mostly border operations, conducted on extended frontages to reduce infiltration of enemy personnel and supplies from Cambodia into South Vietnam.
- Most of these operations encountered regular NVA units since enemy local forces were heavily eroded in strength. As RVN regional and popular forces gained in strength and proficiency, gradually they were able to assume most of the burden of population security and keep the few area Viet Cong tied up.
- They made extensive use of land-clearing operations as a means of opening base areas, cutting across infiltration trail networks and providing areas of lateral access for rapid movement of cavalry through the jungle.
- They made extensive use of integrated intelligence, reconnaissance, and surveillance operations, augmented by manned and unmanned trail ambush systems, to gather information, interdict enemy movement, and defeat the enemy land-mine threat, which was his most effective weapon against armor.

In May-June 1970, the regiment entered Cambodia with other allied forces to search out and destroy enemy units and base areas.

During the autumn of 1969, the 5th VC and 7th NVA Divisions began a prolonged harassment of Bo Duc, capital of the northern district of Phuoc Long Province. Against the possibility of another Duc Lap, two troops of the Blackhorse were airlifted by C130 into nearby Bu Dop in late November. In early December, the 2d Squadron began operations along Highway 14A, from Loc Ninh in northern Binh Long to Bo Duc, to link up with the two airlifted troops and other U.S. and ARVN units defending the area. In addition, the 2d Squadron

was to interdict the Serges Jungle Highway, a main NVA supply route from Cambodia south to the Song Be River. Squadron operations included extensive land clearing of an access corridor for quick relief of the Bo Duc garrison by armored cavalry.

In addition to his squadron, from which F Troop had been airlifted into Bu Dop, Lieutenant Colonel Grail Brookshire's 2d Squadron had attached to it an engineer land-clearing company, two rifle companies from battalions of the 1st Cavalry Division (AM), and two platoons and company headquarters of the 919th Engineers -- the Blackhorse's own engineer company. With cavalry and infantry protection, the engineers pushed the Rome plows through the jungle, opening a 400-meter wide cut, generally along the trace of Highway 14A, to permit rapid movement of mechanized forces and facilitate airlanding of infantry. At the same time, the 2d Squadron began to interdict the Serges Jungle Highway. For about a week, the enemy rear service group, operating the Serges Jungle Highway, defended their lines of communications, then withdrew, leaving the trails dry, and concentrated on an extensive antivehicular mine program against the 2d Squadron.

The mine campaign represented an insidious and difficult threat; the Rome plow cut generally paralleled the border, making it possible for mining parties, under cover of darkness, to easily cross the border, plant their mines, and be gone in a few hours. Extraordinary countermine measures were called for; additional mine detectors were procured and put into service, enabling the 2d Squadron to find about four out of every five mines encountered. Recognizing that the best way to defeat mining is to eliminate either the source of the mines or those who plant the mines, Brookshire's troops began an intensive intelligence and surveillance program to detect the mine-laying parties and eliminate the mine layers. Gradually, these efforts bore fruit in reduced mining incidents; however, it was not until May 1970 that it was possible to get at the source of the mines. In that month, Colonel Ma Sanh Nhon's 9th ARVN Regiment entered Cambodia, and at the head of the Serges Jungle Highway, captured more than 200 cached mines — the source of Colonel Brookshire's troubles 6 months before and a continuing problem in the intervening months.

At the beginning of 1970, with his lines of communications shut off, his trail systems heavily interdicted, and his minelaying parties under constant attack, the enemy began to cross the border in battalion strength to ambush friendly units, hoping to destroy a small unit in an ambush before help could arrive. The Battle of the Crescent was typical of these efforts, and is worth recounting briefly since it highlights many characteristics of both antagonists.

Early morning on 20 January 1970, NVA gunners opened fire on the 2d Squadron command post near Bo Duc. By mid-morning more than 100 rounds of mixed mortar fire, up to 122mm in caliber, had fallen in and around Colonel Brookshire's command post, howitzer battery, and tank company laager. The first rounds brought immediate and violent counter-battery fire from the 2d Squadron. A Cobra light observation helicopter (LOH) team already on station swung over to find the mortars, while H Company and one cavalry troop started toward the position. Within minutes, the LOH's observer located the mortars. Major Fred Franks, the squadron S3, now airborne, began to work the position over with artillery. Tactical air and aerial rocket artillery were both on the way.

While fire support poured in on the mortar positions, the LOH was shot down in a crescent-shaped open area in the jun-

gle near the Cambodian border. This disclosed the main enemy fighting position — a classic landing zone ambush with six .51-caliber antiaircraft guns, mortars, rocket launcher teams, and an estimated two battalions of infantry.

Major Franks shifted artillery into the area immediately and diverted a light fire team to cover a daring rescue of the downed LOH pilot by his covering Cobra, piloted by Captain Carl Marshall. Captain Marshall landed his Cobra amid intense enemy fire, after working over the enemy gun positions with his own ordnance, picked up the injured LOH pilot by dragging him in the front cockpit of the Cobra so that he lay across the gunner's lap, half in and half out of the open canopy, and took off in a hail of hostile fire.

Then, the 2d Squadron bore down on the enemy. H Company moved north and west to get between the dugin NVA and the border. Two troops of cavalry moved through the jungle to close with the enemy from the south and east. While the ground troops maneuvered, Colonel Brookshire kept fire on enemy positions. Sixteen air strikes, more than 20 Cobra loads of ordnance, and more than 600 rounds of 155mm artillery were delivered before the fight was over. Two troops of cavalry broke into the open on the south side of the crescent and charged the enemy positions to their north with all guns blazing. By this time, it was late afternoon and the fight had been knocked out of the 209th NVA Regiment in the crescent. Survivors broke and fled into the jungle toward Cambodia, covered by the lowering darkness.

Several features of this action characterize Blackhorse border operations during this period:

- The enemy generally consisted of regular NVA forces, which fought as units and enjoyed the same problems with fire support and maneuver coordination as any regular force. Their positions were always dug in, weapons were well-sighted and communications, including field wire, were in place before they attempted to fight. In the Crescent battle, field wire was even found in front of enemy positions along the north edge of the crescent.
- NVA commanders were creatures of habit and frequently returned to the scene of a previous fight and set up to fight again even to the extent of using old bunkers and trench lines.
- Fighting this type of enemy called for techniques modified from those used in fighting smaller, more widely dispersed local guerrillas. The Patton "pile on" dictum still applied; however, initial reconnaissance operations had to be conducted in at least platoon strength lest a small unit take unnecessary losses at the hands of a superior force in a well-organized position before help could arrive.
- Proximity to the border made it imperative that the cavalry close with and hold the enemy, lest he escape into the sanctuary. The organic firepower of armored cavalry makes it an ideal force for this type action.
- Supporting fires had to be applied in the appropriate volume at the proper places, then maneuvered about to pace the battle. The ideal situation is to turn everything on when the fight starts artillery, air, gunships, and maneuver forces and never turn anything off, but





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control the battle by varying intensity and place of application of all the resources brought to bear.

So successful was the 2d Squadron's Bo Duc operation that it was decided to carve up War Zone "C" with an extensive series of Rome plow cuts using two squadrons of cavalry and two Rome plow companies. In February, the 1st Squadron, commanded by Lieutenant Colonel Jim Reed, moved to Tay Ninh, picked up an engineer land-clearing company and commenced operations north toward the Cambodian border. Once along the border, Colonel Reed turned his forces east and moved to link up with the 2d Squadron, which had begun to cut west out of Binh Long Province along the trace of Highway 246. By mid-March, both squadrons had made extensive cuts into enemy trail networks in northern War Zone "C:" the 1st Squadron across the Mustang Trail; the 2d Squadron across the trail systems leading from Cambodia to the Saigon River Corridor.

Based on the 2d Squadron's experience in the Bo Duc operation, tactics and techniques for border interdiction had been fully developed. It was apparent that to defeat the NVA at its own game, one had to make systematic and imaginative use of all resources — especially reconnaissance, intelligence, and surveillance means — and all of these had to be tied into an integrated plan. On the Bo Duc road, Brookshire's troops had developed an effective ambush system using claymores and other devices in manned and unmanned ambushes (*ARMOR*, November-December 1970). The system continued to develop and saw full utilization for the first time in War Zone "C" during March and April.

Rome plow operations in War Zone "C" included major eastwest cuts along the general trace of Highway 246, and along major north-south secondary roads. Tactical cuts 100 to 200 meters in width were made along and across enemy trail networks. In addition, base areas were thoroughly plowed out, forcing the enemy to abandon the base. In March, the 165th NVA Regiment was interrupted in the construction of their new "Kennedy Base" in northern War Zone "C" and driven back into Cambodia.

