THE HEAVY BRIGADE COMBAT TEAM IN COIN: AN ASSESSMENT CAPABILITIES TO CLEAR-HOLD-BUILD-AND SUSTAIN SUCCESS

A thesis presented to the Faculty of the U.S. Army Command and General Staff College in partial fulfillment of the requirements for the degree

EN

WO

MASTER OF MILITARY ART AND SCIENCE General Studies

RALPH W. OVERLAND, MAJ, USA B.S., Arizona State University, Tempe, Arizona, 1998

by



Fort Leavenworth, Kansas 2009-02

Approved for public release; distribution is unlimited.

REPORT DOCUMENTATION PAGE					Form Approved
					OMB No. 0704-0188
sources, gatherin other aspect of the Information Oper notwithstanding a OMB control num	ng and maintaining the dans his collection of informati- ations and Reports (070 any other provision of law hber. PLEASE DO NOT	ata needed, and comple on, including suggestion 4-0188), 1215 Jefferson v, no person shall be su RETURN YOUR FOR	eting and reviewing this c ns for reducing this burde n Davis Highway, Suite 12 ubject to any penalty for fa M TO THE ABOVE ADDI	ollection of information n to Department of De 204, Arlington, VA 222 siling to comply with a	he time for reviewing instructions, searching existing data . Send comments regarding this burden estimate or any fense, Washington Headquarters Services, Directorate for 202-4302. Respondents should be aware that collection of information if it does not display a currently valid
	DATE (DD-MM-Y	,	ORT TYPE		3. DATES COVERED (From - To)
11-12-200	9	Maste	r's Thesis		FEB 2009 – DEC 2009
4. TITLE AN	D SUBTITLE				5a. CONTRACT NUMBER
The Heavy Brigade Combat Team in COIN: An Assessment of Capabilities to Clear-Hold-Build-and Sustain Success			of 5b. GRANT NUMBER		
1					5c. PROGRAM ELEMENT NUMBER
6. AUTHOR((S)				5d. PROJECT NUMBER
MAJ Ralph W. Overland					5e. TASK NUMBER
					5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Command and General Staff College ATTN: ATZL-SWD-GD)	8. PERFORMING ORG REPORT NUMBER
	enworth, KS 66 RING / MONITORI		ME(S) AND ADDR	RESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
					11. SPONSOR/MONITOR'S REPORT NUMBER(S)
14. ABSTR Are Heavy capabilities execute the 24.2, <i>Tactio</i> HBCTs tha Baghdad se part analysi lines of effect time in term The HBCT improved th	Brigade Comba to clear, hold, b clear-hold-build <i>cs in Counterins</i> t conducted CO courity plan. To a s which include ort, and a DOTM ns of capabilities has adapted in r raining, impleme	t Teams (HBCT puild, and sustai d COIN approad <i>urgency</i> . The re IN from the beg answer the ques d a tactical asse d a tactical asse d a tactical asse d a tactical asse d a tactical asse answer the ques d a tactical asse answer the ques	n success? This i ch described in F esearch approach ginning of the Irac stion of whether I essment wargame es assessment. The iblers that improve e OIF 1 to meet to rine, and received	research examinied Manual (F used Iraq as a qi insurgency t HBCTs are effet a cross walk his model show yed their effect: the demands of a ugmented eq	cy (COIN) operations with the ned the modular HBCT's capabilities to M) 3-24, <i>Counterinsurgency</i> , and FM 3- case study with three case events about o the 2007 surge in support of the ective in COIN, this study used a three of capabilities against doctrinal COIN ved improvements made to HBCTs over iveness in the COIN environment.
to assess th provide the 15. SUBJEC Heavy Bri	e modular HBC capabilities to c T TERMS	T's effectivenes lear, hold, build Feam, HBCT,	ss in COIN based d, and sustain suc	on its structur	e, equipment, and skill sets available to ounterinsurgency doctrine,
	TY CLASSIFICAT		17. LIMITATION	18. NUMBER	19a. NAME OF RESPONSIBLE PERSON
			OF ABSTRACT	OF PAGES	
a. REPORT	b. ABSTRACT	c. THIS PAGE			19b. PHONE NUMBER (include area code)
(U)	(U)	(U)	(U)	127	
(U)	(U)	(U)	(U)	127	Standard Form 298 (Rev. 8-98) Prescribed by ANSI Std. Z39.18

ii

MASTER OF MILITARY ART AND SCIENCE THESIS APPROVAL PAGE

Name of Candidate: Major Ralph W. Overland

Thesis Title: The Heavy Brigade Combat Team in COIN: An Assessment of Capabilities to Clear-Hold-Build-and Sustain Success

Approved by:

_____, Thesis Committee Chair Thomas G. Clark, Ph.D.

_____, Member __

_____, Member Lowell E. Solien, M.S.

Accepted this 11th day of December 2009 by:

_____, Director, Graduate Degree Programs Robert F. Baumann, Ph.D.

The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

HEAVY BRIGADE COMBAT TEAM IN COIN: AN ASSESSMENT OF CAPABILITIES TO CLEAR-HOLD-BUILD-AND SUSTAIN SUCCESS, by Major Ralph W. Overland, 127 pages.

Are Heavy Brigade Combat Teams (HBCTs) effective in counterinsurgency (COIN) operations with the capabilities to clear, hold, build, and sustain success? This research examined the modular HBCT's capabilities to execute the clear-hold-build COIN approach described in Field Manual (FM) 3-24, *Counterinsurgency*, and FM 3-24.2, *Tactics in Counterinsurgency*. The research approach used Iraq as a case study with three case events about HBCTs that conducted COIN from the beginning of the Iraqi insurgency to the 2007 surge in support of the Baghdad security plan. To answer the question of whether HBCTs are effective in COIN, this study used a three part analysis which included a tactical assessment wargame, a cross walk of capabilities against doctrinal COIN lines of effort, and a DOTMLPF capabilities assessment. This model showed improvements made to HBCTs over time in terms of capabilities, as well as enablers that improved their effectiveness in the COIN environment.

The HBCT has adapted in many ways since OIF 1 to meet the demands of the COIN environment. HBCTs have improved training, implemented new doctrine, and received augmented equipment and special skill sets to improve their effectiveness in COIN. The purpose of this study was to explore the problem of insufficient research to assess the modular HBCT's effectiveness in COIN based on its structure, equipment, and skill sets available to provide the capabilities to clear, hold, build, and sustain success.

ACKNOWLEDGMENTS

This project would not be possible without the guidance, expertise, council, mentorship, and patience from my thesis committee. Thanks to Dr. Thomas Clark, Mr. Stephen Melton, and Mr. Lowell Solien for guiding me through this endeavor.

Special thanks to my wife Ashley for her love, encouragement, and understanding during my hours of solitude while working on this project.

TABLE OF CONTENTS

	Page
MASTER OF MILITARY ART AND SCIENCE THESIS APPROVAL PAGE	iii
ABSTRACT	iv
ACKNOWLEDGMENTS	v
TABLE OF CONTENTS	vi
ACRONYMS	ix
TABLES	X
CHAPTER 1 INTRODUCTION	1
Background Problem Statement	
Primary and Secondary Research Questions Assumptions	
Definition of Terms Limitations and Delimitations	
Significance	
CHAPTER 2 LITERATURE REVIEW	
CHAFTER 2 LITERATORE REVIEW	13
Introduction	
Strategy	
Doctrine Lessons Learned	
Organization	
Summary	
CHAPTER 3 RESEARCH METHODOLOGY	35
Introduction	
Research Approach	
Population	
Procedures-The Tactical Assessment Wargame	
Analysis-Evaluation Criteria to Answer the Primary Research Question	
Summary	

HAPTER 4 ANALYSIS	·····4
Introduction	4
Section 1: Case Event Executive Summary	4
Case Event 1-The 2 BCT, TF Warhorse, During OIF 1,	
April 2003-April 2004 Executive Summary	4
Case Event 2: The 2 BCT, 4ID in Iraq after Modular Transformation	
Executive Summary	4
Case Event 3: The 3 HBCT, 3 ID during the 2007 Surge Executive Summary	
Section 2. Tactical Assessment Wargame: Clear-Hold-Build-Sustain Success	
Doctrinal Description of Clear-Hold-Build-Sustain Success	
The Wargame: Case Event 1-The 2nd BCT, 4ID during OIF 1,	
April 2003-April 2004	5
Clear	
Hold	
Build	
Sustain Success	
Case Event 2: The 2 BCT, 4ID Return to Iraq after Modularity	
Clear	
Hold	
Build	
Sustain Success	
Case Event 3: 3 HBCT, 3 ID COIN Operations during the 2007 Surge	
Clear	
Hold	
Build	
Sustain Success	
Section 3: SWOT Analysis	
Strengths	
Weaknesses	
Opportunities	
Threats	
Tactical Assessment Wargame Summary	
Section 4: Evaluation Criteria	
Establish Civil Security	
Establish Civil Control	
Support Host Nation Security Forces	
Governance, Essential Services, and Economic Development	
Conduct Information Engagement	
Summary of the Evaluation Criteria Analysis	
Section 5: Findings	
Secondary Research Question 1	
Discussion	
Findings	
DOTMLPF Implications	

Secondary Research Question 2	
Discussion	
Findings	
DOTMLPF Implications	
Secondary Research Question 3	
Discussion	95
Findings	96
Military Organizations	
Non-military Organizations	
DOTMLPF Implications	97
Secondary Research Question Four	
Discussion	
Findings	99
DOTMLPF Implications	100
Section 6: Summary	100
CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS	102
Introduction	
Clear-Hold-Build-Sustain Success	103
Organizational Structure	
Equipment	
Skill Sets	
Lessons Learned	
DOTMLPF Factors	
Doctrine	
Organization	
Training	
Materiel	
Leadership and Education	
Personnel	
Facilities	
Recommendations	
Hybrid Organization	
Assets from Modular Support Brigades	
Applicability of HBCTs in Afghanistan	
Summary	111
REFERENCE LIST	112
INITIAL DISTRIBUTION LIST	117

ACRONYMS

BCT	Brigade Combat Team
CA	Civil Affairs
CAB	Combined Arms Battalion
COIN	Counterinsurgency
HBCT	Heavy Brigade Combat Team
IA	Iraqi Army
IBCT	Infantry Brigade Combat Team
IP	Iraqi Police
ISF	Iraqi Security Forces
PSYOP	Psychological Operations
SBCT	Stryker Brigade Combat Team

TABLES

		Page
Table 1.	Tactical COIN Assessment	38
Table 2.	BCT Capability and Evaluation Criteria	42
Table 3.	Clear-Hold-Build-Sustain Success Tasks and Objectives	55
Table 4.	Results of the Tactical Assessment Wargame	82
Table 5.	Results of the Evaluation Criteria Analysis	89
Table 6.	DOTMLPF Assessment	90

CHAPTER 1

INTRODUCTION

We are developing a modular Army force that gives us much more rapidly deployable, much more capable organizations that cover a broader spectrum of the conflict. What you will have is a team of pentathletes. I want a whole basketball team of Michael Jordans who can play any position. What we must do is be able to have this pentathlete team better organized, better led, better trained, better equipped, and more strategically agile.

> — General Peter Schoomaker, *Time*, April 2005

In March 2003, the 3rd Infantry Division (3ID) led the V Corps attack into Iraq to start major combat operations against Sadaam Hussein's Ba'athist regime. V Corps attacked earlier than planned using the element of surprise against the defending Iraqi army (Fontenot, Degan, and Tohn 2004, 94). In a span of 20 days, the 3ID and 1 Marine Expeditionary Force (1 MEF) defeated the Republican Guard, secured Iraqi oil fields, and seized Baghdad. Weeks after the invasion, a Marine M88 tracked recovery vehicle pulled down the statue of Sadaam Hussein amid a cheering crowd of Iraqi citizens, symbolizing of the end of Sadaam Hussein and the Ba'ath Party. The President of the United States announced the end to major combat operations on 1 May 2003, from the deck of the USS Abraham Lincoln while Army units in Iraq faced the transition to stability operations. As the Iraqi summer heated up, brigade combat teams began a long counterinsurgency (COIN) campaign which required more flexible organizational structure, different equipment, and new skill sets to conduct full spectrum operations in large non-contiguous areas of operation.

As the 3ID rotated back to U.S. bases in August 2003, the Army focused on a major transformation effort harnessing the proven capabilities of brigades in combat, and

the improved situational awareness from digital battle command systems. During the initial invasion, reinforced brigades under 3ID proved to be effective operating independently at extended distances to achieve multiple objectives simultaneously (McGrath 2004, 131). While harnessing lessons learned from the conventional attack into Iraq, the Army had insufficient forces to stem the momentum of a complex insurgency. Brigades rotated back to Iraq in the winter of 2005 to conduct counterinsurgency operations after organizing into the new modular brigade combat team (BCT) structure. Smaller in size to create more expeditionary brigades, the Army planned to increase the number of active brigades from 33 to 48 (McGrath 2004, 137).

The Army Chief of Staff set goals for the modular redesign to provide combatant commanders a more capable combined arms force. The modular BCT's standardized organization was designed to reduce joint planning burdens and be able to meet the demands of the higher operational tempo (Task Force Modularity White Paper 2004, 4). The modular BCT was designed to be more effective in combat and stability operations than its predecessor design (Headquarters, Department of the Army 2006a, xvi). The modular Heavy Brigade Combat Team (HBCT), the focus of this research, indeed has more capability at the brigade level headquarters, but fewer maneuver battalions to execute operations. With more modular heavy brigades available for rotation overseas, the question this paper addresses is whether HBCTs are organized and equipped for COIN operations.

The purpose of this research project was to evaluate the modular HBCT's effectiveness in COIN. This project examined the HBCT's capabilities in COIN based on its organizational structure, equipment, skill sets, and lessons learned from the war in

Iraq. Focusing on the modular transformation since 2003, its accompanying doctrine, strategic guidance, and lessons from the field are essential to determining the extent the Army has improved capabilities against irregular threats. The modular HBCT's preponderance of heavy armor and mechanized equipment does not clearly reflect an adaptation toward unconventional warfare. The relevancy of assessing the HBCT's effectiveness in COIN is the necessity to shift from the cold war conventional mindset to a force optimized for full spectrum operations. As a result, this research evaluated the modular HBCT in the context of on-going COIN campaigns to determine if it is indeed an adaptive, flexible, and self-sustaining organization.

Background

The United States Army has transformed the structure, organization and equipment of its tactical units three times over the last quarter century to meet the demands of the changing strategic environment. The Army has changed from the 1970s Armored Infantry and Mechanized divisions (AIM), to the Army of Excellence (AOE) heavy and light infantry divisions, to digitally enhanced combined arms Force XXI divisions, and finally the recent modular BCT organized for the expeditionary force.

The AOE design of the 1980s faced the challenges of the Cold War and the Warsaw Pact. The heavy corps design was essential as both a deterrent and defense against the Soviet Cold War armor and mechanized order of battle (Romjue 1993, 123). The Army of Excellence light infantry divisions provided the strategic flexibility to respond to worldwide contingencies enabled by corps assets until heavy AOE forces arrived. Following the disintegration of the Warsaw Pact ending the Cold War, the Army of Excellence structure received and passed its last test during the Gulf War in 1991.

The Army began changing from a division-based to brigade-based organization in 1999 following then Chief of Staff General Eric Shinseki's announcement to create Interim Brigade Combat Teams capable of deploying anywhere in the world in 96 hours (U.S. Senate 2000, 6). The division-based Army of the 1990s was eight divisions smaller than its Cold War predecessor and focused on power-projection rather than a large forward stationed force (AUSA 1997, 28).

Force XXI preceded the modular transformation. Force XXI brought digital command and control systems such as Force XXI Battle Command Brigade and Below (FBCB2), Blue Force Tracker (BFT), and other Army Battle Command Systems improving situational awareness for commanders. The Force XXI battle command systems first tested in battle labs and in the field with the 4th Infantry Division in the late 1990s, proved their effectiveness on the Iraq battlefield in 2003. However, the Force XXI divisions lacked the combined arms organization within their brigades furthering the debate whether to permanently organize for the fight versus ad hoc task organizations (Romjue 1993, 123).

Under the new modular design, brigades became the basic maneuver unit with a robust headquarters and added capabilities from division and corps control. The brigade transformation resulted in re-organizing the many different types of brigades such as light infantry, mechanized infantry, airborne, air assault, and heavy brigades into three types. The three types of BCTs became the heavy brigade combat team (HBCT), infantry brigade combat team (IBCT), and Stryker brigade combat team (SBCT). The three modular BCTs are combined arms organizations with similar structure for providing the flexibility to plug into a joint force headquarters. Because there are three distinct BCTs

with heavy, light, and medium equipment types, there is a potential disadvantage built into the design.

As the Army's modular transformation comes to a close, years worth of lessons learned are available concerning modular HBCT COIN operations in Iraqi. Each of the three types of modular brigades is optimized for certain operations based on organization and equipment. However, the contemporary environment requires forces to operate in complex, urban terrain while simultaneously conducting offense, defense, and stability operations (Headquarters, Department of the Army 2008a, 3-1). Modular HBCTs offer commanders a balance of combined arms maneuver assets along with a robust headquarters for command and control. They have improved intelligence, surveillance and reconnaissance (ISR) capability, as well as networked communications capability for added flexibility to operate in all environments (Headquarters, Department of the Army 2006a, xvii).

Two combined arms maneuver battalions, each with two tank and infantry companies, are the center of the HBCT (Headquarters, Department of the Army 2006a, 2-7). According to Field Manual (FM) 3-90.6, *The Brigade Combat Team*, the core mission is to close with the enemy by means of fire and maneuver to destroy or capture enemy forces, or to repel their attacks by fire, close combat, and counterattack (Headquarters, Department of the Army 2006a, 2-1). Overwhelming military force is decisive to conventional warfare and major combat operations. However, as the conflict shifts from major combat operations to irregular warfare within the complexities of urban sprawl, precision and measured force have proven to be critical factors for maintaining the initiative against an enemy who avoids direct military confrontation. Military force is

used to defeat armed groups aimed at creating instability. In the case of counterinsurgency, a joint operational subset of irregular warfare, use of force is limited to maintaining security and protecting the populace (Headquarters, Department of the Army 2008a, 2-11). The dynamic COIN environment demands HBCTs be flexible not only within the organization's leadership, but also with the equipment required for full spectrum operations.

In the 2008 National Defense Strategy, Secretary of Defense Robert Gates noted the military's proficiency in conventional warfare and the resulting reality for non-state actors and other adversaries to use asymmetric warfare to counter those strengths. Facing unconventional threats requires the military to "display a mastery of irregular warfare comparable to that which we possess in conventional combat (Department of Defense 2008, 4). In light of the ongoing insurgencies in Iraq and Afghanistan, the U.S. Army's *2006 Game Plan* requires the Army to posture the force for the *long war*. The plan includes modernization and "increasing capability and capacity by creating modular, multipurpose, brigade-based combat and support forces" (Department of the Army 2006, 15). One of the goals for the modular design was to create more brigades to fulfill the requirements in Iraq and Afghanistan. After meeting the necessity for more overseas brigades, the question remains whether the three types of modular brigades are the right organizations for the contemporary environment.

Counterinsurgency campaigns are not new to the Army. Lessons learned from nation building efforts after World War II as well as fighting insurgencies in the Philippines, Vietnam, and the recent COIN operations share common aspects. They were all complex struggles to defeat insurgents, provide security, and establish a stable environment for host nation governments to gain legitimacy with the population. The clear-hold-build approach to COIN described in recent counterinsurgency doctrine requires a large enough force to defeat insurgents and conduct stability operations. The right mix of equipment within the organization is crucial to provide commanders with the flexibility for offensive operations against insurgents in complex terrain, as well as less intimidating actions to build support among the local populace. Organizations conducting COIN operations deal with an array of situations often spanning the entire spectrum of conflict simultaneously, requiring leaders to be flexible and innovative. The same is true for the organizational structure of brigades conducting COIN.

Change is not new to the Army. The constant evaluation, modernization, and restructuring of combat units are necessary to defeat current and future adversaries. Modernization and transformation are topics of constant debate to achieve the right organizational structure for the time while preparing for the future. As military professionals, we must evaluate the progress made during the modular transformation, and whether the modular brigade organization is effective in COIN operations.

Problem Statement

The wars in Iraq and Afghanistan sparked the re-emergence of counterinsurgency and stability doctrine. The doctrine marks a change in mindset from conventionally focused linear operations to the realities of the full spectrum environment. Prior to the arrival of new doctrine, the Army embarked on the modular transformation creating heavy, infantry, and Stryker BCTs as organizations to meet the demands of the full spectrum operational environment. Now, heavy, Stryker, and infantry BCTs deploy for year-long rotations conducting COIN and stability operations. The ongoing heavy,

medium, and light capability debates continue based on the three distinct types of modular BCTs. What works best in COIN furthers the debate. As a result, an analysis of the HBCT's organic and augmented assets is necessary to answer the question of whether HBCTs are the right organization for COIN operations. The HBCT has adapted in many ways since OIF 1 to meet the demands of the COIN environment. HBCTs have improved training, implemented new doctrine, and received augmented equipment and special skill sets to improve their effectiveness in COIN. The problem is insufficient research to assess the modular HBCT's effectiveness in COIN based on its structure, equipment, and skill sets available to provide the capabilities to clear, hold, build, and sustain success.

Primary and Secondary Research Questions

The introduction and background framed the problem for this research which addresses the Army's redesign from a division to brigade-based approach to land warfare. This investigation was within the context of COIN as the Army has been fighting insurgencies in Iraq and Afghanistan throughout the modular transformation. Therefore, the primary question was whether modular HBCTs have adequate capabilities for counterinsurgency operations to clear, hold, build, and sustain success. To determine whether the modular HBCT has the capabilities to be effective in COIN, four secondary research questions were used to focus the primary question on the organization's effectiveness. The secondary research questions are:

1. Is the HBCT's modular structure effective in COIN?

2. Is the HBCT equipped for COIN operations?

3. Is the HBCT manned with the skill sets for COIN?

4. Do lessons learned from Operation Iraqi Freedom (OIF) validate the modular HBCT?

Assumptions

This research accounts for the following necessary assumptions:

1. HBCT vehicles and equipment will remain the same with minor upgrades until the end of their lifecycle.

2. HBCTs will continue to deploy to support COIN operations.

3. Army doctrine will continue to be based on Full Spectrum Operations.

Definition of Terms

<u>Army of Excellence (AOE)</u>: Refers to the Army's material, organizational, and doctrinal reform from the mid 1970s to the late 1980s responding to the Soviet Cold War threat in central Europe and lessons from the 1973 Mideast War. Characteristics of the AOE include a large conventional Army organized into powerful armored corps, the creation of the light division to respond to contingencies, and weapon modernization programs (Romjue 1993, 2-3).

<u>Asymmetric Warfare</u>: Within the contemporary operating environment means a conflict where the enemy does not operate along a linear front with a uniformed, organized force. Instead, the enemy operates among the civilian population to offset its weaknesses to attack targets of opportunity and exploit its enemy's weaknesses (Giovannelli 2008, 19).

<u>Brigade Combat Team (BCT)</u>: The Army's basic instrument of tactical execution organized into three types: the Heavy Brigade Combat Team (HBCT), Stryker Brigade

Combat Team (SBCT), and Infantry Brigade Combat Team (IBCT) (Headquarters, Department of the Army 2006a, xvi).

<u>Counterinsurgency Operations (COIN)</u>: Those military, paramilitary, political, economic, psychological, and civic actions taken by a government to defeat insurgency (Headquarters, Department of the Army 2004, 147)

<u>Force XXI</u>: Refers to the smaller, division-based Army of the 1990s with upgraded technologies to enhance intelligence, maneuver, fire support, sustainment, and command and control capabilities (AUSA 1997, 30).

<u>Full Spectrum Operations</u>: The Army's operational concept where Army forces combine offensive, defensive, and stability or civil support operations simultaneously as part of an interdependent joint force to seize, retain, and exploit the initiative, accepting prudent risk to create opportunities to achieve decisive results. They employ synchronized action-lethal and nonlethal-proportional to the mission and informed by a thorough understanding of all variables of the operational environment (Headquarters, Department of the Army 2008a, 3-1).

<u>Heavy Brigade Combat Team (HBCT)</u>: A single type of heavy brigade replaces the armored, mechanized, and balanced brigades of the heavy divisions, and the separate tank and mechanized brigades and armored cavalry regiments of the corps. These HBCTs field tanks and mechanized infantry within standardized combined arms maneuver battalions (Headquarters, Department of the Army 2006a, xvi).

<u>Irregular Warfare</u>: The violent struggle among state and non-state actors for legitimacy and influence over a population (Headquarters, Department of the Army 2008a, 2-10).

<u>Modularity</u>: The Army's transformation into a flexible, brigade-centric force of self contained, full-spectrum units able to be plugged into larger joint forces quickly and effectively to meet the combatant commander's needs (Giovannelli 2008, 21).

<u>Stability Operations</u>: Operations that sustain and/or establish civil security and control over areas, populations, and resources (Headquarters, Department of the Army 2006a, 1-8).

Limitations and Delimitations

This paper will focus on the Heavy Brigade Combat team at the tactical level. This research covers the period from the start of OIF to the present and then projects to the future. It primarily draws from lessons learned during counterinsurgency operations during the period from 2003 to 2008, and will address if the Army's modular transformation has contributed to the effectiveness of HBCTs in counterinsurgency operations. Although many of the lessons learned concerning modular brigades in OIF are classified, this paper will use only available unclassified information to present findings. The information cutoff date for this research was October 2009.

This research does not focus on modular HBCTs effectiveness in the linear conventional fight. Worthy of analysis, the HBCT operating in linear conventional fight raises similar questions relating to organizational structure and combat effectiveness. However, the scope of this research includes HBCTs effectiveness in the complex terrain and mission sets inherent in COIN operations. This paper will not discuss cost comparison in relation to the number of battalions within the HBCT; rather, will focus on benefits and burdens of the modular force structure and equipment in the context of COIN operations.

Significance

This paper is significant to military professionals for three reasons. First, it assesses the modular HBCT's capability within the irregular warfare theme which is important as the Army continues COIN operations in Iraq and Afghanistan. Second, this research examined linkages between national defense strategy, recent doctrine, and organizational structure to determine the extent to which the Army has improved capability in irregular warfare by converting to the modular design. Finally, findings suggest capabilities for COIN operations in addition to the current modular HBCT design, and offers ideas to progress toward a full spectrum capable force.

<u>Summary</u>

This chapter provided an introduction and background to the problem of providing commanders with the right organization, equipment, and skill sets to be effective in COIN operations. There are potential gaps associated with the modular HBCT meeting the requirements for COIN operations which encompass the spectrum of offensive, defensive and stability operations. With the majority of effort directed toward building during stability operations, the preponderance of heavy armor and mechanized infantry within the HBCT has the potential to be counterproductive to maintaining support from the population. The primary research question is: Are modular HBCTs effective in COIN operations with the capabilities to clear-hold-build-and sustain success? Chapter 2 is a review of literature relating to the primary and secondary research questions for this research.

CHAPTER 2

LITERATURE REVIEW

Military forces are organized, trained, and equipped, to be modular, versatile, and rapidly deployable. They are tailored for expeditionary operations, easily task organized, and continuously self sufficient. — Department of the Army, Field Manual (FM) 3-07, *Stability Operations*

Introduction

The purpose of this research was to determine if the modular HBCT has adequate capabilities to be effective in COIN operations. Chapter 1 provided background to the topic and described the problem of determining the right structure, mix of equipment, and skill sets for COIN. Chapter 1 introduced the primary research question this research will answer, along with the secondary research questions necessary to develop conclusions. This chapter is a review of literature necessary for answering the primary research question: whether modular HBCTs have adequate capabilities for COIN operations to clear, hold, build, and sustain success?

There are four sections within this chapter which frame the literature review in terms of strategies for successful COIN operations, recent Army doctrine, lessons learned, organization, and the chapter summary. The first section deals with a review of national strategy documents and Army strategic guidance which describes the need to increase proficiency in irregular warfare. Section two is a review of recent doctrine which describes the Army's full spectrum operational concept, as well as how the Army conducts COIN and stability operations. Section three includes lessons learned from COIN operations in Iraq. The lessons learned section describes efforts to adapt to the COIN environment, and recent COIN guidance from commanders in theater. Section four, organization, deals with changes to the modular BCT structure and describes the Army Chief of Staff's vision at the time for modularity. The chapter summary provides conclusions which reinforce the importance of this study.

Strategy

To set the stage for examining the requirements for successful COIN campaigns and the current modular BCT, it is important to trace the relation of both to national strategy. Following the attacks on 11 September 2001, the Army began conducting combat operations in Afghanistan and Iraq against terrorist groups such as al-Qaida whose extremist ideology threatens the core of free societies. The successful attacks into Afghanistan in 2001 and Iraq in 2003 materialized into complex counterinsurgency campaigns requiring the Army to reorganize to meet the demands of yearly unit rotations. The Army faced an elusive enemy within the mountainous terrain of Afghanistan and the urban sprawl of Iraqi cities. President George W. Bush's *National Security Strategy* and *National Strategy for Victory in Iraq*, the Department of Defense's *National Defense Strategy*, and the 2006 *Quadrennial Defense Review (QDR)* outline the broad way ahead for success. The documents also direct required changes based on the shifts of the strategic environment since 9/11.

The 2006 *National Security Strategy* provided three lines of effort essential to winning the wars in Iraq and Afghanistan. The *National Security Strategy* defined the lines of effort as political, security, and economic tracks to assist the Iraqi people to defeat the insurgency (U.S. President 2006, 12-13). The *National Strategy for Victory in Iraq* expanded on this strategy to assist Iraq with defeating terrorists and the insurgency.

The political, security, and economic tracks each had three associated tasks. The Political track included isolating enemy forces, engaging the Iraqi population to gain support in the political process, and building institutions able to support the Iraqi society (National Security Council 2005, 1). The second track was security, which shaped Army COIN doctrine nested in this strategy. The associated tasks with establishing security were clear, hold, and build. Establishing security requires clearing enemy controlled areas, holding the terrain in conjunction with local security forces, building government capacity, and supporting rule of law (National Security Council 2005, 1). The final element in the strategy was economic development which included building capacity in the economic institution to support Iraqi society and join the international community (National Security Council 2005, 2).

The 2003 *Strategy for Victory in Iraq* and the 2006 *National Security Strategy* approaches to winning the wars in Iraq and Afghanistan were centered on building the capacity of the host nation as well as providing security necessary to build. Defeating the insurgency means countering the terrorist ideology and gaining support from the population (U.S. President 2006, 11). The security track was clearly a strategy for the military instrument of national power aimed at providing a secure environment for the population as well as offensively capturing or killing enemy forces.

The 2008 *National Defense Strategy* was nested within the President's *National Security Strategy* and provided direction to focus on proficiency in irregular warfare versus a conventional fight. Defeating violent extremism worldwide was the primary objective of the defense strategy with proficiency in irregular warfare as the top priority (Department of Defense 2008, 13). Achieving this end depended on establishing

partnerships, defeating terrorist ideology, sustaining a long campaign against irregular threats, and enabling host nation governments to defend themselves (Department of Defense 2008, 8). The *National Defense Strategy* highlighted the importance of continuing force transformation to be successful within the strategic environment of violent extremist movements (Department of Defense 2008, 20).

The 2006 *Quadrennial Defense Review* (*QDR*) was nested in the *National Security Strategy* as well as the *National Defense Strategy* and defined the DoD's initiatives for change in order to meet the demands of the contemporary and future operating environments. The 2006 *QDR* applied lessons learned from the war against violent extremism and provided direction to transform forces and mindset to agile, asymmetrically oriented, expeditionary units. Furthermore, the *QDR* defined the 21st Century Force as tailored for irregular warfare. This meant a force better configured for joint multinational operations, adjustable force packages to meet the demands of the combatant commander, with balanced skill sets to meet the challenges in Iraq and Afghanistan (Department of Defense 2006, 75-76).