From his command post at Fort Defiance, the highest peak (95 meters) in War Zone "C," Colonel Brookshire directed the 2d Squadron to conduct border interdiction operations, while on his left Colonel Jim Reed's 1st Squadron extended the system to the west. By the end of April, these two squadrons had accounted for more than 200 enemy forces killed in the ambush systems along the trails. During the same period, several

hundred other enemy soldiers were killed in firefights in the area as the 7th NVA Division fought to reestablish its infiltration system. So great was the enemy's concern over the presence of the 1st and 2d Squadrons in War Zone "C" that he eventually moved two regiments, the 165th and 209th NVA, around the flanks of the ambush system to attack Colonels Brookshire and Reed from the rear.

In April, these units were joined by an antiaircraft regiment whose mission was to force up off the trails the intensive reconnaissance effort of the Blackhorse air cavalry troop. Groundto-air firing incidents increased to several per day in April. Major Don Smart, the air cavalry troop commander, found himself inadvertently on the ground more than half a dozen times during the month. In addition, troop laagers, especially command post laagers, were heavily targeted. Fort Defiance, the 2d Squadron command post, was the objective of several violent attacks. Fortunately, it had become the practice in the Blackhorse to dig in, not a popular procedure with armored cavalry, but a requisite to survival in this environment. Ammunition, aid stations, and personnel shelters were all bunkered in; a perimeter berm added shelter and individual vehicles were dug in as time permitted. The practice paid off. Fort Defiance, on one occasion, survived a 100-round mortar-rocket attack, coordinated with a ground attack by a battalion of the 165th Regiment with only two friendly casualties.

While all indicators lead to a conclusion that the interdiction effort was a success, the full measure of success was not apparent until the Cambodian operation. In May, when the Blackhorse uncovered the cache systems in the Fishhook, extensive stores of food and ammunition were found above ground in temporary storage. Prisoners related that the supplies had not been stored underground because they were scheduled for immediate movement to the south, but had not been moved due to the tight control the 1st and 2d Squadrons exercised over the trail system south of the border.

The lessons of these operations confirmed those alluded to before, and added to the conviction that armored cavalry could master the enemy infiltration system with intense use of an integrated intelligence, surveillance, and reconnaissance effort to develop fully the trail system and imaginative use of an extensive ambush system as the basis around which other operations might be conducted.

While the 1st and 2d Squadrons were working over the 7th NVA Division in War Zone "C," the 3d Squadron, with elements of the 1st Cavalry Division (AM), was in Binh Long

Province, providing convoy security and escort, and operating along the northern province border in locations vacated by the other two squadrons. The 7th NVA Division continued to try to move elements into the populated areas of Binh Long, despite the fact that most of the division was fully occupied in War Zone "C." Typical of these actions was a fight between L Troop and a battalion of the 209th NVA Regiment on 10 March.

Binh Long's rubber plantations were no more than a night's march from the Cambodian border. Hence, when he chose to do so, the enemy could move at dusk, avoiding the last light air cavalry visual reconnaissance and be in position in the rubber before the first light visual reconnaissance. From there, he could attack towns and villages in the rubber plantations, including the district and province capitals of Loc Ninh and An Loc.

On the afternoon of 9 March, Captain John Caldwell's L Troop set out unmanned automatic ambushes across the trail systems to their west and laagered near the edge of the rubber plantations west of Loc Ninh. During the night, an unmanned ambush detonated. Troop L responded with mortars and artillery; at first light, a check of the area yielded several enemy bodies and considerable equipment, indicating that a larger party had been involved. Captain Caldwell took one platoon and backtracked the enemy trail that lead into the ambush. A second platoon, which had dismounted to search the ambush area, returned to its armored cavalry assault vehicles (ACAVs)

herringboned along the edge of the rubber plantations. Before mounting up, the platoon began a search of the nearby rubber plantation to determine if survivors of the ambush had taken up positions. As the dismount party entered the rubber plantation, the enemy opened fire from positions in an old bunker trench line. The dismounted party hit the ground and returned fire from a drainage ditch, while the platoon's ACAVs returned fire over their heads.

The third platoon, hearing the firing, came on the run, closed on a small knoll behind the enemy and cut down would-be escapees as they ran over the knoll to the rear. The squadron commander, Lieutenant Colonel George Hoffmaster, brought in artillery and gunships as Captain Caldwell returned fire, and L Troop, in a coordinated attack, finished off the boxed-in enemy. The 209th NVA Regiment left more than 50 dead on the field, along with some wounded. Several rubber workers, who the NVA had forced into the bunker line to avoid their alerting L Troop, were freed and their wounds treated.

The enemy's behavior underscored his propensity for coming back to the same place to fight over and over again. Also of note is the fact that in this area, he habitually chose to fight armored cavalry in the rubber, where his losses were enormous (about 40 to 1) compared to fights in the jungle where he had the advantage of being more a creature of the environment than the cavalry.

One other feature of this battle that deserves emphasis is the fact that no one in the dismount party was injured by friendly



fire, although a heavy volume of automatic weapons fire was directed at the enemy over their heads. For months, the 3d Squadron had concentrated on training battle drills, to include aimed fire and fire discipline. Developed by the squadron commander, Lieutenant Commander David Doyle, in the fall of 1969, these important features of cavalry operations were continued by his successor Colonel Hoffmaster. In this fight, they paid big dividends, driving home the fact that even in combat, units must have some training programs designed to sharpen basic combat skills.

The actions described in this article typify regimental operations from late 1969 to the end of April 1970. The combination of armored cavalry and Rome plows kept main enemy forces at bay in the sanctuary. All that remained to be done was to enter the sanctuary and destroy bases, supplies, rear service elements, and the main units stationed there. Until about 28 April, the idea of an attack into Cambodia was just that — a good idea. However, by nightfall of 1 May, it was no longer a matter of wishful thinking.

Two squadrons, in the midst of the most extensive collection of rice and equipment anyone could remember, were there; and after a day of continual fighting, were in contact with large enemy forces. The Fishhook was to the NVA 7th Division what any large logistics complex is to U.S. forces — supplies of all kinds waiting transshipment to the south, hospitals (with x-ray equipment), laundries, clothing and equipment repair facilities, bicycle assembly, and repair shops. North of the Fishhook were division-sized training and rest areas to house NVA units moving in and out of South Vietnam. Except for some dependent housing (with television), the North Vietnamese lived in Cambodia much as they did in South Vietnam — underground and hidden away in the jungle. Hence, there was still the problem of following the trails, finding the base areas and rooting defenders or survivors out of hiding.

By the afternoon of D+2, the 2d and 3d Squadrons had linked up with ARVN airborne division elements, which had conducted airmobile assaults into positions about 20 kilometers deep into the Fishhook to secure key points to the enemy rear. On D+3, the order went out to continue the attack to seize Snuol, the center of a large rubber plantation about 40 kilometers north of the Fishhook. En route, Blackhorse squadrons linked up with two battalions of U.S. airmobile infantry, which were in the process of searching out large cache sites.

On D+5, the lead squadron negotiated three blown bridges left by the enemy. By the afternoon of D+5, Colonel Brookshire was on the outskirts of Snuol with lead elements of the 2d Squadron, followed closely by Lieutenant Colonel Bob Griffin's 3d Squadron. After several days of fighting around Snuol, Brookshire and Griffin were joined by Lieutenant Colonel Jim Reed and his 1st Squadron. Then the regiment concentrated on a detailed search of enemy base areas, cache sites, and elimination of enemy units remaining in the area. Details of the entire operation are being prepared by the regimental historian and should appear in these pages in the near future. However, one comment is in order here:

It has been said that the Vietnam War has made standard military operational methods obsolete and that new planning methods and new tactics are required. While this may be true to some extent, it is instructive to note that in the first 7 days of May, the Blackhorse attacked (from an attack position), crossed a line of departure, proceeded on an axis of advance, linked up with ARVN airmobile infantry, conducted a passage of lines, continued to attack on axes, linked up with U.S. airmobile infantry, conducted another passage of lines, seized a heavily defended objective, and exploited the success by mopping up in the enemy rear. It was noted with considerable relief that no one had forgotten the fundamentals.

The Blackhorse Regiment is a unique institution — it does everything well. From vehicle maintenance to operations, it exceeds every expectation. Professionalism in all ranks is its hallmark. Its soldiers bear our country's arms with honor and dignity, despite the difficult tenor of the times. Its fighting record is well known. Strong ties of friendship and professional allegiance bind it to our gallant Vietnamese allies. In all these endeavors, the Blackhorse record is unblemished, unexcelled, and unequalled — it reflects the sacrifice of all those of all ranks who have served, who have, whatever the difficulties, done their duty well. No country in history has ever been served so ably by such gallant and dedicated men.