The Army's 2005 *Strategic Planning Guidance* described the Army's plan for meeting its Title 10 responsibilities in conjunction with tenets of the national security strategy which included winning the irregular war against violent extremists. The imperatives outlined in the *Strategic Planning Guidance* included continuing with modular transformation as the approach to meeting the challenges in the current operating environment. The document highlighted the need to improve proficiency against irregular threats, improving capabilities for stability operations, and dominating in complex terrain (Department of the Army 2005, 1). The planning guidance, like the National Security and National Defense Strategies, emphasized the importance of shifting excessive capability for conventional warfare toward required capability for effective asymmetric operations (Department of the Army 2005, 8). This was an important direction for updating doctrine, tactics, organization, equipment, and training to win in Iraq and Afghanistan. The Army's transformation initiatives focused on responding to decentralized, irregular threats and providing capability to be successful in the asymmetric environment such as COIN.

The Army's strategy to improve capabilities against irregular threats in the 2005 Planning Guidance outlined the necessity to expand specialized skill sets, improve understanding of irregular warfare, as well as doctrine and capabilities (Department of the Army 2005, 11). The requirement to improve capabilities against irregular threats such as insurgents, stems from recent lessons learned where tactical units hunt decentralized insurgent networks that use unconventional weaponry such as Improvised Explosive Devices (IED). The planning guidance highlighted the need for integrating skill sets such as information operations (IO), civil affairs (CA), and psychological operations (PSYOP) to defeat insurgent influence on the population. Although the guidance recognized the need for doctrine and improving capabilities in technological weapons such as target acquisition and intelligence, surveillance, and reconnaissance (ISR) systems, it did not address the mix of equipment for tactical units. The broad modular concept is the response without a clear description of how the modular unit will be successful at the tactical level in an asymmetric environment.

The imperatives to improve capabilities for stability operations and dominate in complex terrain are essential for success in Iraq, Afghanistan, and potential future conflicts. However, the strategic planning guidance described the modular BCT as the approach to provide rapidly deployable expeditionary forces without explaining how the modular organization would be best suited to improve capacity for stability operations. The planning guidance used the same broad explanation for dominating in complex terrain by emphasizing the importance of implementing changes such as adjusting equipment and tactics for success (Department of the Army 2005, 12). As the modular transformation comes to a close, the question remains whether the projected increase in combat power for modular brigades, a greater pool of deployable brigades, and combined arms organization among the three distinct types of BCTs has increased effectiveness against insurgencies.

Reviewing the *National Security Strategy*, *National Defense Strategy*, *Quadrennial Defense Review* and the Army's *Strategic Planning Guidance*, we clearly see common themes for achieving success in the ongoing counterinsurgency operations. The first predominant theme is the military must get better at irregular warfare. This requires properly organizing and equipping forces to dominate against irregular threats. Second, the United States will continue stability operations to protect U.S. interests and prevent regional instability. As a result, forces at the tactical level must have the right balance of skill sets to operate in a joint, multinational environment in partnership with interagency, intergovernmental, and non-governmental organizations. Third, modularity remains the Army's transformation initiative to redesign the operational force into a more flexible force with more deployable, self sustaining brigades. Furthermore, the modular organization is the Army's plan to meet the challenges of the 21st century and win the war against terrorism (Department of the Army 2005, 9). The question remains whether the Modular BCTs were configured to be effective in COIN operations against irregular threats in complex terrain, or rather self sufficient combined arms teams ideal for conventional warfare.

Doctrine

Another topic of interest draws attention to current COIN, stability operations, and BCT doctrine to review explanations for successful practices while examining the expected benefits of the modular BCT organization. FM 3-24, *Counterinsurgency* (2006), is the Army's recent COIN doctrinal manual encompassing lessons learned from contemporary and past counterinsurgency operations. It is the rebirth of previously combat tested COIN practices that were lost to the conventional mindset of the cold war until the Army became involved in the wars in Iraq and Afghanistan. FM 3-24 provided Army units with doctrinal approaches to help solve the complex problems associated with COIN operations. The COIN doctrine represents a paradigm shift from focusing on major combat to full spectrum operations where the population is the objective. The change in mindset requires changes within the maneuver BCT's capabilities to conduct long COIN campaigns.

British Army Brigadier Nigel Aylwin-Foster discussed the U.S. Army's primary focus on kinetic conventional warfare and the resultant challenges in Phase IV of Operation Iraqi freedom (OIF) at the completion of major combat operations in his 2005 article in *Military Review* titled "Changing the Army for Counterinsurgency Operations." His focused timeframe was late 2003 to 2005 as the insurgency gained momentum. His observations were the U.S. Army at the time was unprepared for counterinsurgency operations because of focusing on destroying the insurgents rather than securing the population. He noted a lack of focus in doctrine on population-centric counterinsurgency training, lack of cultural awareness, and a focus on technology which alienated the population rather than gain their support (Aylwin-Foster 2005, 6). Since his article, the Army released new COIN doctrine in addition to FM 3-0, *Operations* (2008), which is the capstone document describing how the Army conducts operations as well as the full spectrum operational concept (Headquarters, Department of the Army 2008a, v). However, Brigadier Aylwin-Foster notes the challenges associated with the U.S. Army adapting to irregular warfare because the "conventional warfighting pre-disposition is so deeply ingrained in the institution that it will take many years to effect the necessary transformation (Aylwin-Foster 2005, 14). The emergence of COIN and stability operations doctrine as well as the modular BCT transformation initiative could be a step in the direction of changing the conventional mindset to more adaptive formations. The question specifically for the modular HBCT is whether it is a product of the conventional war fighting mindset or an innovation toward full spectrum capability.

Full Spectrum operations, defined in FM 3-0, *Operations* (2008), are offensive, defensive and stability operations when referring to joint operations overseas (Headquarters, Department of the Army 2008a, 3-2). Offensive and defensive operations defeat adversaries, however, combat operations are conducted among the population in the contemporary operating environment which adds complexity. Stability operations in COIN ultimately aim toward the objective of winning the support of the population which is the most important aspect of COIN operations for both the insurgent and counterinsurgent. Within a BCT's area of operations, the organization's activities span the spectrum of conflict on any given day at any given time. For instance, an HBCT might have companies within one of the combined arms battalions (CABs) conducting

cordon and search missions to capture known insurgents while another CAB plans local elections with civil authorities. Doctrine stipulates that operating within the complex full spectrum environment requires "versatile, well-trained units and tough, adaptive commanders" (Headquarters, Department of the Army 2008a, 3-2). Additionally, commanders must lead their units to accomplish their missions within a joint, multinational environment conducting a combination of offensive, defensive, and stability operations. The assumption is that modular heavy, infantry, and Stryker BCTs are each sufficiently equipped to meet the commander's needs in the daily gauntlet through the spectrum of conflict.

FM 3-0, *Operations* (2008) describes five operational themes that correlate with the four ranges on the spectrum of conflict model. The spectrum of conflict model describes the increase in violence along the range from stable peace, unstable peace, insurgency, and general war. The operational themes corresponding to the spectrum include peacetime military engagement, limited intervention, peace operations, irregular warfare, and major combat operations (Headquarters, Department of the Army 2008a, 2-5). Operational themes frame characteristics of major operations to develop a common understanding of the type of operation being conducted, establishing doctrine, task-organization, and resource allocation (Headquarters, Department of the Army 2008a, 2-3). COIN is resident in the irregular warfare operational theme which spans between unstable peace and general war. This focus on irregular warfare has been directed by national strategy and nested down to the tactical level based on the current operating environment. Insurgents threaten regional stability and fight among the people to gain support from the population and project their ideology. Countering irregular threats

requires forces optimized for irregular warfare just as countering traditional threats requires strong conventional forces. FM 3-0, *Operations* (2008) describes the U.S. as previously optimized for traditional threats which indicates not only a change in mindset as well as organizational structure, skill sets, and equipment to better respond to the irregular threat (Headquarters, Department of the Army 2008a, 1-4).

Counterinsurgency doctrine encompasses many hard lessons learned, paradoxes, and imperatives, that if left untended, result in failure. FM 3-24, *Counterinsurgency* (2006), focused on these lessons, paradoxes, and imperatives while providing examples for executing COIN operations. First, use of force and empowering the host nation security forces are important to building legitimacy without alienating the population. This leads to paradoxes that the Army has learned, forgotten, and relearned over time. Use of force, large scale conventional operations, and lethal firepower are most often counterproductive to the COIN campaign. Furthermore, overprotecting our forces can lead to alienating the population and playing into the hands of insurgent tactics. Focusing on the population's needs requires units to walk among them instead of patrolling in the distance with tanks and mine resistant vehicles. Additionally, living and operating among the population is necessary to gaining support early in the COIN campaign. This allows units to build relationships, conduct information operations (IO) prevalent in the COIN campaign, collect intelligence, and see firsthand what the population needs (Headquarters, Department of the Army 2006b, 1-28-1-29).

FM 3-24, *Counterinsurgency* (2006), describes the clear, hold, build approach to COIN for achieving the ultimate objectives of providing security, stability, governance, and population control. This approach encompasses COIN imperatives and successful

practices in order to eliminate insurgent presence in an area, provide security for the populace, enforce the rule of law, build government capacity, and rebuild institutions (Headquarters, Department of the Army 2006b, 5-18). Within the context of full spectrum operations, clear is more offensive oriented, hold is both defensive and stability oriented, while build is primarily stability focused. Clearing an area of insurgents requires multiple offensive operations such as patrols, raids, cordon and search, and ambushes minimizing impact on the populace (Headquarters, Department of the Army 2006b, 5-19). Once coalition and host nation forces remove the majority of the insurgent presence, they hold the area while providing security. Raids against remaining insurgent groups continue but often with fewer requirements for heavily armored forces. Protecting the population, protecting key infrastructure, conducting information operations, building host nation government capacity are key in this phase as the environment is more permissive (Headquarters, Department of the Army 2006b, 5-19). Developing intelligence sources, partnership with host nation security forces and officials, as well as conducting information operations are also essential in the *hold* phase (Headquarters, Department of the Army 2006b, 5-19-5-20).

The *build* phase requires the most flexible and adaptable force structure, equipment, and skill sets to accomplish the stability tasks. Units provide security and conducting small unit operations against insurgent forces, however the majority of the resources are applied to conduct the essential stability tasks to build the area. According to FM 3-07, *Stability Operations* (2008), the primary stability tasks are establishing civil security, civil control, information engagement, supporting the local government, economic and infrastructure development (Headquarters, Department of the Army 2008b, 3-19). These tasks are ideally accomplished with the whole of government leveraging the capabilities of U.S. government agencies and departments. Continued offensive operations in conjunction with host nation security forces are necessary to prevent insurgents from gaining freedom of movement and hindering progress toward building a strong host nation government. Building partnerships, training security forces, supporting infrastructure projects, and humanitarian assistance requires more time on the ground with less time in tank turrets. Insurgents will continue to use tactics such as ambushes, assassinations, IEDs, kidnapping, infiltrating government organizations, and raids to discredit the host nation government (Headquarters, Department of the Army 2009, 2-21). As a result, BCTs require the combat power to dominate in any situation as well as the equipment and skills to build the area they are securing.

The much read counterinsurgency theorist David Galula asserts understanding the conditions of the insurgency are essential to countering it. The most important among the conditions being the insurgent's cause, which is particularly important for counterinsurgents to understand in order to plan a COIN campaign (Galula 2005, 42). The other conditions include lack of police, government administration, geography, and support for the government (Galula 2005, 42). Changing the conditions are prevalent in our lines of operation to isolate insurgents, build capacity within the government, provide essential services, train host nation security forces, and control borders. The overarching theme is gaining and maintaining support for the population. Achieving this end is both the aim of the insurgent and counterinsurgent forces requiring much more than advanced weaponry. The next section reviews lessons learned which helped develop doctrine, training, and guidance for COIN operations.

Lessons Learned

Examples of what is important to commanders in the field conducting COIN campaigns feed the print in the Army's doctrinal manuals. General David Petraeus' 2007 Multi-National Force-Iraq Counterinsurgency Guidance included ten points he deemed necessary to establish a secure and stable Iraq. His fourth point was "Get out and walk--Move mounted, work dismounted" (Petraeus 2007, 2). He highlights the potential to alienate the population by driving around in up-armored HMMMVs which "insulate us from the Iraqi people we are securing" (Petraeus 2007, 2). GEN Petraeus described the HMMWV as more risky overall to operate in as they are susceptible to IED attack, do not carry enough personnel, and are predictable to the enemy (Petraeus 2007, 2).

In terms of predictability, the same can be said for armor and mechanized equipment. Following his tour in Iraq as the commander of 3-3 ACR, LTC Ross Brown wrote in his article "Commander's Assessment: South of Baghdad" that one of his main problems was that the terrain did not support tracked vehicle movement, which was the preponderance of the vehicles in his squadron. Furthermore, using his armored vehicles restricted movement to predictable routes. This ultimately led to the loss of 30 combat vehicles over a year in Iraq to include six tanks, ten Bradleys, and fourteen M114 HMMWVs (Brown 2007, 32).

General Raymond Odierno issued guidance in September 2008 to Multi-National Force-Iraq after taking command from General Petraeus. GEN Odierno's guidance highlighted a need for changes in thinking, operating, and defining the organization based on changes in the environment in Iraq (Headquarters, Multi-National Force-Iraq 2008, 1-2). Under the *how we operate* guidance, GEN Odierno, like GEN Petraeus, instructed his forces to walk. His intent was to "Move mounted, work dismounted. Patrol on foot and engage the population-with ISF [Iraqi Security Forces] in front whenever possible" (Headquarters, Multi-National Force-Iraq 2008, 1). This ultimately focused efforts on securing the population, increasing situational awareness, gathering intelligence, and truly understanding the environment.

Sent from Kabul, Afghanistan where mechanized forces are the minority because of the severely restrictive mountainous terrain, General Stanley McChrystal, the International Security Assistance Force (ISAF) Commander issued his June 2009 commander's guidance. The theme of his guidance was similar to the MNF-I COIN guidance because it was population centric and focused on establishing a secure environment. GEN McChrystal's seventh point in his guidance to his forces was to "constantly adapt" (Headquarters, International Security Assistance Force 2009a, 1). The ISAF Commander's August 2009 counterinsurgency guidance focused on the population and explained the objective to gain support from the Afghan people with the mission to protect the people (Headquarters, International Security Assistance Force 2009b, 1). Relating back to the national strategic, military strategic, operational, and tactical need to improve capability in irregular warfare, GEN McChrystal described the complexities of the environment and asked the troops to "challenge the conventional wisdom if it no longer fits the environment" (Headquarters, International Security Assistance Force 2009a, 6). This guidance was sent from the front of the counterinsurgency fight where the right force structure, skill sets, and equipment are critical to clearing insurgent strong holds, holding ground with the trained host nation forces, and providing room for the government to build capacity. This amplifies the necessity to analyze the current modular brigade structure for its effectiveness in executing the clear-hold-build approach to COIN and its capability to sustain success.

On Point II (2008) describes the adaptation of Army units facing a growing insurgency in the spring of 2003. The book describes how units began practicing the key concepts of counterinsurgency without training for such operations prior to Operation Iraqi Freedom. The principles of COIN doctrine were unfamiliar during the rise of the insurgency in the summer of 2003. However, commanders and leaders adapted to the situation and learned how to focus less on the conventional fight and more on conducting operations against insurgents while focusing on the needs of the populace (Wright and Reese 2008, 116). The authors continued to describe how large scale operations against the insurgency in the spring and summer of 2003 alienated the population (Wright and Reese 2008, 121). After several early lessons learned, Army units in Iraq began conducting full spectrum operations, a term not yet spoken in the classroom or on the battlefield, but the concept was a reality to the Soldier's daily routine.

Lessons learned from COIN campaigns in Iraq and Afghanistan regarding the ratio of counterinsurgents to the host nation population proved critical to achieving objectives. The ratio of security forces, or counterinsurgents, to the host nation population includes host nation security forces. The number of host nation forces effectively protecting their population is critical to the overall COIN campaign. FM 3-24, *Counterinsurgency* (2006), states the ratio of security forces to inhabitants in an area should be twenty to twenty five per one thousand population density (Headquarters, Department of the Army 2006b, 1-13). The 2007 surge in Iraq is an example of increasing the number of counterinsurgents to regain lost ground, secure the population,

and stabilize areas controlled by the insurgents. The recent increase of coalition forces in Afghanistan is an additional example highlighting the importance of providing the necessary number of ground forces to maintain momentum in COIN campaigns.

Lessons learned about the number of counterinsurgents necessary to maintain momentum in a COIN campaign go hand in hand with the nature of COIN operations and the tasks counterinsurgents execute to achieve the desired ends. FM 3-24, *Counterinsurgency* (2006) describes requirements for successful COIN operations. The first requirement is to restore the host nation government's legitimacy (Headquarters, Department of the Army 2006b, 5-1). Examples of restoring legitimacy include training and enabling host nation security forces to protect their own population. The remaining requirements describe establishing control of the population centers, expanding influence, stabilizing, and gaining support from the population using aggressive information operations (Headquarters, Department of the Army 2006b, 5-1). Achieving these objectives requires units to operate among the populace with host nation forces, and support from government officials. Translating these requirements to a troop to task analysis indicates a need for a larger proportion of soldiers able to saturate an area, eliminate the insurgent threat, and hold the area in conjunction with host nation forces.

FM 3-24, *Counterinsurgency* (2006) describes the importance of establishing and maintaining presence in the area of operation as well as the negative effects on the population by raiding from remote locations and patrolling from armored convoys (Headquarters, Department of the Army 2006b, A-4). Living among the population and conducting dismounted patrols is necessary to maintain situational awareness, collect intelligence, and establish relationships with the population (Headquarters, Department of

the Army 2006b, A-4). The next section demonstrates how lessons learned from COIN resulted in changes to the BCT organization.

Organization

Mechanized Divisions, like the 4th Infantry Division, were not organized for stability and COIN operations in 2003, largely due to the pure armor and mechanized infantry companies in the maneuver battalions. The full spectrum environment required a mix of heavy armor, mechanized and light infantry, and a large increase in wheeled capability to facilitate population centric operations. *On Point II* describes how armor and field artillery units organized for more infantry type missions resulting in "parking many of their combat vehicles and conducting patrols and other operations on foot or in wheeled vehicles such as HMMWVs" (Wright and Reese 2008, 127). Heavy armor proved to be especially useful when teamed with light and mechanized infantry clearing areas controlled by insurgents. The problem was after the heavy resistance was cleared, the Abrams tanks and Bradley Fighting Vehicles were not always the best option for conducting combat patrols within the population centers. The heavy armor often damaged roads, infrastructure, and damaged popular impressions.

This trend to organize for full spectrum operations continued not only with equipment, but also with skill sets required for COIN. Divisions task organized light infantry battalions to heavy brigades and armored battalions to light units for a better mix of capabilities (Wright and Reese 2008, 126). Maneuver battalions did not have the civil affairs personnel, language capability, or PSYOP teams required for COIN operations. Brigade headquarters had very limited staff capabilities in these areas as well prior to modularity. The demand for these special skill sets to work on the large reconstruction problem caused the battalions to create civil affairs staff positions and organize for civilmilitary operations (Wright and Reese 2008, 12728).

The Army began reorganizing brigades into modular BCTs following a year of lessons learned during OIF 1 to better respond to the demands of the contemporary environment. The three distinct types of maneuver BCTs provided a mix of capability across the spectrum of conflict. However, that mix of capability is separated into heavy, medium, and light BCTs optimized to be self sufficient with extended operational reach. Heavy BCTs, in particular, are optimized for offensive operations in open and mixed terrain. Their preponderance of armor and mechanized equipment is potentially a limiting factor for commanders holding, building, and sustaining their area of operations. The 2004 Task Force Modularity White Paper explains that enabling the HBCT's armor, mechanized, and engineer units with skilled teams such as PSYOP, civil affairs, and aviation assets will enhance success in the urban environment (Task Force Modularity White Paper 2004, 84-85). The added skill sets helped, but this was only one aspect that fell short of the equipment challenges within the combined arms battalions. For instance, the HBCT must still augment with other assets such as up-armored HMMWVs when tanks become more of a burden then benefit to building and sustaining (Wright and Reese 2008, 127).

The Army's Brigade Combat Team field manual, FM 3-90.6, *The Brigade Combat Team* (2006), highlights the benefits of the modular redesign. The benefits include more brigades without loss of combat power, standardized designs that meet the demands of combatant commanders, reduced joint planning burden, and more capability for the joint team (Headquarters, Department of the Army 2006a, xvi). Modular HBCTs replaced the armored and mechanized brigades from the previous heavy division. IBCTs replaced the numerous specialized infantry brigades with a common design. SBCTs were a relatively new concept that combines infantry with light armored wheeled Stryker vehicles enhancing mobility and firepower. The modular BCT designs provided improved expeditionary capability, lethality, and joint capability without addressing the increased capability for full spectrum operations.

The doctrinal guidelines for force requirements in COIN combined with the multiplicity of requirements for BCTs conducting stability operations contradict the modular BCT design. For one, removing one of the brigade's maneuver battalions while attempting to maintain its proven strength and self-sufficiency at increased operational distances was a hard sell. The Chief of Staff's requirement for modular designs to be as capable as the legacy three maneuver battalion design is reliant on the modular BCT's reconnaissance, surveillance, and digital command and control systems to fill the void of a reduced number of maneuver battalions (Donnelly 2004, 44). The smaller modular HBCT design is a result of the need to increase the number of brigades to sustain the operational tempo of overseas deployments around the world. At the time General Schoomaker decided to convert the Army to a modular brigade force, 33 percent of the active Army brigades and 33 percent of the National Guard brigades were deployed overseas (Donnelly 2007, 21). That problem coupled with resource constraints equaled creating more brigades with fewer maneuver battalions.

In his article "Why Small BCTs Undermine Modularity," Stephen L. Melton makes an argument for increasing the BCT size versus reducing it. He asserts that the smaller modular BCTs not only do not improve combat power, but increase the size of brigade and division level headquarters at the expense of maneuver battalion strength (Melton 2005, 58). He argues the smaller modular BCTs cause an increase in command and supporting headquarters instead of the planned goal for modular units to reduce command and control layers. Melton further advocates increasing the size of the BCTs using the current modular combined arms battalion and company designs to flatten command echelons while increasing capability where the rubber meets the road. He recommends increasing the modular combined arms BCT to four maneuver battalions instead of two, doubling the amount of armor and infantry companies to sixteen instead of eight in the current two battalion modular BCT (Melton 2005, 60-61). COIN environments where BCTs operate in large, non-contiguous areas of operation further highlights the importance of more rather than less maneuver units.

According to our doctrine and lessons learned, providing more combined arms battalions and companies to saturate an area, secure the communities, and deny insurgent influence is necessary in a COIN environment. In his paper "The Nine Principles of Combined Arms Action in a Counterinsurgency Environment," LTC Adrian Bogart III describes effective operations as small unit in nature where "command, control and intelligence in a counterinsurgency occur at the lowest level" (Bogart 2006, 112). His fifth principle of combined arms action in a COIN environment describes effective levels of command where company commanders are the "key leaders" (Bogart 2006, 112) and the company level as the "unit of success" (Bogart 2006, 112). His paper addresses leadership axioms supporting the nine principles which include focusing on the populace, organizing forces to fight against insurgents, and flattening command and control structures (Bogart 2006, 112-13). Providing more capability at the company and battalion

32

level is the recurring theme for success rather than reducing the number of forces at the most critical echelon.

The HBCT has the least amount of infantry, as well as the fewest Soldiers within its maneuver battalions, compared to the IBCT and SBCT, for COIN operations. The HBCT has two combined arms battalions consisting of two armor, two mechanized infantry, and a headquarters company including a scout and mortar platoon. The HBCT's reconnaissance squadron with three reconnaissance troops took the place of the third maneuver battalion in the previous brigade organization. The IBCT has two light infantry battalions each with three infantry companies, a weapons company, and a headquarters company. The IBCT has a reconnaissance squadron as well, with two mounted troops and one dismounted troop. The SBCT has an additional maneuver battalion making it three, in addition to a reconnaissance squadron with three reconnaissance troops and a surveillance troop. The SBCT at a glance provides the most flexibility in terms of full spectrum operations because it has more mounted and dismounted capability with a third maneuver battalion. In terms of COIN, the SBCT has more dismounted capability with a medium armored capability adding potential to move mounted with less impact on the population.

U.S. Army MAJ Steven Zynda concluded in his thesis "How the Army Meets Future Requirements," that "Major Combat is not the Army's only or even primary task, now or in the future. The Army should have transformed earlier but at least it is finally on the right track and needs to continue in the current direction" (Zynda 2008, 11). Parallels are easily drawn between our coalition onlookers such as Brigadier Aylwin-Foster who concludes the U.S. Army's conventional mindset ingrained throughout the institution limits its capability in unconventional warfare and only a shift in its culture will shape change for the future of irregular warfare. MAJ Zynda discusses the trend toward the SBCT's capabilities as a move in the right direction. He analyzed the SBCT in relation to the HBCT and IBCT using firepower, protection, manpower, mobility, sustainability, flexibility, maneuver damage, intimidation, deployability, and footprint as evaluation criteria (Zynda 2008, 9-10). By doing so, he demonstrated the SBCT provides commanders with more flexibility across the spectrum of conflict.

<u>Summary</u>

This chapter was a review of literature necessary to answer the research question whether HBCTs have the capabilities for effective COIN operations. The chapter was organized according to strategy, doctrine, organization, and lessons learned from recent COIN campaigns. The strategy section included a review of national and Army strategy documents highlighting the need to improve capabilities against irregular threats. Furthermore, it showed how the Army's COIN doctrine is nested within the national security documents. The doctrine section reviewed recent COIN doctrine and the requirements for units to be successful in COIN operations. The organization section described the goals for modularity and aspects of the modular BCT design within the context the contemporary operating environment. The lessons learned section included a review of recent COIN literature as well as COIN guidance from Iraq and Afghanistan highlighting successful approaches to COIN.

The next chapter describes the research methodology used to generate and analyze data to answer the primary and secondary research questions.

CHAPTER 3

RESEARCH METHODOLOGY

Introduction

The purpose of this research was to assess the modular HBCT's effectiveness in COIN based on its structure, equipment, and skill sets available to provide the capabilities to clear, hold, build, and sustain success. The aim of this chapter is to describe the research methodology used to answer the primary research question whether modular HBCTs have adequate capabilities for COIN operations to clear, hold, build, and sustain success. This chapter has five main sections: the research approach, the population, the procedures for conducting the research, the analysis strategy, and the chapter conclusion.

The *research approach* section describes the qualitative research design and introduces the case approach, requirements used in the tactical assessment, and evaluation criteria used in the analysis. The *population* section describes the sources for data collection and introduces the case studies used to frame the data set. The *procedures* section describes the process used to collect and analyze data. The *analysis* section describes the process for applying the data gathered from the tactical assessment against the evaluation criteria to address the primary research question.

Research Approach

This research used a four-part qualitative approach to develop responses to the primary and secondary research questions. The parts of this research plan included an analysis of doctrine and literature, a tactical case study assessment, a strengths, weaknesses, opportunities, and threats (SWOT) analysis, followed by an analysis of HBCT capabilities against doctrinal evaluation. The purpose of the doctrine and literature review was to determine the requirements to assess the case studies against in order to generate data. The purpose of the case study assessment was to generate data for the SWOT and evaluation criteria analysis. The SWOT analysis identified strengths, weaknesses, opportunities and threats for HBCTs in COIN which fed the evaluation criteria analysis. The purpose of the evaluation criteria analysis was to determine the capabilities HBCTs require for effective COIN operations across the doctrinal lines of effort. The results from the analysis generated findings organized according to the doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) framework which generated discussion to help answer the secondary research questions.

Population

Although the previous chapters included an investigation of strategic and operational guidance for conducting irregular warfare and COIN, this research was focused at the tactical level. Additionally, the analysis focused on three HBCT's within separate case events in Iraq. The three case events in the tactical assessment wargame depicted heavy brigade combat teams in Iraq conducting COIN operations in different areas of operation from 2003 to 2008.

The case event one included a legacy heavy brigade that deployed to Iraq in OIF 1 from 2003 to 2004 following the initial invasion. The purpose of using the first case event was to collect data from a legacy heavy brigade conducting COIN and stability operations prior to the modular transformation. The second case event described the return of the same brigade to Iraq in 2005 after converting to a modular HBCT. The purpose of this case event was to assess the capabilities of the HBCT after its modular transformation in addition to improvements applied to the BCT based on lessons learned. The third case event included a modular HBCT that conducted clear-hold-build operations in southeastern Baghdad province during the 2007 surge. The purpose of using this case event was twofold. First, case event three provided data about a modular HBCT organization that introduced recent COIN doctrinal concepts into the campaign. Secondly, the case provided data regarding additional enablers assigned to improve effectiveness in COIN. The sources used for this case study include the author's experience, unit after action reports, transcripts from interviews with the brigade commanders, scholarly articles, books, and doctrinal publications. The details of each case event are explained in chapter 4.

Procedures-The Tactical Assessment Wargame

The tactical assessment wargame was the process of collecting data from the three case events described in the previous section against the requirements of the Clear-Hold-Build-Sustain Success approach to COIN selected from FM 3-24, *Counterinsurgency*. Each case event was assessed against the requirements for the doctrinal COIN approach and data was organized within the framework of strengths, weaknesses, opportunities, and threats. Strengths and weaknesses were internal factors, while opportunities and threats were defined as external factors. The results from the tactical COIN assessment yielded an assessment of insufficient, sufficient, or best. *Insufficient* means that capabilities were severely lacking resulting in failure. *Sufficient* means that not all required capabilities were present but adaptation resulted in limited success. *Best* means

necessary capabilities were present to fulfill requirements resulting in success. Table 1 shows the model for the tactical coin assessment of the case events against the doctrinal COIN requirements.

Table 1. Tactical COIN Assessment						
CASE (OIF)	CLEAR	HOLD	BUILD	SUSTAIN	ASSESSMENT	
Event 1 2 BCT (pre-modularity)	S/W/O/T	S/W/O/T	S/W/O/T	S/W/O/T	Insufficient Sufficient Best	
Event 2 2 BCT (post-modularity) Event 3 3 HBCT (Surge)						

Source: Created by author.

The results from the tactical assessment wargame provided the data required to assess the case events against the evaluation criteria. The strengths, weakness, opportunities, and threats analysis highlighted the capabilities that enhanced and degraded the BCT's overall effectiveness. The patterns identified from the results of the tactical assessment wargame fed into the evaluation criteria analysis. The results from the tactical assessment wargame provided the basis for the discussion to answer the secondary research questions:

- 1. Is the HBCT's modular structure effective in COIN?
- 2. Is the HBCT equipped for COIN operations?
- 3. Is the HBCT manned with the skill sets for COIN?
- 4. Do lessons learned from Iraq validate the modular HBCT?

Analysis-Evaluation Criteria to Answer the Primary Research Question

The next part of the research methodology was to apply the data collected from the tactical assessment wargame against seven evaluation criteria. This process did two things. First it provided a model to cross walk the capabilities of the HBCTs against the COIN lines of effort. This process showed the packages of capabilities HBCTs require for effective COIN operations. Second, the evaluation criteria analysis demonstrated how HBCTs have improved COIN capabilities over time. The results from the evaluation criteria analysis generated the discussion according to the doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) construct which helped answer the research questions. FM 1, *The Army* (2005) defines DOTMLPF as "a problem-solving construct for assessing current capabilities and managing change" (Headquarters, Department of the Army 2005, 4-4). The remainder of this section describes the evaluation criteria and model for scoring the evaluation criteria analysis.