Colonel Donn A. Starry, 41st commander of the 11th Armored Cavalry Regiment, has been writing for *ARMOR* for more than 15 years. He is currently assigned as the Deputy Director of the Operations Directorate in the Office of the Deputy Chief of Staff for Military Operations, Department of the Army.



The Battle of Suoi Tre:

Viet Cong Infantry Attack on a Firebase Ends in Slaughter When Armor Arrives

by First Sergeant Christopher P. Worick

(Reprinted from May-June 2000)

"It was like the 10 o'clock late show..."

In 1967, the troop buildup in Vietnam was in full swing with no end in sight. American commanders, equipped with more personnel and supplies, decided to revise the overall strategy of local containment for a more aggressive approach. Combined arms operations would now venture farther into enemy-held territory in an attempt to draw the communist forces into battle.

Operation Junction City, the largest combined arms operation to that date, began on 22 February. The operation was designed to disrupt the Viet Cong Central Office for South Vietnam (COSVN), destroy the Viet Cong and North Vietnamese forces, and clear War Zone C, III Corps' tactical zone base areas in the northern Tay Ninh Province. Junction City would reinforce the necessity for armor and cavalry for the remainder of the war.

The initial phase of Junction City kicked off with airmobile troops lifted into the northwest corner of the operational area near the Cambodian border.² The mission was to establish fire support bases for follow-on infantry and establish a horseshoe blocking position.3 With this in place, mechanized forces began their attack north into the open end of the horseshoe toward the "U" end of the position. Initial enemy contact was sporadic, but mechanized units found Viet Cong base camps, hospitals, bunker systems, and small groups of Viet Cong. Dense jungle and enemy mines made progress slow for the armored forces.

Upon reaching the northern limit of advance, the mechanized units wheeled west to "squeeze" the enemy.⁴ Feeling the pressure, Viet Cong resistance began to stiffen until they were finally drawn out in an attempt to boost their sagging fortunes.

The last significant engagement involving the use of armor during Operation

Junction City occurred at a remote firebase on 21 March. It would become known as the battle of Suoi Tre or Fire Support Base Gold.⁵ The shock effect of armor would turn an enemy victory into a disastrous defeat.

If You Build It, They Will Come.

On 19 March, almost a month into the operation, the 3d Battalion, 22d Infantry (-) and the 2d Battalion, 77th Artillery (-) began airlifting three batteries of 105mm howitzers and about 450 troops into an egg-shaped clearing near the former village of Suoi Tre. Their mission was to establish Fire Support Base (FSB) Gold and provide indirect fire support for the 4th Infantry Division's 3d Brigade Task Force.⁶ This particular area had been quiet thus far and heavy action was not expected. When the first helicopters set down in the landing zone (LZ), it became obvious that something was different. Viet Cong scouts, waiting in the surrounding woods, had placed command detonated mines facing inward in the clearing. The detonation of these explosives destroyed three UH-1 (Huey) helicopters. Undeterred, the Americans continued to secure the perimeter and establish the firebase, despite the fact that an unusually large number of Viet Cong were spotted moving in the area.7

American troops were unaware that they had landed virtually on top of approximately 2,000 Viet Cong troops spearheaded by the 272d Main Force Regiment of the 9th Viet Cong Division.8 Disturbed by this sudden threat, the enemy observed the Americans for the next 2 days while formulating a plan of attack. Feeling that the odds were in their favor based solely on their numerical superiority, the Viet Cong would use speed and surprise to overwhelm the Americans. By using human wave assaults to quickly move in close to the defenders, they would deny U.S. forces the ability to use their technological advantage.

At FSB Gold, the infantry and artillerymen continued to reinforce and improve their perimeter defenses; they built defensive bunkers, rehearsed contingency plans, conducted ambush patrols, and constructed 18 firing positions for the artillery batteries. To the southwest of FSB Gold were elements of the 2d Battalion, 12th Infantry, the tank-mech infantry task force of 2d Battalion, 22d (2/22) Infantry (Mechanized) and the 2d Battalion, 34th (2-34) Armor (-). 10

Under the command of Lieutenant Colonel (LTC) Raymond Stailey, 2-34 Armor moved north on 20 March as part of the 3d Brigade, 4th Infantry Division Task Force, commanded by Colonel (COL) Marshall Garth. The task force had been placed under operational control of the 25th Infantry Division for Junction City. The 2-34 Armor had been conducting search and destroy operations, which consisted of clearing 10x10 kilometer quadrants, searching for any sign of the Viet Cong.¹¹ On 20 March, COL Garth ordered 2-34 Armor to link up with 2/22 Infantry, commanded by LTC Ralph Julian, and continue to push north as a combined arms team toward the Suoi Samat River. Earlier that afternoon, the scout platoon of 2/22 Infantry had cleared a trail 1,500 meters to the north, but had been unable to find a ford.12 The recon platoon from 2-34 Armor would have better luck in the search.

Arriving ahead of the main body at the river, the 2-34 Armor scouts found that the dry season had reduced the river to a muddy stream. A possible fording site had been located at a bend in the river; however, bridging assets would still be required to get vehicles across without getting stuck. LTC Stailey met with his scouts at the river and coordinated for an M113 to be sunk in the river and two armored vehicle-launched bridges (AVLBs) set across, if necessary. This contingency plan was then passed along to all maneuver elements. Separated from the fire-

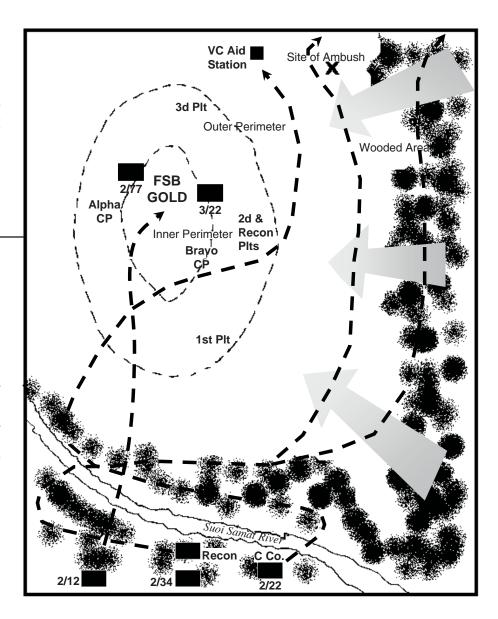
Viet Cong preparing to assault the new firebase were discovered by an American patrol, triggering the beginning of the enemy assault from the woods at right. As the eastern perimeter of the base began to collapse, armored units crossed the river south of the base and attacked south to north, breaking the enemy assault.

base by only 2 kilometers, LTC Stailey felt confident that if any trouble should occur, his units were in a good position to provide support. Exchanging information with the firebase commander on the task force net, LTC Stailey received the troop disposition at FSB Gold and the extent of the outer perimeter's location.¹³ With darkness approaching, 2/22 Infantry and 2-34 Armor had conducted their linkup and began setting up for the night. Normally, a clearing would have been preferred, but none had been located or indicated on the maps. With the rear elements closing in on their respective unit night positions, LTC Stailey briefed his commanders on the current situation; he decided to wait until first light and resume the move toward the river. 14

First Lieutenant Denny Hollister, XO, A Company, 2-34 Armor, recalls the movement: "The day before the battle, our unit, A Company, 2-34 Armor and 2/22 Infantry, made little progress due to the heavy jungle and various breakdowns, mainly thrown tracks. By this time, our tanks, which were old when we got them, had sustained months of mine and RPG [rocket-propelled grenade] damage. Also, the daily routine of bulldozing the jungle was beginning to take its toll. Throwing a track (especially off a vehicle that was already short tracked due to mine damage) often meant that everything was wedged in a tree or other jungle growth. The process of repairing it was very labor intensive, as only a tanker can understand. As a result of all this, we did not make our assigned objective for that day. Since our objective was mainly just driving around in the woods until we ran into someone, it really didn't matter in the overall scope of the war — but it sure did upset the brigade commander, Colonel Marshall Garth. As a punishment, we did not receive any fresh water that evening.15

First Blood

Around 0600 hours the next morning, radio reports indicated possible enemy movement on the perimeter of the FSB. 16



First contact with the enemy was at 0631 hours.¹⁷ An ambush patrol from B Company, 3/22 Infantry, located 500 meters from the perimeter of FSB Gold, broke down their ambush site when they spotted two Viet Cong. Taking the soldiers under fire, they discovered the enemy was in the tall grass all around them. With only part of the patrol making it back to the FSB, five soldiers were left pinned down. A squad was quickly assembled to provide help, but several short bursts of AK-47 fire indicated that any survivors had been killed. The sound of mortar rounds leaving tubes sent men diving for cover as 61mm and 82mm rounds began exploding throughout the fire support base. 18 Within minutes, the mortar fire shifted to the western side of the perimeter.

As the enemy continued to pound the western perimeter and the artillery batteries in the center of the FSB, the tempo of the battle increased. Scores of Viet

Cong troops emerged from the jungle in a three-pronged assault along the eastern side of the perimeter. Small arms, RPG, and recoilless rifle fire peppered the defenders along the outer perimeter. As counter-mortar fire went out, the amount of incoming fire in the FSB diminished. It was only 0638 hours, 7 minutes since the ambush patrol had set off the Viet Cong attack. ¹⁹ Immediately, it was obvious that this unprecedented daylight attack was not a small enemy force. The enemy's boldness and sheer numbers indicated that they were determined to overrun the fire support base.

While tactical air support was called in, all platoons along the eastern perimeter reported enemy in the wire. ²⁰ The enemy surrounded some positions, with one platoon reporting hand-to-hand combat. The artillery reaction force, which had rehearsed this move the day prior, was put on standby. With his company decisively engaged, the B Company, 3/22 Infantry

commander called for 105mm howitzer fire as close to the perimeter as necessary. He wanted to plaster the wood line and get as many troops emerging into the open as possible.²¹ A forward air controller (FAC) notified the firebase that four sorties of fighters were inbound and would be on station shortly.²²

Monitoring the situation from his helicopter, COL Garth ordered the armored units to move across the river in an effort to assist the embattled firebase. LTC Julian, commander, 2/22 Infantry, immediately ordered C Company, 2/22 Infantry, and an attached tank platoon from 2-34 Armor to move across the river and head northwest using the trees for cover. Camping near the river the night before, a fording site was found that would not require bridging assets.²³

With the C Company, 2/22 Infantry team on the move ahead of the task force main body, the remaining units were cranked up, waiting to move. At 0700 hours, incoming mortar fire landed among 2-34 Armor's tank positions.24 Although ineffective, the mortar fire caused the tanks to disperse to get out of the impact area.²⁵ Straddling each other's tracks to clear a path wide enough for the tanks, the M113s pushed forward as fast as the jungle growth allowed.²⁶ The smell of diesel smoke filled the air as the two battalions crashed through the underbrush. The mortar fire gradually tapered off, with no casualties or vehicle damage reported. Although initial progress along the trail went well, maintaining dispersion and getting all the vehicles to converge on the fording site proved time-consuming. COL Garth, anxious to get a relief column to the firebase, radioed, "If a vehicle throws a track, leave it. Let's get in there and relieve the force!"27

As the mechanized forces moved toward the sound of the guns, the situation at FSB Gold deteriorated. The outer perimeter along the eastern side was collapsing. The B Company, 2/22 Infantry commander called for the artillery reaction force in an attempt to reinforce the line.28 Additionally, he told his fire support officer to move the artillery fire to within 100 meters of the perimeter. With all three platoons fighting hand-to-hand, it appeared that the reaction force would not make it in time. Ammunition was being consumed at an alarming rate. The third platoon leader reported that he had Viet Cong in the foxholes at the center of his position. Suddenly, the first platoon leader reported that the reaction force had arrived and was counterattacking on line across his positions. For a brief moment, the situation stabilized.²⁹

At 0715 hours, a silver Phantom jet swooped overhead, passing along the edge of the woods to the east, and pulled up to the north, followed by the thunder of ordnance exploding. The U.S. Air Force had arrived! A second F4 repeated the lead plane's maneuver. The FAC plane could be seen circling to the southeast, directing the fighter-bombers. Then two more Phantoms appeared and dropped their loads along the eastern edge of the firebase. Trying to catch enemy troops in the open, the FAC plane moved some of the air strikes more closely along the southeast corner of the perimeter and to hit the Viet Cong with napalm.³⁰

By the time the planes launched their sorties, enemy mortar fire had tapered off because of continuing artillery countermortar fire. The Viet Cong were still shooting at the artillery positions with RPG, 75mm, and 57mm recoilless rifle fire from the wood line.³¹ The enemy raked the firebase with automatic fire as the attack on the eastern perimeter intensified.

At 0745 hours, the FAC plane was shot down by heavy machine gun fire and crashed into the trees beyond the firebase, killing both the pilot and observer.³² As the ramifications of the loss sank in, there was a lull in the air strikes until a new FAC could come on station.³³ The battle would now take a radical turn of events.

Desperate Measures

The B Company commander directed 105mm artillery rounds, known as "beehives," to be loaded immediately; the rounds had not been used previously because of their classified nature.34 Packed with thousands of small steel flechettes in a single projectile, a beehive could cut a wide swath in enemy ranks. The B Company commander decided to use the beehives in the first platoon sector first.35 After telling the platoon leader to get his men under cover, the commander instructed the guns to fire toward the east and southeast. The telltale effect was immediate. Although wide gaps had been blown in the attackers' ranks, more were requested along the entire eastern side. Due to a shortage of beehive rounds, a reaction force from A Company, 3/22 Infantry was requested at 0800 hours to reinforce B Company's infantrymen. The A Company, 3/22 Infantry commander, said that his 20-man force was on the move en route to Bravo's positions.³⁶

Within minutes, the reaction force linked up with B Company. Despite the best efforts of artillery firing over the defenders' heads, the Viet Cong were in scattered foxholes. More importantly, ammunition was now in short supply. With troops still emerging from the wood line, the order was given at 0820 hours for the eastern perimeter troops to fall back to secondary positions.³⁷ Platoons began bounding back to their alternate positions in a move rehearsed the day prior. By 0840 hours, B Company had completed its move.³⁸ This allowed the artillerymen to drop the tubes and fire at point-blank range, making the beehives even more effective. A Company now experienced problems of its own; the Viet Cong overran a quad .50-caliber machine gun positioned on the northern perimeter. Attempting to turn it on the defenders, it was destroyed by a direct hit from a 105mm howitzer.39

Alarmed by the radio reports at FSB Gold, the tank/infantry task force moved with stealth speed through the heavy vegetation in its attempt to relieve the base. Although sporadic sniper fire hampered their movement, they made progress. A new FAC arrived back on station at 0845 hours and coordinated more air strikes.⁴⁰ Helicopter gunships had also been called in to assist the defenders. CH-47 Chinook helicopters dropped fresh supplies of ammunition directly into the firebase.⁴¹ From his vantage point above the battlefield, LTC Stailey helped direct his battalion's lead elements to the river from his helicopter. Calling forward the AVLBs and an M113 from the headquarters section, the contingency plan went into effect. The armored personnel carrier (APC) was driven to the middle of the river to act as an abutment. Once the crew was clear of their M113, the scissors bridges were set in, finally spanning the river.⁴²

As the task force main body closed on the fording site, air strikes were within 100 meters of FSB Gold.⁴³ Napalm was burning up the foliage around the base that enemy troops were using for concealment. Indirect fire to hit the troops still emerging from the jungle was on hold because of the aircraft in the area. Like a swarm of ants, the Viet Cong continued to advance on the defending troops.⁴⁴ With beehive rounds expended, the artillerymen resorted to firing high-explosive

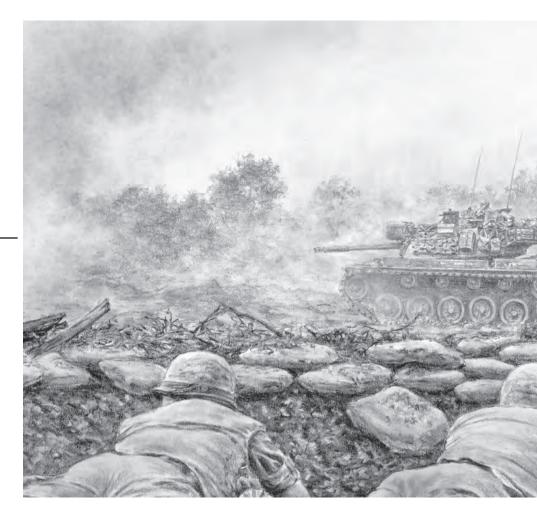
"LTC John Bender, the firebase commander commented, 'It was just like the 10 o'clock late show on TV. The U.S. Cavalry came riding to the rescue."

(HE) rounds at point-blank range. Enemy troops were within hand-grenade range of the command bunker and 5 meters of the 3/22 Infantry battalion aid station. ⁴⁵ Having borne the brunt of the enemy's repeated attacks, B Company was on the verge of being overrun. A Company, under moderate pressure, still held its original positions, but in some places the Viet Cong were within 15 meters of their line. ⁴⁶

Into the Maelstrom

With C Company, 2-34 Armor leading the task force main body across the Suoi Samat, the 2d Battalion, 12th Infantry, had already moved up on foot and were just to the south of FSB Gold in the wood line.⁴⁷ C Company, 2/22 Infantry, with its attached tank platoon, had also made it to the edge of the trees in good time. The situation at the firebase had rapidly gotten worse. Viet Cong soldiers continued to pour from the woods from the north and east.48 Unknown to the Viet Cong troops, 2-34 Armor and 2/22 Infantry were consolidating in the wood line preparing to assault. The plan called for C-2/22 Infantry to attack northwest through the FSB and swing north.⁴⁹ The task force main body would skirt the wood line, moving east and emerge swinging north, immediately spreading out to have room for fire and movement. They would continue along the wood line, destroying all enemy forces to secure the eastern perimeter and prepare for a counterattack.