The first doctrinal evaluation criterion was *establishing civil security*. Establishing civil security means protecting the host nation population and resources from internal and external threats (Headquarters, Department of the Army 2009, 4-6). Establishing civil security is essential to achieving progress across the other nation building lines of effort. BCTs successful with civil security are able to establish a secure and stable environment enabling the host nation government to build capacity.

The second evaluation criterion was *establishing civil control*, which means controlling the behavior and activities of people in an area (Headquarters, Department of the Army 2009, 4-7). BCTs establish rule of law by enabling host nation security forces

with establishing order and safety. Additionally, BCTs support community programs aimed at enforcing security in local areas.

The third evaluation criterion was *supporting host nation security forces*. This includes establishing partnerships, training, equipping, and conducting operations with host nation forces. BCTs successful with supporting host nation security forces transition responsibility for COIN operations to host nation forces able to provide their own security (Headquarters, Department of the Army 2009, 4-8).

The fourth criterion was *supporting governance*, which means restoring public administration and re-storing public services. Supporting governance includes providing a military government or civil administration when the host nation government is incapable or non-existent (Headquarters, Department of the Army 2009, 4-9). When possible, BCTs coordinate efforts with U.S. government agency partners such as the Department of State to build host nation government capacity and legitimacy among the population. Units successful with supporting governance are able to establish secure and stable conditions for interagency partners to assist the host nation government with building capacity for self sufficiency.

The fifth criteria was *restoring essential services*, which means restoring or providing basic services for the host nation population meeting their basic needs. BCTs successful with providing basic services are able to provide for the population's basic needs until non-governmental humanitarian assistance organizations, U.S. government organizations, and the host nation assume this role under the security umbrella provided by the military (Headquarters, Department of the Army 2009, 4-9).

The sixth criterion was *support economic and infrastructure development*. This means enabling the host nation to build capacity, reduce unemployment, and build the economy. BCTs successful with supporting economic and infrastructure development assist with coordinating local efforts with regional and national programs. Additionally, BCTs use their resources to stimulate employment and the economy through local infrastructure projects (Headquarters, Department of the Army 2009, 4-9).

The seventh and last evaluation criterion was *conducting information operations*. This means units keep the population informed, influence audiences in an area of operation with leader engagements, and persuade the population through action (Headquarters, Department of the Army 2009, 4-10). BCTs successful at information engagement gain popular support for COIN efforts, marginalize the insurgent's actions, and help isolate the insurgents among the population (Headquarters, Department of the Army 2009, 4-10).

The ability of the HBCT to meet the tasks associated with the evaluation criteria, or COIN lines of effort, yielded an outcome of insufficient, sufficient, or best based on the ability to accomplish the tasks associated with each line of effort. The analysis included a cross-walk of baseline capabilities and augmented assets provided to the HBCT during the COIN campaign across the COIN lines of effort. The cross-walk of the BCT with augmented assets across the COIN lines of effort showed capabilities HBCTs require to be effective. Comparing the three case events highlighted the improvement in capability over time. These improvements were addressed within the DOTMLPF construct in the research findings. Table 2 shows the model used for analyzing the case events against the evaluation criteria.

41

	Table 2.BCT Capability and Evaluation Criteria							
	Establish Civil Security	Establish Civil Control	Support Host Nation Security Forces	Support Governance	Restore Essential Services	Support Economic Infrastructure	Conduct Information Operations	Assessment
2 BCT (pre- modularity)								Insufficient Sufficient Best
2 BCT (post- modularity)								
3 HBCT (Surge)								

Source: Created by Author.

<u>Summary</u>

This chapter described the research methodology used to generate and analyze data used to address the research questions. This was a qualitative study designed to develop a response to the primary research question of whether HBCTs have the capabilities to be effective in COIN to clear-hold-build-and sustain success. The first part of the research methodology described was the data collection process. This included the tactical assessment wargame and the SWOT analysis. The tactical assessment wargame included three case events assessed against the clear-hold-build-sustain success requirements of the doctrinal COIN approach. The data generated from the wargame and SWOT analysis fed into the evaluation criteria analysis. The evaluation criteria analysis included a cross-walk of the HBCTs capabilities across the COIN lines of effort. This model showed HBCT's improvements over time in terms of capabilities, as well as enablers that improve their effectiveness in the COIN environment. The results of this study are presented in the next chapter followed by a discussion of responses to the research questions.

CHAPTER 4

ANALYSIS

Introduction

The purpose of this research was to determine if modular HBCTs have adequate capabilities to be effective in COIN operations allowing commanders to clear, hold, build, and sustain success in their areas of operation. This chapter applies the research methodology described in chapter three to generate and analyze the data to answer the secondary research questions:

- 1. Is the HBCT's modular structure effective in COIN?
- 2. Is the HBCT equipped for COIN?
- 3. Is the HBCT manned with the skill sets for COIN?
- 4. Do lessons learned from OIF validate the modular HBCT?

There are six sections in this chapter: the case event executive summary, the tactical assessment wargame, the SWOT analysis, the evaluation criteria analysis, the findings, and the chapter summary. The first section is the case event executive summary. The purpose of the case event executive summary is to introduce the three case events used to generate data during the tactical assessment wargame. The second section is the tactical assessment wargame which describes the data collected from the three case events assessed against the doctrinal requirements for the clear-hold-build-sustain success COIN approach. The purpose of the tactical assessment wargame was to generate data for the SWOT and evaluation criteria analysis. The third section is the SWOT analysis. The purpose of the SWOT analysis was to analyze the data generated during the tactical assessment wargame in terms of the three HBCT's strengths, weaknesses, opportunities,

and threats. The SWOT analysis helped identify capabilities and limitations of the HBCTs around internal strengths and weaknesses in relation to external opportunities and threats. The fourth section is the cross-walk of the three HBCT's capabilities along the evaluation criteria representing the doctrinal COIN lines of effort. The purpose of the evaluation criteria analysis was to determine what capabilities HBCT's require for effective COIN operations. The fifth section is the findings from the analysis presented within the DOTMLPF construct. The purpose of the findings section was to provide the discussion to answer the research questions by describing where HBCTs have improved capability for COIN operations over time, and where continued growth is recommended.

Section 1: Case Event Executive Summary

The following case event executive summaries highlight the creativity and adaptability of leaders and Soldiers in heavy brigade combat teams during COIN operations. The adaptability of heavy brigades in the COIN environment represents the organization's ability to overcome shortfalls in doctrine, organization, training, materiel, and support from interagency and other government organizations to achieve success in the long war in Iraq. Furthermore, the case events demonstrate the HBCT's keys to success in COIN: training and employing host nation security forces, securing the populace from joint security outposts located within communities, and integrating interagency teams to build support. The HBCT's ability to sustain successes achieved along the security, economic, and governance lines of effort increased with augmented capability from interagency as well as other government or non-governmental organizations. The HBCT's task organization, specifically the number of battalions under its control in addition to the number of trained ISF conducting operations with the BCT, impacted the number of areas it could hold and expand control in an AO.

The primary sources for case events one and two were Robert Babcock's book titled *Operation Iraqi Freedom I: A Year in the Sunni Triangle*, Department of Defense transcripts of interviews with the BCT commanders, the author's experience in the BCT, and personal interpretation. The primary sources for case event three were transcripts from interviews with the HBCT commander and articles written by officers from the HBCT published in *Military Review* and other journals. The main interview cited during case event three was a transcript from a December 2007 interview with the HBCT commander by Kim Kagen from The Institute for the Study of War. Details about the sources can be found in the reference list at the end of this paper.

Case Event 1-The 2 BCT, TF Warhorse, During OIF 1, April 2003-April 2004 Executive Summary

The Second Brigade, 4th Infantry Division deployed to Kuwait in April 2003, after being redirected from its intended mission to attack from Turkey into Iraq as part of the initial invasion. The 2nd BCT was a legacy brigade that deployed with the full complement of battalions: three maneuver battalions (1-67 Armor, 3-67 Armor, and 2-8 Infantry), the artillery battalion (3-16 FA), engineer battalion (588th Engineers), and support battalion (204th Support). The brigade also had a motorized brigade reconnaissance troop (BRT). TF Warhorse included several attachments throughout the year-long deployment to include 1-17 FA, the 978th and 323rd Military Police Companies, the B Company 104th Military Intelligence (MI), B Company 124th Signal, and an Unmanned Aerial Vehicle (UAV) platoon (Babcock 2005, 348). The 2nd Brigade moved into Iraq in late April 2003 and settled in Diyala province where it conducted counterinsurgency and stability operations for the remainder of the next year.

Diyala is a province in Iraq comparable in size to New Jersey with a mix of religious, ethnic, and tribal influences (Babcock 2005, 74). Diyala is located northeast of Baghdad extending to the Iranian border in the east, and is bordered by the Tigris River in the west. Ba'qubah, the province's capital city is located approximately 35 miles northeast of Baghdad. The 2.5 million population included Sunni and Shia Arabs, Kurds, Iranians, and Turks. The threat that operated among the population included former Ba'ath regime cells, Fedayeen, Iranian Badar Corps, and terrorist groups from outside Iraq (Babcock 2005, 290).

The terrain in the brigade's area of operation was primarily lush, agricultural terrain with dense palm and orange groves separating the villages from the sprawling capital city Ba'qubah. The intricate canal system, narrow canal roads, foot paths, and narrow dirt bridges restricted mobility for the brigade's M1A2 Abrams tanks and M2A3 Bradley fighting vehicles. The cities and villages had many obstacles such as narrow congested roads with single and multiple story buildings. Low hanging power and communication lines criss-crossed over the roadways. The Warhorse units conducted a combination of mounted and dismounted operations because of the mix of congested urban areas, open desert, and heavily vegetated agricultural areas along the Diyala River with foot trails the insurgents used to evade coalition forces.

The Diyala river valley provided ample ground for insurgent training areas, weapon caches, and movement of supplies. As a result, the brigade established numerous battalion and company sized outposts to cut the insurgent lines of communication and prevent their influence on the rural population. TF Warhorse arrayed its battalions around the province occupying key terrain within the cities to focus on controlling the population. Companies occupying FOBs among the population were able to control areas by providing constant presence, cooperation with local leaders, and consistently gathered intelligence.

The battalions quickly adapted to the challenging environment and equipment constraints. The maneuver battalions lacked wheeled vehicles to move forces throughout the large non-contiguous areas of operation. Armor, infantry, engineer, and artillery companies trained their platoons to conduct dismounted infantry operations. They became adept at dismounted patrolling, raids, ambushes, searches, and clearing buildings. Platoons conducted combined arms operations including dismounted and mounted elements working with attack aviation, fixed wing aviation, engineers, and artillery. The maneuver battalions received a small number of up-armored HMMWVs to distribute to the companies to increase flexibility by adding a motorized capability to their heavy armor, mechanized, and dismounted assets.

Warhorse units quickly adapted to the full spectrum environment and leaders became proficient conducting civil-military operations while simultaneously conducting offense and defensive operations. Company and battalion commanders became town and city mayors responsible for establishing security in an unstable environment. Stability operations included numerous infrastructure repair projects such as repairing schools, water treatment facilities providing clean water to numerous cities, repairing court houses, hospitals, cleaning up trash in neighborhoods, and providing generators to provide power for public works facilities lacking reliable power. Battalions created civil-

48

military operations cells from within their staffs and appointed CMO officers to manage projects. The brigade adapted to the increased amount of tasks associated with COIN and stability operations in the large area of operation. Although trained and optimized for major combat operations prior to OIF, the 2 BCT proved that the heavy brigade is adaptable to the complexities of the COIN environment.

Case Event 2: The 2 BCT, 4ID in Iraq after Modular Transformation Executive Summary

The 2 BCT deployed to Kuwait in November 2005 after undergoing transformation to a modular HBCT. The HBCT completed reception, staging, onward movement, and integration (RSOI) and moved into Iraq to assume responsibility of the Babil, Karbala, Najaf, and part of the southern Baghdad provinces. This time the brigade had two combined arms maneuver battalions (CABs) instead of three (TF 2-8, TF 1-67), the addition of a reconnaissance squadron (1-10 CAV), a special troops battalion (2 STB), artillery battalion (3-16 FA), and no engineer battalion. The engineer battalion sent its companies to the maneuver battalions and the headquarters began forming 2 STB. The 204th Support Battalion remained as the brigade's support battalion.

Following OIF 1, the Warhorse brigade spent eighteen months completing equipment reset, modular transformation, and train-up for the deployment back to Iraq which culminated with a mission rehearsal exercise at the NTC. The brigade trained and equipped the Soldiers based on lessons learned from the previous deployment Iraq where it conducted COIN and stability operations in complex urban environments. The battalions conducted task force lanes training which included urban offensive operations both mounted and dismounted, intelligence collection, information operations, and leader engagements. The brigade brought in cultural and language experts to train Soldiers and leaders about how to conduct leader engagements with Iraqi counterparts, as well as important information about the Iraqi society. The brigade's NTC rotation prior to the deployment focused on COIN and stability operations in replicated towns simulating operations in Iraq.

The 2 BCT's area of operation (AO) included mostly agricultural terrain with some cities and industrial areas. The BCT's area of operation was similar to the size of Massachusetts and Connecticut combined, with a mix of ethnic and tribal affiliations (United States Department of Defense, 2006). The population consisted of Shia Arabs in the southern portion of the AO and a mix of Sunni and Shia in the northern Babil province where a fault line existed between the groups. The 2 BCT initially occupied four Forward Operating Bases (FOBs) throughout the area of operation and consolidated battalions toward the end of the deployment closing down camps no longer required after transitioning areas to the Iraqi Army (IA).

The 2 BCT trained and operated with six Iraqi Army battalions and three brigade headquarters from the 8th Iraqi Army Division during the deployment (Friederich 2006, 18). The brigade also assisted with training approximately 28,000 Iraqi Police (United States Department of Defense 2006). 2BCT created a brigade military transition team (MiTT) of dedicated trainers provided by the battalions to partner with the Iraqi Army brigade headquarters units during the deployment. The battalions partnered with the Iraqi Army battalions and conducted training on the large brigade FOB which included a marksmanship range and area to conduct maneuver training. Successful partnerships resulted in transitioning security responsibility to the Iraqi army and police. The 2 BCT

50

signified transitioning authority to the Iraqi security forces during ceremonies held with the Iraqi units and provincial leadership (Friederich 2006, 18).

The brigade continued offensive operations against insurgents and radical militias that threatened stability in the provinces. The battalions worked with community leaders and local sheiks to foster stability within their communities versus allowing the growing sectarian violence to damage security (United States Department of Defense 2006). Companies, in conjunction with Iraqi Army units, cleared areas where militias thrived assisting the Iraqi security forces with regaining stability.

Case Event 3: The 3 HBCT, 3 ID during the 2007 Surge Executive Summary

The 3rd HBCT, 3 ID conducted COIN operations in the Mada 'in Qada during the surge from 2007 to 2008. The Mada'in district located in the southeastern portion of Baghdad province is an agricultural area on the east side of the Diyala and Tigris Rivers. The Mada'in Qada is the size of the area inside the Washington, D.C. Beltway with a population of 1.2 million Sunni and Shia Arabs (Kagen 2007, 1). Mada'in Qada has four main population centers; Nahrawan, Wehda, and Jisr Diyala which included Shia extremist groups; and Salman Pak in the south which included Sunni extremist groups (Kagen 2007, 1-2). The 3 HBCT's mission was to interdict the extremist lines of communication entering Baghdad, prevent sanctuary in the AO, and enable the local government to provide for the communities. The HBCT spent over fourteen months focusing their efforts on controlling the population, destroying insurgent forces, and defeating the insurgent influence among the population (Fivecoat and Schwengler 2008, 24).

The brigade deployed to Iraq as a modular HBCT with two combined arms battalions (1-15 Infantry and 2-69 Armor), a reconnaissance squadron (3-1 CAV), artillery battalion (1-10 FA), 3-3 Special Troops Battalion, and the 203rd Brigade Support Battalion. The 3rd HBCT lost one of its CABs, 2-69 Armor, which was detached to support operations in Baghdad during the deployment (Fivecoat and Schwengler 2008, 24). The HBCT received an attached light infantry battalion from the Georgia National Guard, the 13th Georgian Light Infantry Battalion, late in the deployment. 1-10 FA detached from the brigade to conduct operations in another area for several months prior to occupying FOB Sallie and assuming responsibility for Nahrawan (Kagen 2007, 2).

Coalition forces did not have a foothold within Mada'in prior to 3 HBCT's arrival. Previous units operated from FOBs in Baghdad. They crossed over the Tigris River into Mada'in to conduct operations but left once they completed their missions. As a result, coalition forces could not control the population centers, gain the trust and support from the locals, or collect the intelligence required to defeat the insurgent groups. The 3 HBCT changed the conditions in the AO by occupying six FOBs in Mada'in Qada, cleared insurgents from the population centers, partnered with ISF, developed relationships with the community, and built economic and government capacity (Kagen 2007, 2). The HBCT lived among the populace and operated out of the numerous patrol bases along with the ISF. Their strategy to live and walk among the population followed the Multi-National Force-Iraq (MNF-I) commander's counterinsurgency guidance to "Walk. Move mounted, work dismounted" (Multi-National Force Iraq 2008, 1).

The 3 HBCT's "Counterinsurgency by the Numbers" (Kagen 2007, 7) approach based on recent COIN doctrine resulted in the Iraqi citizens supporting their local governments, ISF, and maintaining control of the population centers. The HBCT was able to continue to build government capacity with the support of an embedded provincial reconstruction team (ePRT). The brigade recruited hundreds of police, conducted millions of dollars worth of infrastructure projects focused primarily on water, and facilitated the spread of concerned local citizen groups (CLCs) working with the police to secure the communities (Kagen 2007, 7). Their efforts to build relationships and foster the concerned citizen groups proved to be essential to establishing security in the AO. The 3rd HBCT used their ePRT to exploit success and continue to build government capacity. The ePRT included State Department, USAID, and Department of Agriculture representatives to work with the government councils along the economic and government lines of effort (Kagen 2007, 17).

<u>Section 2. Tactical Assessment Wargame:</u> <u>Clear-Hold-Build-Sustain Success</u>

The tactical assessment of the three case events against the clear-hold-buildsustain success requirements for the doctrinal coin approach is the first part of analysis to determine the HBCT's effectiveness in COIN operations. The tactical assessment wargame begins with case event one followed by the remaining two case events assessed against the doctrinal clear-hold-build-sustain success approach to COIN. The results of the assessment of each case event against clear-hold-build-sustain success yielded a result of insufficient, sufficient, or best based on capabilities to accomplish the tasks associated with the doctrinal requirements.

The tactical assessment highlighted strengths, weaknesses, opportunities, and threats for heavy brigade combat teams conducting COIN operations. The results of the tactical assessment and SWOT analysis feed the final analysis of HBCT capabilities from the three case events against the doctrinal COIN lines of effort. A short description of the tasks associated with the doctrinal clear-hold-build-sustain success requirements precedes the results from the tactical assessment wargame.

Doctrinal Description of Clear-Hold-Build-Sustain Success

FM 3-24, *Counterinsurgency* (2006) describes clear-hold-build as an approach to COIN to achieve three main objectives: create a secure environment, establish host nation government control, and gain support from the population (Headquarters, Department of the Army 2006b, 5-51). The clear-hold-build approach focuses on controlling areas, expanding control and influence to other areas, continuing success by building government capacity, building support for the government, providing services for the population, and maintaining security. FM 3-24, *Counterinsurgency* (2006) paragraph 5-52 lists the primary tasks for the clear-hold-build COIN approach as:

Providing continuous security for the populace Eliminating insurgent presence Reinforce political primacy Enforce the rule of law Rebuild local HN institutions.

Sustaining success requires maintaining support from the populace while continuing to support economics and governance with other government agencies, non-governmental organizations, and international support. Table 3 summarizes the associated tasks and objectives for each phase.

Table 3. Clear-Hold-Build-Sustain Success Tasks and Objectives				
	Tasks	Objectives		
Clear	Destroy, capture, force withdrawal of enemy forces	Remove enemy forces and eliminate organized resistance		
Hold	Prevent insurgents from returning to cleared areas; defeat remaining networks; secure the populace and infrastructure	Reestablish host nation government		
Build	Rebuild infrastructure; continue securing the populace; implement projects that improve living conditions; enable the host nation government	Build support for the host nation government; build government capacity		
Sustain Success	Maintain conditions for progress; effective transitions; continue reconstruction and to build government capacity	Sustained progress and development		

Source: Headquarters, Department of the Army, Field Manual (FM) 3-24, *Counterinsurgency* (Washington, DC: Government Printing Office, 2006), 3-19-21.

Information operations are necessary for achieving success in the clear, hold, build, and sustaining success phases of COIN. FM 3-24, *Counterinsurgency* (2006) lists examples of themes for each COIN phase as well as the audiences commanders target with IO messages. During the clear phase, units focus IO messages on gaining support from the communities by emphasizing the cooperation between coalition and host nation security forces providing security against insurgents (Headquarters, Department of the Army 2006b, 5-19). During the hold phase, commanders emphasize the progress made with host nation security forces as well as the improvements made with local infrastructure and essential services making life better in the communities. During the build phase, commands create messages to inform the populace about COIN operations, collecting HUMINT, and gaining support from neutral people or "fence sitters" (Headquarters, Department of the Army 2006b, 5-22). Sustaining success phase requires consistently highlighting the benefits associated with secure and stable environments, improvements in local communities, as well as the long term plans for continued growth.

The Wargame: Case Event 1-The 2nd BCT, 4ID during OIF 1, April 2003-April 2004

Clear

At the conclusion of their deployment in support of OIF 1, the 2nd Brigade commander then COL David R. Hogg wrote "The lesson learned from our yearlong deployment was very simple: the Heavy Brigade Combat Team is a very adaptable and flexible force" (Babcock 2005, 296). OIF 1 preceded Army COIN doctrine published in 2006, and stability operations doctrine published in 2008. However, lessons learned from the Soldiers and leaders during the initial COIN years in Iraq shaped the success for future COIN campaigns in Iraq. The second BCT's approach to clearing was full spectrum operations conducted from multiple FOBs located on key terrain. The Warhorse Brigade gained a marked advantage over the insurgents by controlling the key areas with numerous battalion and company outposts. The leaders quickly adapted to shortfalls associated with the organizational structure, equipment for dismounted operations, and skill sets for COIN operations. Full spectrum operations became the norm and units conducted offensive operations to destroy insurgent forces while conducting stability operations to build support and capacity for local government councils.

As the insurgency grew in the summer of 2003, the coalition forces encountered resistance from former Ba'ath regime loyalists, extremist groups, and a growing number of foreign fighters (Pirnie and O'Connell 2008, 9). The insurgent groups gained support within their communities as damaged infrastructure, unemployment, lack of government

administration, and an overall gap in Iraqi Security Forces fueled support for insurgent groups. The 2 BCT conducted offensive operations at the platoon, battalion, and BCT level to kill or capture anti-Iraqi forces. Companies conducted searches for weapon caches, check point operations to interdict the flow of weapons and resources in the AO, raids, and combat patrols while continuously developing sources to support the intelligence effort. By applying constant pressure on the insurgent groups throughout the AO through a combination of direct and indirect action, the brigade was able to reduce attacks against as well as force the insurgent groups out of the AO (Babcock 2005, 293).

The insurgents primarily used direct fire ambush techniques combining machine gun fire, small arms, and rocket propelled grenades (RPGs) against the BCT during the early part of the deployment. As a result, the brigade's M1A2 tanks and M2A3 Bradley Fighting Vehicles were "worth their weight in gold-when they rolled, the bad guys took notice and when they fired, the enemy died" (Babcock 2005, 296). The 2nd Brigade's combined arms approach to offensive operations against the insurgent groups using all available assets including heavy armor, mechanized infantry, motorized assets, dismounts, attack aviation, lift aviation for air assault operations, UAVs, fixed wing aviation, Special Operations Forces (SOF), CA, PSYOPs, and ISF resulted in continuous progress establishing security.

The battalions initially lacked the equipment required for full spectrum operations. Soldiers were equipped differently and according to their military occupational specialty (MOS). Armor crewmen, engineers, artillerymen, combat support, and combat service support units did not have the necessary equipment for dismounted COIN operations. Armor companies did not have enough rifles to outfit every Soldier for dismounted operations.

The 2 BCT started receiving up-armored HMMWVs in the summer of 2003 to improve mobility while conducting full spectrum operations. The heavy units did not have enough trucks to outfit platoons for COIN and stability operations early in the deployment. As the insurgency grew, companies added armor protection to their unarmored HMMWVs and support vehicles to increase survivability. Welders fabricated weapon mounts for the light skin vehicles creating gun trucks. Companies began receiving up-armored HMMWVs in addition to crew served weapons and weapon mounts which improved mobility and survivability.

Armor, field artillery, and engineer companies adapted to the infantry type missions associated with offensive operations in COIN by organizing for dismounted operations. Tank platoons formed squads and fire teams to conduct dismounted patrols, searches, ambushes, and raids in conjunction with mounted elements. Companies trained and rehearsed dismounted operations at their FOBs and outposts to develop tactics, techniques, and procedures (TTPs) to counter the insurgent's tactics. The battalions conducted numerous company and battalion air assault operations to maintain surprise over insurgents. As a result, everyone regardless of MOS conducted air assaults (Babcock 2005, 294-295).

Unit leaders became proficient in applying combined arms techniques to defeat guerilla tactics and weaponry such as IEDs. Rather than depending on technical solutions, units gathered intelligence, conducted pattern analysis, route reconnaissance, route security, trash removal, ambushes, snipers, information operations, and leader

58

engagements to defeat IEDs (Wright and Reese 2008, 316). The 2 BCT applied a similar comprehensive combined arms approach to the insurgent mortar threat as well using a combination of intelligence preparation of the battlefield (IPB), reconnaissance from UAVs in conjunction with ground elements, counterfire, and ambushes to defeat the threat (Wright and Reese 2008, 316-317).

Tactical intelligence drove full spectrum operations. Small tactical units quickly became proficient in collecting and managing HUMINT to identify the significance of the operational variables in addition to the various insurgent activity in their AO. Tactical HUMINT Teams (THTs) could not sufficiently provide the extent of HUMINT support BCTs required because of their small number and size (Wright and Reese 2008, 199). As a result, companies and battalion headquarters organized for intelligence operations. Company commanders assigned their company fire support officers or executive officers as their intelligence officers; battalion S2 and S3 sections assessed, collaborated, and developed targets from the intelligence.

The BCT had the capability to sufficiently clear areas and establish continuous presence to control the population. The heavy units adapted to the irregular warfare environment and conducted full spectrum operations. They became proficient in dismounted operations, COIN, and stability operations. The units conducted combined arms operations incorporating all war-fighting functions which reduced the burden of training and equipment deficiencies. The BCT's methods of employing its units on key terrain among the population using multiple outposts enabled the units to control the areas and build support for the new local governments. In the end, the BCT leadership and soldiers adapted to the full spectrum environment and continued to improve capabilities to clear areas.

Hold

The 2nd BCT partnered with the Iraqi Police once they arrived in Diyala Province. As the battalions began initial patrols in their AOs, they met with small police forces that occupied damaged police stations in the population centers. Most of the police did not have weapons, vehicles, or radios to protect their communities. The police were waiting for guidance and assistance to start working again. The Coalition Provisional Authority (CPA) directed Iraqi police officers to return to work in July 2003 (Wright and Reese 2008, 442). The battalions had already begun working to get resources for the local departments such as pay, weapons, vehicles, and communication equipment. The 2 BCT continued this effort and recruited, trained, and equipped over 3,400 IP and 1,200 border police (Babcock, 2005, 293).

Similarly, the brigade recruited, trained, and equipped over 3900 Iraqi Civil Defense Corps soldiers (Babcock 2005, 293). The ICDC later transitioned to become the Iraqi National Guard and was responsible for assisting with security and reconstruction efforts (Wright and Reese 2008, 465). Companies selected ICDC company leadership and built ICDC units to assist with securing the communities. The companies trained their Iraqi counterparts from battalion and company outposts located within the communities. The ICDC conducted joint patrols, COIN, and stability operations along side of the BCT units who lived and worked in the same communities as the ICDC which built trust.

60

The number of battalion and company outposts among the communities enhanced trust, relationships, HUMINT collection, as well as joint operations with the ISF. Furthermore, units living in the communities were able to quickly identify the immediate needs of the population and implement projects to meet those needs. Leaders built relationships with the tribal sheiks and community leaders resulting in increased participation in ISF, support for continued infrastructure improvement, and developing the provincial councils.

The 2nd BCT's capability to hold areas was sufficient and continued to strengthen as units trained ISF. The newly formed ICDC and police units operating with 2nd BCT units marked the first steps toward continuously securing communities and building support from the populace. The partnerships formed early in the war became the road map for expanding and maintaining security. In the end, the BCT's approach to holding areas with numerous outposts within the communities proved to be a viable COIN strategy.

Build

Units conducting offensive operations against insurgents recognized the importance of repairing damaged infrastructure and services to creating stability within their AOs. The Soldiers lived in the same harsh, damaged conditions as the Iraqi population which provided an added motivation to make life better for the communities. The ten Civil Affairs (CA) teams from the 418th CA Battalion assigned to the division as a whole were critical assets to establish civil military operations centers (CMOCs) and prioritize needs for the people (Babcock 2005, 101). However, the battalions had to create their own internal CA teams led by junior staff officers because of the high

demand for civil military operations and small amount of trained CA assets within the brigade. The battalions focused on nation building because "There was simply no other agency that had the resources, organization, manpower, or willpower to even consider attempting the overall task of reconstructions" (Wright and Rees 2008, 374).

The engineer battalion, as well as the companies assigned to the maneuver battalions conducted the initial infrastructure improvement efforts with their organic equipment prior to the Commander's Emergency Response Program (CERP) funding. The engineers conducted various projects such as trash removal, clearing unexploded ordnance, destroying weapon caches, and assessments on damaged services. Battalions appointed civil-military affairs offices (CMO), or S5s, from within their staffs to work with the company commanders to prioritize high payoff infrastructure projects in their areas. With CERP money, battalion commanders were able to repair water stations, hospitals, and damaged government buildings.

The 2nd Brigade created a provincial council with district and local councils to establish governance. The battalions organized district councils by selecting a pool of candidates who voted for the council to represent their district. The district council then voted on a mayor. Companies conducted the same process at the lower county level (Wright and Reese 2008, 412). After facilitating the creation of provincial and local governments, units were able to coordinate efforts between the government seats while enabling the Iraqis to take responsibility for their communities.

Units living among the communities with damaged infrastructure and services quickly identified what needed to be fixed. Leaders met with community leaders to understand what the people needed, as well as to begin prioritizing projects to restore services among the population. The battalions established civil military operations cells but did not have sufficient capability to build until CERP became available. Once the battalions received financial resources they began restoring essential services and repairing damaged infrastructure. Simultaneously, the brigade established local and provincial councils and placed Iraqi leaders in charge of their communities. In the end, this was the first step in building government capacity to transition responsibility to the Iraqi people.

Sustain Success

The 2 BCT transitioned responsibility for Diyala province to 3 BCT, 1 ID in March 2003. Units transferring responsibility introduced the in-coming brigade to their Iraqi counterparts to include ISF, government leadership, sheiks and community leaders, as well as informants. This became the start of the one year brigade rotation cycle which challenged continuity and "adversely affected the Army's abilities to make sustainable progress" (Wright and Reese 2008, 390). Within the Brigade's AO, there were no established interagency governance and reconstruction teams to bridge the gap between the changes in military units. The new BCT did not occupy the smaller outposts because of requirements to perform out-of sector missions such as clearing operations in Fallujah which resulted in insurgents regaining momentum in certain areas. This started the continuous cycle of units clearing areas without dedicating the forces to hold areas in conjunction with the ISF. Without the continuous presence, units could not sustain support for the government, security, or protect the communities.