As the end of the column moved up to within 50 meters of the wood line preparing to counterattack, the defenders at FSB Gold were in dire straits. Some of the troops had begun to destroy their weapons to prevent capture. Along the B Company, 3/22 Infantry's sector, many troops were down to one grenade and two magazines a piece. 50 Small pockets of men, out of ammunition, had resorted to using weapons or entrenching tools as clubs in desperate battles for survival. The 2/12



Infantry began its attack by firing directly into the Viet Cong flank as they emerged at the southern end of the clearing. Artillery fire was immediately adjusted to prevent hitting friendly troops. ⁵¹ As the Viet Cong continued to advance through the smoke a new sound was added to the chaos, growing louder from the south.

Fire and Maneuver

At 0912 hours, with canister rounds exploding among the troops in the open and machine guns blazing, the tanks and APCs broke cover of the trees and began to fan out on line, suddenly throwing the enemy off balance.⁵² Skirting the tree line toward the north, one tank crewman observed; "It was like shooting fish in a barrel."53 Responding to this new threat, groups of Viet Cong began to rush the vehicles but were quickly crushed by the rolling juggernaut. Others foolishly attempted to climb onto the tanks and had to be taken off with pistols, hand grenades, and even pioneer tools. Anatol Kononenko, a 4.2 mortar forward observer with 2/22 Infantry, observed two tanks actually fire at each other using canister rounds to remove Viet Cong troops from their tanks.54 Private First Class Gary Lapp, of C Company, 2-34 Armor, was assigned as loader on C-25. Moving into the battle area, Lapp recalls the battle:

"As the tanks were racing up and down the trails to get to Gold, I was down inside. The center of gravity on a tank is so high that once it starts bucking back and forth, it is very difficult to stay up top in the loader's hatch without getting thrown around. Down inside, I was having a hard time holding on to anything that would give me support. Sitting on the loader's seat with feet spread apart for directional support, my right hand was on the steel grid that protects the radios from the spent 90mm shell casings and my left hand was placed on the gun carriage. That was the best place to be. Once we broke through onto the LZ, Staff Sergeant Badoyen told me to get ready. One of the prides I had in being a lowly loader was that I knew how to keep the coax machine gun going, and I could load the main gun so fast it sounded like a semiautomatic. I remember racing across the opening for some distance before we opened fire. I also remember soldiers of the 77th Artillery, waving and cheering as we raced around them moving northeast. We had still not opened fire and were now in the clear-



ing. I jumped up in the loader's hatch and I could see the black grill doors of three other tanks in front of us. Once I had jumped down inside to begin loading the main gun and keep the coax from jamming, I kept thinking: 'This is it, this is real combat. I wonder if an RPG will come through the front slope and kill us all. I hope Staff Sergeant Badoyan has his pistol ready to keep anybody from jumping up on the tank and throwing a grenade inside. I just kept loading that main gun and kept the slack belts feeding into the coax. I recall the empty shell casings falling on the floor and using my boot to keep them away from the turret ring. When several shell casings stack up, they can roll into the drive gear and jam it up."55

Fatal Blows

Stunned by the unexpected armored onslaught, Viet Cong troops hesitated, unsure of what to do next. Now fighting a threat from two directions, the only logical course of action was to withdraw before being enveloped and cut off. The Viet Cong were truly between the hammer and anvil. The majority of enemy troops were caught in the open and were cut down by direct fire before they could reach the cover of the trees. A mechanic, aboard the A Company, 2-34 Armor tank recovery vehicle, sat calmly on top, filming the action with his home movie camera while the rest of the crew threw grenades and fired their .50-caliber machine gun at the fleeing enemy.56 With the Viet Cong on the run, artillery was immediately shifted farther east into the wood line in an attempt to kill as many enemy as possible with indirect fire.⁵⁷ C Company, 2/22 Infantry, moving through the FSB, found a Viet Cong aid station just to the north of FSB Gold.⁵⁸ Tying in with 2/12 Infantry, the armored vehicles quickly established a firing line outside the original perimeter and consolidated their combat power, preparing for a counterattack.59

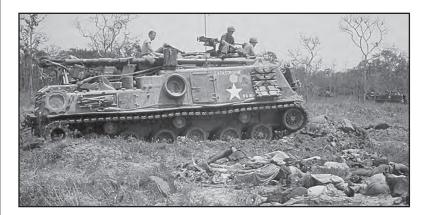
Once it was established that the Viet Cong had broken contact, treatment of the wounded and policing of the battlefield began. C Company, 2/22 Infantry located the missing ambush patrol. Four of the men were dead, but one soldier had miraculously survived. 60 Captured enemy soldiers and documents provided a wealth of information.

With 2,500 Viet Cong soldiers participating in the attack, 647 now lay dead

with another 200 believed killed and dragged away.⁶¹ Friendly casualties included 31 killed in action and 187 wounded.⁶² Due to the large numbers of enemy dead, a mass grave was scooped out by one of 2-34 Armor's M88 recovery vehicles.⁶³ Surveying the devastation, the survivors at FSB Gold estimated that if the armor would had arrived 15 minutes later, the Viet Cong would have overrun the base.⁶⁴

LTC John Bender, the firebase commander commented, "It was just like the 10 o'clock late show on TV. The U.S. Cavalry came riding to the rescue." Master Sergeant Andrew Hunter recalled, "They haven't made a word to describe what we thought when we saw those tanks and armored personnel carriers. It was *devine*!" For their participation in the battle, the 2d Battalion, 34th Armor was awarded the Presidential Unit Citation.

The battle of FSB Gold was over, but not forgotten. The Viet Cong had lost more soldiers at Suoi Tre than any other single engagement of the war. The 9th Viet Cong division, although decimated on 21 March 1967, would fight in other battles throughout the rest of the war.⁶⁷ Once the smoke had cleared, after-action







Suoi Tre...The Aftermath

Above, an M88 digs a mass grave for the more than 600 Viet Cong casualties. A Vietnamese advisor, above right, with some of the hundreds of weapons captured.

RPGs were rarely seen until this battle. Some captured rounds are seen at left.

At right, the calling card of C Company, 2-34 Armor.



reports of the battle immediately concluded that the use of armor had turned the tide of battle in the Americans' favor. Initially hesitant about using armor in the jungle, senior officers were beginning to rethink their tactics in favor of the use of combined arms teams whenever possible. The geography of Vietnam would pose special problems for armored forces. When properly employed, however, tanks and mechanized infantry proved to be a powerful combat multiplier, as was the case at Suoi Tre.



Notes

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²Harry G. Summers, *Historical Atlas of the Vietnam War*, September 1995, p. 118.

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 $^{16}\mathrm{Anatol}$ Konenenko, eyewitness account, (forward observer), HHC, 2-22 Infantry, 1 June 1998.

¹⁷LTC (Retired) Robert L. Hemphill, Vietnam Magazine, Feature article, "VC Onslaught at Fire Support Base Gold," December 1998, p. 22.

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²⁴Stailey.

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²⁸Vietnam Magazine, p. 25.

²⁹Ibid.

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32 cm.

³²Gehr, p. 2.

³³Vietnam Magazine, p. 26.

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³⁸Ibid.

³⁹Starry, p. 101.

⁴⁰Vietnam Magazine, p. 26.

⁴¹Time Magazine, p. 26

⁴²Stailey conversation.

⁴³Vietnam Magazine, p. 27. ⁴⁴Ibid.

⁴⁵Ibid.

⁴⁶Ibid.

⁴⁷Stailey conversation.

⁴⁸Vietnam Magazine, p. 27.

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⁵⁰Hollister account.

⁵¹Vietnam Magazine, p. 28.

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53Konenenko account.

⁵⁴Ibid.

⁵⁵Gary Lapp, (loader C-25), C Company, 2-34 Armor, 1966-67 eyewitness account, correspondence dated 21 June 1999.

⁵⁶Ibid.

⁵⁷Starry, p. 101.

⁵⁸Vietnam Magazine, p. 28.

⁵⁹Ibid.

⁶⁰Ibid.

⁶¹Ibid.

⁶²Ibid.

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 $^{64}\rm{Eric}$ M. Bergerud, Red Thunder Tropic Lightning, Viking-Penguin, March 1994, p.159.

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 $^{67}\mbox{\it Vietnam Magazine}, pp. 26-27.$

First Sergeant Christopher P. Worick enlisted in the Army in 1981 as an armor crewman. His assignments include 3d Squadron, 8th Cavalry, 8th Infantry Division; 5th Squadron, 12 Cavalry, U.S. Army Armor Center; 1st Battalion, 68th Armor, 8th Infantry Division; 3d Battalion, 69th Armor, 24th Infantry Division; and Great Lakes Recruiting Battalion, Recruiting Command. He is currently assigned as the first sergeant of C Company, 2-34 Armor at Fort Riley, Kansas.

Armor Task Force to Khe Sanh

by Lieutenant Colonel Carmelo P. Milia

(Reprinted from May-June 1970)

Few armor units in Vietnam have received a more exciting or challenging mission than "get through to Khe Sanh and conduct a reconnaissance-in-force to the Laotian Border." This was the assignment given on 14 March 1969 to 1st Battalion, 77th (1/77) Armor, by the XXIV Corps Commander, Lieutenant General Richard G. Stilwell. Necessary armor assets were to be provided from 1st Brigade, 5th Infantry Division (Mechanized), the largest and most versatile armor command in Southeast Asia.

Highway 9, the only road to Khe Sanh, had last been used in early July 1968 when the last vehicles of the 3d Marine Division traversed it after the siege had been lifted in the spring of 1968. The road was 26 kilometers of deteriorating asphalt laid along a twisting mountain defile. Every bridge and culvert had been destroyed; numerous landslides had cut the one-way surface. The first 10 kilometers from the fire support base at Calu was a relatively flat road, but the next 8 kilometers of road contained many hairpin turns as it climbed the 45-percent slope to the Khe Sanh Plateau. Along most stretches, the road was so narrow that the tank turret could not be rotated and the tank gun could not be elevated to cover the ridge lines on either side of the gorge.

Before the main body of the task force could move, it was necessary to reconnoiter and reconstruct the road while simultaneously providing security and continual fire support for the lead elements of the force. As commanding officer of the task force (since named Task Force Remagen), I was given complete freedom in selecting the task organization needed to accomplish the mission. In addition to 1/77 Armor's organic assets, I requested and received a mechanized infantry company (Company B, 1st Battalion, 61st Infantry), a 105mm self-propelled (SP) artillery battery (Battery C, 1st Battalion, 40th Artillery), a reinforced platoon of armored engineers (Company A, 7th Engineers), and a section of 40mm "dusters" (Battery C, 1st Battalion, 44th Artillery). Although gunships and command and control ships were requested, they were not available from the 3d Marine Division, the senior headquarters controlling the operation.

The concept of the operation was to scout, clear, and rebuild the road through to Checkpoint Golf before any heavy combat vehicles would be allowed on the narrow road. Checkpoint Golf was critical because it was the first point on the road where one vehicle could pass another and was, in fact, a clearing large enough for the artillery battery and 4.2 mortar platoon to occupy firing positions.





The mission was a classic for an armored force; the execution was "out of the book." The first unit to run the gauntlet was the battalion scout platoon mounted in M113 armored cavalry assault vehicles (ACAVs). This platoon reconnoitered by fire every potential ambush site, swept the road for mines, and provided security to the armored engineer platoon that followed.

The engineer platoon leader used every technique in his engineer bag of tricks. Every gap was quickly spanned by the armored vehicle launcher bridge (AVLB), which permitted passage of an engineer squad and a bulldozer to the next obstacle that might require construction of a bypass or culvert or the reduction of a roadblock or landslide. By leapfrogging two AVLBs, it was always possible to work on at least two obstacles simultaneously. When a bypass around the AVLB site had been constructed, the scissors bridge was picked up on the far side and carried to the next gap. The feats of the engineer platoon were prodigious; working nearly 18 hours a day for 2 days, the platoon mineswept 26 kilometers of road, constructed 13 bypasses capable of carrying class-60 loads, launched and

recovered the AVLB six times, and reduced 10 obstructions. Two enemy antitank mines were detected and destroyed.

Progressing faster than the most optimistic forecast, the scout/ engineer team reached a night laager position at Checkpoint Golf by twilight of the first day, 17 March 1969. The bivouac position was ringed by artillery defensive concentrations fired from the main body assembly area at Calu, which was 10 kilometers away.

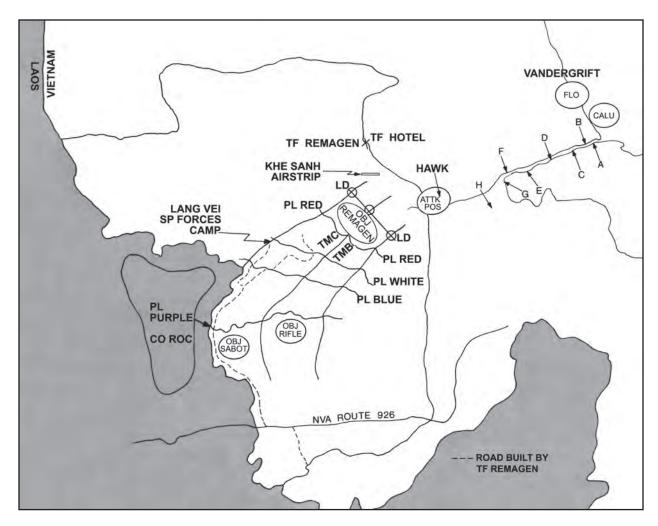
At dawn of the second day, the mechanized infantry company and the 105th SP artillery battery began their displacement forward to Checkpoint Golf. At this point, the infantry dismounted and quickly secured the high ground while the artillery made available fire support necessary for the continued trailblazing of the scout engineer team. Checkpoint Golf was the last checkpoint on the valley floor. From here, the road ascended steeply to the Khe Sanh Plateau, a rise of 1,250 feet. The scouts were now starting up "Ambush Alley," where a year earlier the NVA easily severed the ground lines of communications to the besieged Marines at Khe Sanh.

One extremely critical obstacle remained. Checkpoint Hotel, a high-level truss bridge, had been destroyed and the bypass pontoon bridge had been washed away. The raging river at this point was far too deep for fording. If the gap were too wide for the 60-foot AVLB, the requirement for major bridge construction would grind Task Force Remagen to a halt. Because the bridge abutments had also been destroyed, aerial photos could not be used to accurately measure the gap. When the AVLB opened its scissors bridge, all fingers were crossed. A hearty cheer went up as the bridge touched the far side with 3 feet to spare. Task Force Remagen was almost ready to roll.

By darkness of the second day, the scout/engineer team was on the plateau at attack position Hawk. The engineer platoon leader radioed that he was looking down at the most beautiful valley in Vietnam; the scout platoon leader radioed that he was looking ahead at the eeriest battlefield in the world. The ground, honeycombed by B52 strikes, looked much like the surface of the moon — mines, duds, fortifications, barbed wire, and rotting parachutes were everywhere. With the artillery and mortars in position at Checkpoint Golf, and the high ground between Golf and Hotel secured by the mechanized infantry, we were ready to pass the armor through.

In spite of the engineers' effort expended to improve the road, it had been decided that only track-laying vehicles would go on Task Force Remagen. Any type of wheeled vehicle was prohibited. The force consisted of 86 track-laying vehicles including tanks, armored personnel carriers (APCs), armored mortar carriers, bulldozers, M88 track recovery vehicles, M577 command post (CP) vehicles, and a combat engineer vehicle. While wheeled vehicles may have simplified the control and logistics challenges, the terrain was such that they would not have made the trek.

Company C, 1/77 Armor jumped off at 0800 hours on the third day, and was followed by the task force command group and combat trains. In anticipation of ambush and mechanical breakdown, the order of march was arranged so that similar weight class vehicles traveled as buddies. This order of march ensured that disabled vehicles would always have an adjacent vehicle that could push or pull them off the road and into the chasm below.



The march went without incident. By 1100 hours, the scouts had reached Khe Sanh City. All task force elements had closed on the plateau within 5 hours. By noon on 19 March, Task Force Headquarters at Khe Sanh City was visited by the XXIV Corps commander. Within minutes, U.S. Army armor was racing for the Lang Vei Special Forces camp and the Laotian border. With the removal of the AVLB at Hotel, the ground lines of communications were once again cut. The 1/77 Armor was an independent task force operating deep in enemy territory and being supplied completely by helicopter.

After reaching Khe Sanh, the task force was given a new mission — to turn southward to cut Highway 926, which was an enemy road leading from the Laotian border. For the new mission, the task organization was restructured to form one tank heavy team and one mechanized heavy team. The battalion's 4.2 mortar platoon was attached to the leading tank team so it would be in firing position during the displacement forward of the artillery battery.