The 2nd BCT did not have the capability to sustain successes gained after clearing insurgents from areas and controlling areas with joint ISF presence because of the

transition between BCTs without capable ISF to maintain momentum. The ISF was not yet capable of securing areas independently of coalition forces while incoming units did not occupy the same outposts among the populace. Furthermore, the rise in sectarian violence as well as terrorist attacks disrupted on-going projects. The decline in security resulted in lack of support from government and non-governmental organizations which slowed reconstruction progress (Pirnie and O'Connell 2008, 13). In the end, the BCT transition, lack of ISF, and lack of inter-agency partners resulted in losing the successful momentum in the AO.

Case Event 2: The 2 BCT, 4ID Return to Iraq after Modularity

<u>Clear</u>

The new modular structure along with additional equipment and enablers offered more flexibility for commanders during COIN and stability operations. The combined arms maneuver battalions each had two armor and two infantry companies to train their Iraqi Army partners in addition to conducting joint operations against insurgents operating within their AOs. The CABs each had an engineer company for missions that included MiTT, route clearance, and infrastructure projects. The 2 BCT focused on training Iraqi security forces. However, joint operations often included clearing insurgent or extremist groups from large areas within their AO. As a result, the CABs benefited from the mix of Abrams tanks, Bradleys, up-armored HMMWVs, route clearance vehicles, UAVs at the company level, and improved dismounted equipment to conduct these operations. The CABs proved their effectiveness conducting full spectrum, dispersed operations within their large AOs. The BCT demonstrated its flexibility to clear insurgents from population centers and conducting dispersed operations with its battalions. In August 2006, the brigade sent 2-8 Infantry to Diwaniyah to clear a Shia militia group that overran an Iraqi Army platoon and seized control of the city 20 kilometers from Najaf (Simms and Taylor 2007, 5). The 2-8 Infantry initially deployed two infantry companies and one armor company team to Diwaniya, located 80 kilometers from their Forward operating base, to clear the insurgent force while the rest of the battalion continued operations in their AO from their battalion FOB. The 2-8 Infantry quickly gained control of Diwaniya and left one armor company team to hold the terrain along with coalition and Iraqi Army (Simms and Taylor 2007, 5).

In early October 2008, the reorganized militia attacked the company conducting a joint raid with a motorized Iraqi Army platoon. The ensuing battle later named the "Battle for Salem Street" resulted in intense urban combat between two large militia groups armed with RPGs and machine guns. The company "reconfirmed the value of the M1A2 tank as an indispensable weapon on the urban battlefield" (Simms and Taylor 2007, 13) by defeating the militia group and regaining control of the city. Furthermore, the company used attack and fixed wing aviation to gain superiority on the urban battlefield to disorganize the militia groups, gain situational awareness, prevent the insurgents from using roof-tops to attack the tanks, and envelop the militia groups (Simms and Taylor 2007, 14). The brigade's combined armed battalion proved to be effective while conducting split, dispersed operations to clear insurgents from population centers.

The modular BCT had several equipment related and specialized skill set advantages to use during its second deployment to Iraq. The companies had enough uparmored HMMWVs to outfit platoons which increased speed and mobility while adding capability to heavy armor platforms. Battalions had military dog teams for searches and site exploitation. Route clearance teams with assigned route clearance vehicles cleared supply routes, as well as provided mobility for operations in areas with high IED rates. Companies had enough Raven UAVs for platoons to conduct intelligence, surveillance, and reconnaissance (ISR) operations.

The brigade successfully cleared areas with their trained ISF partners. The modular structure and combined arms teams were effective for sustaining dispersed operations as well as to facilitating frequent task organization changes. The HBCT's improvements in training, and equipment, as well as augmented capability strengthened the combined arms teams. In the end, the modular HBCT's augmented assets and combined arms organization improved its capabilities to clear areas.

Hold

Training the Iraqi Security Forces was the brigade's mission. The 2 BCT trained thousands of IA leaders, Soldiers, and battle staffs "providing them the knowledge and confidence that is required to secure and stabilize their country" (Molinero, 2006). The training along with the joint operations provided the IA with the confidence and abilities necessary to secure their own communities. This resulted in the 2nd BCT transferring responsibility to lead COIN operations to the IA (United States Department of Defense, 2006). Companies and battalion MiTTs conducted ceremonies to celebrate successfully completing training programs while the BCT conducted ceremonies with local

community leaders to signify the Iraqi units taking over responsibility for their areas. An Iraqi battalion executive officer from the 8th IA division described his enthusiasm after training to the media by stating that "The success of this IA training marks another step in the path towards an independent Iraq," and "As the IA moves forward, so do the Iraqi people and soon we will reclaim our stake in a prosperous and free Iraq" (Molinero 2006).

The CABs did not employ as many company outposts among the population as in 2003. As a result, units spent an increased amount of time traveling to their areas of responsibility to conduct missions. Units that operated from consolidated battalion and brigade FOBs benefited from the infrastructure to train with Iraqi counterparts such as facilities, ranges, protected areas, and supplies. However, the lack of a continuous presence with permanent outposts in certain areas potentially impacted their ability to hold ground.

The BCT's focus on training and employing the ISF was critical to their ability to hold areas in order to build support with reconstruction projects. Units gained credibility among the populace by employing the strategy that "The recruitment and integration of indigenous forces into regular and irregular roles bring exponential increases in usable intelligence and can contribute to the legitimacy of the campaign, when those forces are disciplined and well trained" (Cassidy 2006, 130). In the end, the BCT had sufficient capability to hold areas in conjunction with ISF. Expanding throughout the large AO was problematic based on the number of forces available to maintain continuous presence.

Build

The battalions continued to conduct infrastructure and economic development projects in their AOs with the assistance of CA teams attached to the CABs. The companies coordinated with the CA teams to assist with managing projects in their areas. The CA teams directly supporting the battalions was an improvement from the previous deployment in 2003. The CA teams were an asset to the battalions for conducting operations along the economic and governance lines of effort. The companies along with supporting CA teams managed key economic projects such as establishing agricultural unions and building water treatment facilities to provide clean water for the communities.

The 2 BCT established partnerships with external agencies when possible to combine efforts toward building government capacity. For instance, the BCT's Judge Advocate coordinated with the battalions as well as the Babil Province Reconstruction Team's Rule of Law Coordinator to conduct rule of law projects such as rebuilding a damaged courthouse (Card 2009, v). The rule of law projects benefited the local Iraqi court system. The results can be seen today with a renovated, functioning court with the resources necessary to operate (Card 2009, 2).

The 2nd BCT had the capability to sufficiently build within their AO. However, the battalion's capabilities were limited to supporting CA teams and CERP funds to conduct economic and infrastructure projects. The example of the lasting rule of law projects which included support from the U.S. Department of Justice was limited based on the lack of state department personnel in the AO. As a result, the battalions managed most of the infrastructure projects within their AO. Stability operations doctrine later stated that "At the local level, military forces play a significant role in supporting

economic stabilization and infrastructure development" (Headquarters, Department of the Army 2008, 3-14). The battalion's capability to start and manage projects improved with increased CA support available to the battalions, but still lacked combined efforts with interagency partners.

Sustain Success

The 2nd BCT transitioned their AO and support to the ISF to the 1 BCT, 25 ID in November 2006. Capable ISF were in place to maintain momentum with security. The CA teams provided continuity between the transitioning BCTs by continuing civil projects and maintaining relationships with the community leaders.

The increased size and capability of the ISF, lasting partnerships with sheiks and civic leaders, as well as continuity along lines of effort with follow-on BCTs occupying the AO contributed to sufficiently sustaining success. The number of trained ISF established and operating among the communities sustained gains with security and enabled continuous growth. Embedded Provincial Reconstruction Teams supported subsequent BCTs in the same AO and expanded on projects the BCT started. The ePRTs coordinated their efforts to help rebuild the Iraqi economy and infrastructure with their partnering BCT (Turner 2008, 2). In addition to the ePRT, Human Terrain Teams (HTT), which included civilian researchers, worked with BCTs to assist units in understanding aspects of Iraqi culture (Turner 2008, 5). The HTTs also provided continuity between units and assisted commanders with lessons learned and vital information about their AO. In the end, the increase in capable ISF and subsequent addition of interagency partners resulted in the BCT's ability to sustain success.

Case Event 3: 3 HBCT, 3 ID COIN Operations during the 2007 Surge

Clear

The 3 HBCT successfully cleared insurgents from population centers using a combination of offensive operations to kill or capture extremists, and non-kinetic operations to neutralize the insurgent groups (Fivecoat and Schwengler 2008, 28). The HBCT conducted numerous large offensive operations to clear insurgents from their AO which resulted in short term gains. However, the 3 HBCT learned how to exploit the short term tactical successes and destroy the insurgent networks by controlling the population with ISF partners, establishing continuous presence in areas, and building support from the population. The BCT followed doctrinal COIN guidance by pursuing the insurgent infrastructure to include its financial support, leadership, and influence within the communities (Headquarters, Department of the Army 2009, 3-19).

The CABs conducted air assault operations to disrupt extremist groups across the large AO. The battalions conducted single platoon, multiple platoon, and multiple landing zone (LZ) air assaults to avoid IEDs on the roadways, maintain the element of surprise against the extremist groups, and extend operational reach across the AO (Marr et al. 2008, 15). Additionally, the battalions conducted air assaults to get in and out of target areas quickly, collect intelligence, and maintain constant pressure on the enemy throughout the AO (Marr Marr et al. 2008, 15-16). They developed TTPs for establishing outer cordons to isolate objectives with ground forces while inserting air assault elements to clear objectives. TF 1-15 air assaulted with all of its companies as well as TPT, HCT, EOD, and military working dog teams which added capability to their missions (Marr et al. 2008, 20).

The HBCT conducted joint operations with over 900 IP and 2000 NP while maintaining presence in the AO from numerous outposts (Fivecoat and Schwengler 2008, 25). The battalions became proficient with law enforcement operations such as building evidence packets and criminal case files used to convict insurgents in the Iraqi courts. Law enforcement agents trained the battalions to conduct tactical sight exploitation and build criminal case files including fingerprints, photos, videos, sworn statements from Iraqi citizens, confessions, and biometrics data (Fivecoat and Schwengler 2008, 28). The units shared the evidence packets with other BCTs and SOF to assist with capturing targets that moved to other AOs.

The HBCT's capability to conduct joint clearing operations with ISF was best. The brigade continued to apply pressure on the extremist groups where they could not maintain continuous presence. Once the HBCT established a foothold, they exploited success by implementing high payoff projects to attack the insurgent influence in their AO. Brigade operations followed COIN doctrine and attacked the extremist group networks by empowering the Iraqi Police, conducting effective intelligence collection, and policing functions.

Hold

The 3 HBCT followed COIN doctrine to hold the areas they initially cleared by establishing outposts among the communities along with ISF. FM 3-24, *Counterinsurgency* (2006) states that the "establishment of HN security forces among the population furthers the continued disruption, identification, and elimination of the local

insurgent leadership and infrastructure" (Headquarters, Department of the Army 2006b,

5-19). They focused on training the IP and NP while occupying Joint Security Sites (JSS)

among the communities. The battalions developed internal Police Transition Teams (PTTs) to mentor and train the police forces, which became essential to securing the populace.

The HBCT excelled during the *Hold* phase by following COIN doctrine to secure the populace. They empowered the ISF, maintained continuous presence in areas, and controlled the population. The battalions controlled the population by conducting human terrain mapping, biometrics, establishing the Concerned Local Citizens (CLC) or Sons of Iraq (SoI), and enabled the IP to enforce law within the communities (Fivecoat and Schwengler 2008, 26). The companies conducted census screening and human terrain mapping using biometrics collection equipment as well as support from the Iraqi Advisory Task Force (IQATF). The IQATF assisted military staff and commanders with collecting data on the population, advising, and assisting military staff and commanders with planning operations (LCNJ.com 2009, Iraqi Advisor Jobs).

The brigade supported the CLC groups throughout their AO which increased security, local support, and provided economic stimulus for communities. The CLC groups proved to be effective at holding ground and expanding security in areas the BCT and ISF cleared. The CLC groups worked with police to force the insurgent networks out of areas and helped set the conditions for the BCT to continue building support with infrastructure projects.

The HBCT achieved the best results where they could employ the CLC groups in conjunction with the IP and NP conducting joint operations with the battalions from JSS locations among the communities. Their ability to effectively hold areas depended on the number of ISF available to hold areas the battalions cleared. The HBCT continued to apply pressure on insurgent groups in areas they did not have the forces to maintain continuous presence. The 3 HBCT conducted offensive operations to include air assaults to disrupt insurgent activity, but the battalions could not hold areas and destroy the insurgent infrastructure without the ISF. This meant continuously clearing areas battalions could not hold with capable ISF, which contributed to short term tactical gains such as intelligence collection and detaining extremist group leaders. The HBCT was able to expand into the larger populated areas and maintain continuous presence along with ISF once the 1-10 FA returned to the BCT's task organization. They could have continued to expand and hold more terrain within their AO in conjunction with ISF if 2-69 Armor, one of two of the HBCT's CABs, had not been detached to conduct operations in Baghdad.

The HBCT had the best capability to hold areas among the case events. The brigade successfully held areas by employing ISF from joint outposts located among the population, and applying doctrinal as well as technological methods to control the population. The HBCT destroyed insurgent infrastructure with a comprehensive approach which included continuous offensive operations, intelligence collection, policing functions, and provided services to target insurgent influence. The CLC groups enabled the HBCT to maintain security among the communities and denied insurgent safe haven.

According to COIN doctrine, "The primary frontline COIN force is often the police--not the military" (Headquarters, Department of the Army 2006b, 6-19). FM 3-24, *Counterinsurgency* (2006) states that police are often the most effective at countering insurgent groups because of their ability to gather intelligence among the population resulting from their presence among their communities (Headquarters, Department of the

Army 2006b, 6-19). The 3 HBCT followed COIN doctrine and focused on training and enabling the IP and NP. The MPRI embedded Law Enforcement Professional (LEP) program supported the BCT with law enforcement training. This added capability enhanced the unit's ability to train the police on building case files to convict criminals as well as track crime statistics among the communities.

<u>Build</u>

Less than one year prior to the surge in Iraq and the 3 HBCT deployment, the State Department had only four PRTs in Iraq supporting Baghdad, Hillah, Kirkuk, and Mosul (Pirnie and O'Connell 2008, 69). The PRTs assisted with reconstruction and building government capacity at the provincial level, but often lacked personnel to support BCT units that supported neighborhood and district councils. The number of PRTs more than doubled by early 2007 after President Bush announced the surge strategy to set the conditions and begin transitioning control to the Iraqi government (Office of the Special Inspector General for Iraq Reconstruction 2007, 4). During the surge an additional fifteen ePRTs embedded with BCTs to support reconstruction at the district and municipal levels (Office of the Special Inspector General for Iraq Reconstruction 2007, 4). The Department of State (DoS), Department of Agriculture, and U.S. Agency for International Development (USAID) deployed specialists to support the ePRT's efforts in city management, business development, and agriculture. The PRT and ePRT programs continued to expand with specialists from DoS, the Department of Justice, Department of Commerce, and USAID (Office of the Special Inspector General for Iraq Reconstruction 2007, 5).

An ePRT embedded with the HBCT to support efforts in governance and economics. The brigade used CERP and other funds to gain support with reconstruction projects such as irrigation infrastructure, local industry, and CLC groups which provided economic stimulus in local communities (Fivecoat and Schwengler 2008, 29). The HBCT spent 37 million dollars on projects in 14 months which helped to eliminate insurgent control and influence within their AO (Fivecoat and Schwengler 2008, 29-30).

The HBCT achieved successful results during the building phase by coordinating efforts with interagency partners and Iraqi leadership. They helped build relationships between the provincial and local government councils to get resources. Their methodology was to support and assist rather than lead the functioning councils which helped communities grow toward self sufficiency (Kagen 2007, 12-13).