Two factors were to have a heavy bearing on our modus operandi after reaching the Khe Sanh Plateau: the Co Roc and a purported north-south road on the RVN side of the border. The Co Roc was a ridge of mountains, which completely dominated the intended axis of advance. The Co Roc lies in Laos, parallel to the border and the Xe Pon River. From this dominant ridge, the enemy could observe every vehicle; in fact, it was



"Task Force Remagen withdrew from Khe Sanh Plateau on 28 April after having proved its value. For 47 days, a conventional armor/mechanized force had operated in the northwestern mountains of South Vietnam along the Laotian border. One large cache was found; and numerous small skirmishes and two significant engagements were fought. The 1st Infantry Brigade, 5th Infantry Division (Mechanized) had proven again that armor can operate over extended distances without ground lines of communications."

the caves of the Co Roc that sheltered the long-range 130mm field guns, which pounded the Khe Sanh airfield during the historic siege. Enemy possession of this critical terrain demanded that the task force move continuously before enemy direct and indirect fire could be brought to bear.

The second factor stemmed from an intelligence report, which indicated that a road existed along the Xe Pon River and the intended route of advance. If true, such a road would materially assist progress and allow the leading tank heavy team to cut Highway 926 in a few hours. As it developed, the reported highway did not exist; the search for this road committed the tank team to blaze a trail within a few hundred meters of the Laotian border and the Co Roc. The new pioneer road thus exposed the entire task force as it displaced southward. If the road had been built further to the east, the task force would have been less vulnerable to enemy dispositions on the Co Roc. As the task force pushed on closer to the Laotian Border, its lead elements passed through the abandoned Lang Vei Special Forces Camp. The tankers took the opportunity to inspect four PT76 tanks, all of which had been destroyed. Also found was an abundance of old munitions and destroyed equipment of both NVA and friendly forces.

It took an additional 5 days of scouting, trailblazing, and roadbuilding to reach and cut Highway 926, the enemy road from Laos. From 26 to 30 March, both teams conducted extensive search-and-destroy operations north and south of Route 926. Approximately 100 square kilometers were searched with only small enemy contacts.

It would have been desirable if Task Force Remagen could have simply kept going west into Laos or southeast back into the A Shau Valley. Political considerations prevented the first course of action; an impassible mountain ridge discouraged serious consideration of the latter. Accordingly, the task force had to withdraw over the same route on which it had advanced. The enemy knew this; he could permit the advance in the full knowledge that sooner or later the task force would have to run the Xe Pon gauntlet again.

For the next month, Task Force Remagen reconnoitered at will all over the Khe Sanh Plateau. Fire support bases that had heretofore been accessible only by helicopter were assaulted and occupied by tank/infantry companies. During this phase, elements of 1/77 Armor were relieved in place by the 1st Battalion, 61st Infantry (Mech) and an ARVN armored cavalry troop. At one time, five armored companies (2 tank, 2 mech, and 1 cavalry) and two SP artillery batteries were operational in a 200 square kilometer area. During this period, one large ammunition cache was found, and two major engagements were fought in which 73 NVA were killed.

Because the bridges behind Task Force Remagen were removed, the operation was a test of the ability to resupply and maintain armored forces without ground lines of communications. The brigade established a forward support element at Vandergriff Combat Base where supplies and repair parts were staged for shipment by helicopter. Combat trains consisted of tracked medical, maintenance, and resupply vehicles; the majority of the mechanics; and a portion of the battalion support platoon. Field trains were located at Vandergriff.

Not once was the commander's operational concept restricted because of logistics. This logistics achievement can be credited to the S4 and Company D commander. It should be noted that 1/77 Armor is organized with a separate support company (Company D), which has the effect of splitting the old head-quarters and service company. With the S4 operating from the field trains area and Company D commander operating with the combat trains, every logistics requirement was fulfilled. The operation proved the wisdom of the separate support company concept.

An average of 15 Chinook loads per day was required for resupply. The following is a summary of the major supplies required to support the task force:

- 93 pallets of rations.
- 76,000 gallons of Mogas and diesel.
- 2,000 gallons of assorted POL.
- 18,000 rounds of major caliber ammunition.
- 225,000 rounds of small arms ammunition.
- 50 major component repair parts, such as engines, transmissions, track, final drives, and starters.

Vehicle maintenance and organizational and direct support repair were continuous. With the tactical need to move almost daily, crews and mechanics worked around the clock, and often under enemy fire, to repair and evacuate damaged vehicles. During a 3-day period, mechanics of 1/77 Armor pulled 13 power packs for maintenance. The M48A3 power packs were flown in by CH47 Chinook and direct exchanged with monotonous regularity. Five vehicles (one M48A3 tank, one M88 VTR, one M113 APC, one M548, and one bulldozer) were combat losses and solemnly buried near the Khe Sanh airstrip.

Task Force Remagen withdrew from Khe Sanh Plateau on 28 April after having proved its value. For 47 days, a conventional armor/mechanized force had operated in the northwestern mountains of South Vietnam along the Laotian border. One large cache was found; and numerous small skirmishes and two significant engagements were fought. The 1st Infantry Brigade, 5th Infantry Division (Mechanized) had proven again that armor can operate over extended distances without ground lines of communications. In moving at will from Khe Sanh to Route 926 and along the Laotian border, Task Force Remagen has given the enemy cause for concern; his lines of communications in Laos are vulnerable. A tank/infantry/artillery force, which is totally supplied by air and therefore severed from its logistics tail, could enter Laos, turn south, and strike along the Ho Chi Minh Trail.



Lieutenant Colonel Carmen P. Milia, General Staff (Armor), is a 1950 graduate of the United States Military Academy and holds a Master of Science in Aeronautical Engineering from the Georgia Institute of Technology. He served in the 64th Tank Battalion, 3d Infantry Division during the Korean War. He has served in seven tank battalions; in USATCA, as an instructor at the Armor School; and with the CDC Armor Agency. Prior to commanding the 1st Battalion, 77th Armor in Vietnam, he was the DA Systems Staff Officer for the Sheridan/Shillelagh, and an ACSFOR project officer for air cushion vehicles. He is now assigned to the Office of the Chief of Research and Development.

The Battle of An Bao II

by Captain Timothy J. Grogan

(Reprinted from July-August 1969)

This article, written by Captain Grogan, then commander, Company B, 1st Battalion, 69th Armor, illustrates the decisive employment of an armor unit in mounted combat against North Vietnamese Army (NVA) forces in a jungle and rice paddy environment.

During April 1968, the 1st Battalion, 69th Armor, assigned to the 4th Infantry Division, moved from Pleiku in the central highlands to the area between An Khe on Highway 19 East and the coastal plain region from Qui Nhon North to the Bong Son River Plain. With the advent of the monsoon season in the Pleiku area, the battalion was placed under the operational control of the 173d Airborne Brigade on the east coast where the dry season prevailed. The 173d had recently gained control of the 1st Battalion, 50th Infantry (Mechanized), which was based at, and operating out of, Landing Zone (LZ) Uplift. Our company, Company B, 69th Armor, was placed under the operational control of the mechanized infantry battalion to assist in reconnaissance-in-force and search and clear operations.

During the evening of 4 May, companies of the infantry battalion, along with Company B, were recalled to LZ Uplift to provide security against an expected enemy attack. Scattered contacts throughout the area were made during the night; however, no significant action developed. The resulting disposition of friendly forces during the late morning hours of 5 May was Company A, 1st Battalion, 50th Infantry (minus one platoon) operating in a remote area. Company A's detached platoon was conducting a mounted reconnaissance 5 kilometers north of the battalion base. Companies B and C of the infantry were doing maintenance and securing LZ Uplift, respectively. Company B was also standing down in LZ Uplift after having sent its third platoon to conduct a separate operation 26 kilometers to the northwest at LZ Pony.

At approximately 1100 hours on 5 May, the infantry platoon operating just north of LZ Uplift was attacked by an overwhelming NVA force. The attack came with such ferocity and superiority in numbers (the enemy had better than a

10-to-1 advantage and the element of surprise) that virtually all the armored personnel carriers were rendered inoperable and the platoon's infantrymen were either casualties or confused and scattered.

The battalion commander immediately sent Company C, the fastest reaction force he had available, to relieve the besieged platoon. Company C entered the contact site from the east side only to find itself surrounded and taking heavy casualties. In the meantime, the battalion commander had issued a fragmentary order (FRAGO) to move our tank company minus into the contact area. We departed LZ Uplift at 1205 hours, some 20 minutes after the warning order was issued, and proceeded north on Highway 1 to locate the contact site. After turning west off Highway 1 and miring two tanks, which were left for recovery, the remainder of the column (nine tanks) moved along the only available route into the area of the raging battle. The main battle site was a trail running through the semi-abandoned village of An Bao II.



No sooner than we entered the jungle village, we received sniper and automatic weapons fire. One tank commander was wounded but not incapacitated. The tanks immediately attacked through the enemy positions letting loose a high volume of canister rounds and machine gun fire. When the tanks broke out of the jungle area into a wide rice paddy area, it was immediately obvious that the infantry forces present were engaged in a large open area approximately 1,000 meters long and 600 meters across. The NVA forces completely surrounded the outnumbered American forces and had the further advantage of fire superiority. American infantrymen had dismounted from their carriers and were fighting from what little cover and concealment the open rice paddies afforded. Several armored personnel carriers had been destroyed and the infantry forces immediately informed the relieving tankers that they were nearly out of ammunition. My tank company immediately formed a defensive perimeter around the infantrymen and proceeded to gain fire superiority over the enemy force.

This relief of the engaged forces constituted phase one of a five-phased operation, which was destined to continue for 3 days. The first phase lasted approx-

imately 3 hours while the tanks attempted to suppress enemy fire, retrieve casualties, and prepare to counterattack. The NVA forces in the area did not withdraw that afternoon.

Phase one was concluded faster than anticipated because medical evacuation helicopters could not fly into the contact site and the combined force continued to take casualties despite friendly fire superiority. Finally, the combined elements moved to the northeast for ammunition resupply and casualty evacuation. Thus began phase two, which consisted of resupply and preparation for a late afternoon counterattack. While so occupied, the combined force was attacked twice by small groups of NVA; however, no significant contact developed and phase two was completed with minimal difficulty. During phase two, the infantry battalion commander reinforced the engaged forces by moving previously uncommitted Company B, 50th Mechanized Infantry, to the resupply site. He then designated me the ground task force commander and issued a FRAGO for a counterattack into the same area of the earlier contact. The battalion commander helped control the operation from the air and dealt with the ground forces through my command post.

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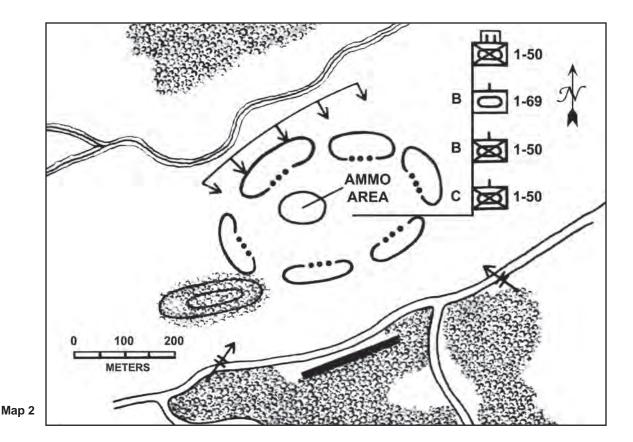
Map 1

The mission of the task force as planned was to counterattack at 1600 hours through enemy forces to the main enemy position, destroy the enemy force, and retrieve any casualties remaining in the area of the earlier contacts. The jungle bordering the planned counterattack was dense enough to preclude mounted movement. However, time was critical, obviating a dismounted sweep to secure the flank. For these reasons, the task force formed a modified wedge to shield dismounted troops and used intense reconnaissance-by-fire techniques. Armored personnel carriers armed with flamethrowers were protected in the center of the formation since we planned to employ them or either flank against targets of opportunity.

The attack, constituting phase three, moved approximately 500 meters before the enemy brought heavy direct fire to bear on the formation. The task force, assisted by air force air strikes, was able to gain fire superiority, but could never completely silence the enemy's weapons. After advancing another 800 meters along the planned attack route, it became obvious, since the infantry was taking more casualties, that a large enemy force was still present on all sides. I decided - after conducting several attacks to the flanks from the main formation that the task force had to establish a night location because darkness was approaching. It was my intent to move through the afternoon's resupply area to another place further to the east, which afforded better fields of fire for a night forward operations base. We could then counterattack again in the morning. When two tanks became mired in the resupply area, I discovered that the rice paddies had been flooded during the counterattack and the task force was committed to a less than ideal defensive position.

Phase four, establishment and defense of the night forward operations base, began with consolidation of positions, assignment of night fire sectors, and first echelon maintenance. Late in the afternoon, the third platoon of the tank company had been ordered to leave LZ Pony and report to me in the night position. The arrival of this platoon raised the total number of tanks in the defensive perimeter to 14. At this time, the opposing force was estimated to be of regimental size and have an unusual number of antitank weapons.

Our on-hand ammunition had become critically short and resupply had been requested. By the time a tactical emergen-



cy was declared and aircraft could fly, the first CH47 unloaded the initial cargo net at 0030 hours, 6 May. All ammunition was offloaded in the center of the perimeter while infantry and tank troops attempted immediately to break down ammunition cases and distribute large-caliber rounds and explosives as quickly as possible. Because the force inside the defensive area now consisted of a complete tank company and two mechanized infantry companies, the amount

of ammunition in the perimeter grew

faster than it could be distributed.

By 0330 hours, the Chinooks had departed. Our crews were getting their ammunition when the enemy triggered an attack from two heavy machine gun emplacements on the south and then maneuvered toward the perimeter from the north side with antitank rockets. Even though harassing and interdiction fires by supporting artillery and closein harassing fires by M79 grenadiers had been almost continuous since darkness had fallen, the enemy had successfully maneuvered a battalion into position for a night attack. Our previously registered defensive concentrations were fired in support of the perimeter forces while tanks and the infantry's dismounted .50-caliber machine guns alternated coverage of overlapping sectors to conserve ammunition. Within 30 seconds of the start of the night attack, the enemy fired a mortar round into the middle of the perimeter, which detonated part of the ammunition stockpile, wounding several soldiers. The exploding of uncrated ammunition continued for nearly 2 hours.

The close-in fire of the tanks firing canister helped repulse the initial assault as the task force's interlocking machine gun fire helped gain decisive fire superiority over the enemy. During the attack, the battlefield was lighted by artillery and air-dropped flares, as well as the white and infrared light of the tank company's xenon searchlights. Phase four was concluded at daybreak when the enemy was forced to withdraw.

Phase five, a coordinated attack into the vicinity of the previous day's action, had to be postponed until resupply had been completed. During the lull in the battle, the infantry battalion commander reinforced the ground forces with Company A, 50th Mechanized Infantry, minus the platoon that had been all but decimated the day before. I was allocated eleven air strike sorties in preparation for the ensuing attack. At 0800 hours, the task force attacked as planned, finding no enemy resistance.

A 2-day operation ensued in which the only enemy contact made was the taking of NVA defectors who sought out the maneuvering task force. These Chieu Hois indicated that the American force has been attacked by a North Vietnamese regiment whose mission was to destroy the armored personnel carriers of

the 1st Battalion, 50th Infantry. To accomplish its mission, the regiment had been especially equipped with rocket propelled grenade (RPG) 2 and 7 rockets as primary weapons. It was also learned that the regiment suffered heavy casualties throughout its first day and night of the battle. It was also said that the NVA force was in position to ambush the second morning attack of the task force when air strikes decimated the enemy force and caused the retreat of its remaining members. Total enemy killed in the 2-day battle exceeded 300, while our combined arms task force had 20 dead and 80 wounded; two of those killed and approximately 10 wounded were tankers.

The mobility, firepower, and shock action of the tanks were instrumental in breaking through the enemy force, relieving the surrounded infantry and continuing a protracted engagement against a well-armed enemy in terrain unfavorable to us. The armor protection of the tanks and the flexibility of the organic communications systems permitted me to control several units on the ground while fighting from a tank. The teamwork and close cooperation of armored and mechanized infantry forces proved to be a devastating combination, which generated overwhelming combat power in the face of what might seem insurmountable odds.



Additional Counterinsurgency Works

More information on counterinsurgency is available at the Combined Arms Research Library (CARL). In particular, older studies that treated the subject in previous eras are:

- Master's Thesis: "Armor Organization for Counterinsurgency Operations in Vietnam," Army Corporate Study, February 1966, online at http://stinet.dtic.mil/oai/oai?verb=getRecord-8metadataPrefix=html&identifier=AD0371338.
- Master's Thesis: "Armor in Low-Intensity Conflict: What Is the Best Tactical Doctrine for Armor in Counterinsurgency?" CSC 1992, Major Jeffrey L. Wilkinson, online at http://www.globalsecurity.org/military/library/report/1992/WJL.htm.
- Master's Thesis: "Armor in Low-Intensity Conflict: What Is the Best Tactical Doctrine for Armor in Counterinsurgency?" SAMS Corporate Study, Michael R. Matheny, 7 December 1987, online at <a href="http://cgsc.cdmhost.com/cdm4/item_viewer.php?CISOROOT=/p4013coll3&CISOPTR=2058&CISOBOX=1-205

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