Sustain Success

The 3 HBCT along with interagency partners enabled the local government councils and ISF to sustain success within their communities. The civil-military team at the tactical level followed COIN doctrine and continued to make progress along the brigade's lines of effort. The HBCT sufficiently sustained successes in parts of their AO by recruiting, training, and enabling the ISF as well as CLC groups. The ePRTs provided the BCT with additional expertise and resources to expand initial efforts to build capacity at the local government level.

Section 3: SWOT Analysis

The results from the tactical assessment determined strengths, weaknesses, opportunities, and threats for each of the three BCTs from the case events. The SWOT

analysis showed three key points that continued in the analysis of BCT capabilities against the doctrinal evaluation criteria. First, the HBCTs sufficiently adapted to the COIN environment. Second, their effectiveness increased over time with added capability either attached or embedded with the BCT during COIN. Third, the BCTs improved methods by implementing new COIN doctrine into their campaign plans. The HBCT's internal factors such as equipment deficiencies, lack of specialized skill sets, full spectrum training, and doctrine were obstacles during the OIF 1 cases event. However, modular HBCTs took advantage of external factors such as COIN doctrine, special training, embedded interagency and contracted support, as well as the growing ISF to defeat the insurgent threat.

Strengths

Adaptability on the part of the HBCT's organization and leadership was a significant strength in the COIN environment. Pre-modular heavy brigades initially lacked the requisite equipment for dismounted operations, wheeled mobility, and full spectrum training. Furthermore, they lacked the necessary skill augmentation to supplement the combined arms team with CA, PSYOP, interagency reconstruction teams, human terrain teams, contracting personnel, interpreters, and HUMINT Collection Teams. Most importantly, they lacked trained ISF partners to control the population and maintain security necessary to build support within the communities. Regardless, units quickly adapted to the full spectrum environment and conducted COIN and stability operations across multiple lines of operation. Their initial efforts to train ISF, form government councils, and begin rebuilding infrastructure paved the way for new COIN doctrine, equipment, training methodology, and augmented capabilities.

The combined arms mindset and organizational structure of the modular HBCT proved to be strengths in each case event. The CAB's mix of armor and infantry benefited learning and training prior to deployment. The heavy task forces displayed flexibility conducting full spectrum operations in complex terrain using mounted, dismounted, and air assault operations to overcome obstacles associated with the terrain and enemy. The battalions used their Abrams tanks and Bradleys in conjunction with motorized and dismounted elements during offensive operations, as quick reaction forces, as well as base camp security. Overall, the HBCTs proved to be flexible and adaptive organizations that improved capabilities in the COIN environment with augmented assets.

Weaknesses

The BCT's lack of full spectrum training prior to OIF 1 was a weakness remedied over time at home station as well as training centers. BCTs improved individual Soldier and collective training to include dismounted operations, weapons proficiency, and scenario training replicated the myriad of tasks associated with COIN operations in complex terrain. The HBCTs received improved equipment for dismounted operations prior to subsequent deployments and continued to improve capability based on lessons learned.

The modular BCT had fewer maneuver battalions to conduct manpower intensive COIN and stability operations in large areas of operation. Higher headquarters task organization implementation further complicated the problem by detaching battalions from HBCTs to support other operations. The BCT's ability to attach and detach battalions on a regular basis proved the flexibility of the modular organization. However, HBCTs with less battalions were less capable of controlling their large AOs. BCTs with less than their authorized battalions combined with a shortage in trained ISF reduced the area they could control.

Another weakness associated with the organizational structure of the HBCT involved the engineers. The legacy BCT in case event one had an engineer battalion with three engineer companies that conducted a number of critical missions to include owning battle space. One of the battalion's engineer companies was task organized to a maneuver battalion and was instrumental with rebuilding one of the largest population centers in the brigade AO. Modularity initially divided the engineer companies among the CABs as in case event two, which provided CAB commanders with an additional company to control areas, as well as dedicated engineer support. The HBCT in case event three had one engineer company assigned to the STB which proved to be insufficient to support mobility, counter-mobility, and construction requirements in the COIN environment.

The HBCT's capability to collect and analyze HUMINT was essential to defeating insurgent networks and maintaining support from the population. FM 3-24 *Counterinsurgency* states that "Counterinsurgency (COIN) is an intelligence driven endeavor" (Headquarters, Department of the Army 2006b, 3-1). HBCTs continued to lack HUMINT capability at the battalion level to analyze and assess the continuous flow of information. The HBCT's Military Intelligence Company supported the brigade with HUMINT Collection Teams (HCT). However, their small number did not meet the high demand of battalions conducting dispersed operations over large areas of operation. As a result, maneuver company teams formed their own intelligence collection and analysis cells to assess information as well as to help understand the environment. The company

intelligence support teams (COISTs) consisted of personnel from the company's authorized personnel to assist the commander with targeting, ISR, managing patrol debriefs, tactical sight exploitation, and detainee operations (Morgan 2008, 24).

Opportunities

The HBCT's efforts to recruit, train, equip, and employ ISF was one of the most significant opportunities they succeeded in developing. Trained ISF along with CLC and Sons of Iraq (SoI) groups held areas in order for the BCTs to focus on building government capacity. The CLC groups took responsibility for security among the communities while the HBCT continued to push for more ISF to expand control into areas where insurgents remained.

The number of enablers that either deployed with or joined the HBCTs in theater increased over time and improved their capability across their COIN lines of effort. The number of civil affairs and PSYOPs teams increased and provided support at the battalion level. Embedded Provincial Reconstruction teams supported the HBCT during the surge and provided expertise to build capacity at the local government level. Embedded law enforcement personnel assisted with training units on policing techniques to improve the overall proficiency of the IP. External training resources increased with mobile training team opportunities, the COIN academy, IED defeat training, sniper training and ambush training for HBCTs to improve capabilities in the COIN environment.

The HBCTs established relationships with the sheiks, various ethnic groups, community leaders, and government councils to build trust as well as encourage participation. Two of the three HBCTs in the case events occupied multiple outposts among the populace. In case event 3, the 3 HBCT occupied eight outposts and four joint security sites with the IP and NP (Garamone 2008). Their partnerships and proximity resulted in over a fifty percent decline in murders in their area, revitalized markets, and reduced attacks (Garamone 2008).

The Army's 2006 Counterinsurgency doctrine provided a guide for units to study the fundamentals of insurgency, effective COIN techniques, and guidance for planning and executing COIN operations. Furthermore, the COIN doctrine focused BCTs on securing the population while building legitimate government institutions and security forces (Wright and Reese 2008, 576). The 3 HBCT in case event three is an example of a modular HBCT that applied doctrinal COIN methodology to defeat insurgent networks with the clear-hold-build approach. Their embedded interagency team, trained ISF and CLC groups enhanced the HBCT's ability to sustain success. Additionally, an HBCT replaced the 3 HBCT to continue momentum in the AO and assist the Iraqis with improvement (Garamone 2008). Overall, COIN doctrine and enablers improved the HBCT's capabilities in COIN.

Threats

The insurgent's ability to maintain sanctuary and influence among the population was a main threat to the BCTs. Large brigade AOs challenged units to maintain continuous presence and disrupt insurgent activity where they did not have the internal forces or trained ISF to hold areas. Units that continuously cleared areas repeatedly faced IED threats and ambushes while achieving short term tactical gains.

The battalion's access to funds was critical to sustaining COIN campaigns. BCT units, as outlined in the case events in this study, had used CERP for reconstruction projects within their AOs since OIF 1. Lack of funding, or complicated access to funds,

restricted the unit's ability to gain support from the communities and defeat the insurgent's control. The Center for Army Lessons Learned (CALL) Handbook 09-27 titled the *Commander's Guide to Money as a Weapon Handbook* describes the importance of money to tactical level commanders to achieve success during COIN campaigns: "Unit leaders who use proactive management controls to provide timely and accurate funding to warfighters are paramount to success or failure on the counterinsurgency (COIN) battlefield" (Center for Army Lessons Learned CALL Website 2009). Overall, the main threats were lack of ISF to control areas and the availability of funds to build support from the population.

Tactical Assessment Wargame Summary

The results of the tactical assessment indicated an increase in overall effectiveness over time associated with improvements in doctrine, training, material enhancements, and augmented support. Case events one and two had an overall rating of sufficient to clearhold-build-and sustain success. Case event three rated best overall with sufficient capability to sustain success with ISF and interagency support. The BCT in case event one adapted to the full spectrum environment but lacked equipment, critical supporting skill sets at the battalion level in addition to interagency support. Case events one and three both employed multiple outposts among the communities which proved to be an effective technique for controlling areas. Case event two had improved equipment, training, and ISF which improved their overall effectiveness. The HBCT in case event three benefitted from COIN doctrine, lessons learned, improved equipment, specialized skill sets, and interagency support at the battalion level. Table 4 summarizes the scoring.

	Table 4.	Results of the Tactical Assessment Wargame					
	Clear	Hold	Build	Sustain Success	Result		
Case Event 1	S	S	S	Ι	S		
Case Event 2	В	S	S	S	S		
Case Event 3	В	В	В	S	В		
I=Insufficient S=Sufficient B=Best							

Source: Created by author.

Section 4: Evaluation Criteria

The following evaluation criteria analysis builds on the previous analysis and demonstrates additional capabilities augmented to the HBCT which increased their effectiveness across the doctrinal COIN lines of effort.

Establish Civil Security

Lessons learned from BCTs conducting COIN operations in Iraq as well as COIN doctrine engrained a mindset into formations that "security was the bedrock to progress" (Garamone 2008). Doctrine emphasizes securing the population, providing services, and building government and security force capacity for achieving the best results (Headquarters, Department of the Army 2006b, 5-1). COIN guidance from the senior Commander's in Iraq that directed subordinate units to secure the population, enable ISF partners, and live among the population echoed the doctrinal guidelines for conducting COIN operations. Together, doctrine and commanders guidance shaped the methods HBCT's used to conduct COIN operations which arguably attributed more to successful campaigns than equipment or technological advances. For instance, the HBCT in case

event three achieved best results with fewer maneuver battalions than the other BCTs by applying recent COIN doctrinal methods.

Examples of critical technological equipment advantages included the addition of decentralized ISR assets available to BCTs. Modularity provided a significant ISR advantage to the BCTs for COIN operations. Decentralized ISR in Iraq provided BCT commanders with the additional resources to gain and maintain contact with the enemy (Odierno, Brooks, and Mastracchio 2009). BCTs received tactical UAV platoons which now can provide up to eighteen hours of full motion video (Odierno, Brooks, and Mastracchio 2009). Although still short in supply, BCTs now have three times the intelligence analyst capability and twice the HUMINT collection capability over legacy Brigades in 2003 (Odierno, Brooks, and Mastracchio 2009). The ISR assets provide BCT units with additional capability to assist ISF partners with internal security against terrorists, criminals, and guerillas (Headquarters, Department of the Army 2009, 4-6).

The additional HMMWV equipment packages provided BCT units with increased speed and mobility while reducing impact on local infrastructure. Perhaps of equal importance was equipping all Soldiers, regardless of MOS, for dismounted operations. The additional equipment allowed units other than infantry to conduct full spectrum operations using a variety of platforms. The case events showed that HBCT Soldiers, regardless of their occupational specialty, were proficient at mounted and dismounted operations in the COIN environment.

As indicated in Tale 5, the HBCTs that operated multiple outposts among the communities were more successful at establishing and maintaining civil security. Furthermore, improved training, improved dismounted capability and ISR assets, as well

as augmented equipment improved the HBCT's effectiveness in the establish civil security line of effort.

Establish Civil Control

The HBCT's capability to control areas increased over time with their ability to understand the environment to include cultural, political, societal and economic aspects. During the surge, Human Terrain Teams (HTTs) deployed to Iraq to embed with BCTs to help units understand the environment to more effectively conduct operations. Battalions followed COIN doctrine and conducted census screening called human terrain mapping within their AOs. The companies conducted human terrain mapping patrols in conjunction with CA, PSYOP, and HCT assets to collect demographics, tribal boundaries, political, economic, and sociological information (Marr et al. 2008, 18). After the patrols, the unit placed the collected information into the battalion's Command Post of the Future (CPOF) battle command system to share with other units (Marr et al. 2008, 19). They also used the handheld interagency detection equipment (HIIDE) biometrics system to catalog individuals among the population (Marr et al. 2008, 20).

The HBCT's strategy to live and walk among the communities was fundamental to controlling areas. Companies set the groundwork early in OIF 1 by recruiting, training, living, and conducting operations with ICDC and IP at combat outposts. Although FOB sizes, locations, and disposition changed over the course of years in Iraq, the partnerships with the ISF continued to grow. The HBCT during the surge expanded on the partnerships, incorporated CLC groups, and deployed its units back among the population according to COIN doctrine. Overall, the HBCTs improved capabilities along the civil control line of effort as indicated in table 5. Augmented capabilities, contracted training

support, and joint security sites within the communities resulted in the best ratings within the civil control line of effort.

Support Host Nation Security Forces

The Army used different models to train ISF such as BCT units, transition teams of different variety that augmented BCTs in their area of operations, or a combination of both. The MiTTs initially had problems with training, resources, and coordination with other US units (Wright and Reese 2008, 580). However, BCTs proved their capacity to overcome the challenges of recruiting, training, and equipping ISF partners. For instance, BCTs spent a considerable amount of time and resources providing logistics support such as weapons, ammunition, vehicles, and communication equipment necessary for the ISF to improve effectiveness (Wright and Reese 2008, 466). Smaller MiTTs that did not receive adequate support from BCTs faced recurring challenges of enabling their ISF partners.

HBCTs began partnering with ISF and conducting security force assistance since OIF 1 which included companies recruiting and training ill-equipped ICDC. From that time, HBCTs have created internal transition teams at the company, battalion, and BCT level to train ISF to assume responsibility of security. HBCTs applied a successful doctrinal method to co-locate with partner units among the population which built trust, provided necessary resources, and improved coordination. The HBCTs conducted training programs, joint operations, and equipped ISF in their AOs resulting in successfully transitioning areas back to Iraqi control. The BCT units that maintained close proximity with their ISF partners were able to provide essential enablers to assist

them during operations which provided an advantage over the enemy and built their legitimacy among the population.

Contracted support on the larger FOBs improved infrastructure to include training areas such as ranges, buildings for instruction, and life support to support training larger units. Contracted law enforcement personnel embedded with HBCTs and assisted units with police training. The contracted support increased over time and improved the HBCT's capability to sustain their partnerships while continuing to improve effectiveness.

Overall, the HBCTs' capabilities to recruit, train, and equip ISF were a strength in each case event. As shown in table 5, case event three had the best rating based on employing doctrinal methods for manning joint security sites and the increased capability to train police. The advent of the CLC groups was an additional capability that the HBCT in case event three expanded on in their AO.

Governance, Essential Services, and Economic Development

The Commander's Emergency Response Program (CERP) proved to be a combat multiplier on the COIN battlefield. CERP represented a key tool for gaining and maintaining support from the population by providing communities with services in an effort to defeat insurgent influence. The HBCTs in this study effectively used CERP to provide services and repair critical infrastructure in their areas while stimulating the local economy with jobs. The BCT's capability to manage the projects increased over time from ad hoc civil military operations cells created from existing staff positions within the battalion to CA team support to the battalions assisting company commanders in their areas.

The HBCT in case event one had an engineer battalion which assisted with removing unexploded ordnance, assessed damaged infrastructure, led the way in early infrastructure repair projects, as well as assisted with cleaning up communities prior to CERP funding. The HBCT in case event 2 had an attached vertical construction company to improve FOB infrastructure as well as assist with building smaller combat outposts. Both of the HBCT's CABs in case event two had organic engineer companies which conducted route clearance missions, destroyed weapon caches, and internal battalion MiTTT duties. The reduced engineer support organic to the HBCT in case event three impacted the unit's overall capability in an environment with a high demand for engineers.

Case event 2 included an HBCT that received limited interagency assistance from a PRT that supported the provincial government. The battalions in conjunction with their CA teams conducted all other civil military operations at the municipal and district levels. The surge BCTs began receiving ePRTs and other government organizations to support building government and economic capacity at the local level. Interagency and other government organizations brought expertise in agriculture, city management, and economics to assist the BCT commander with progress along the services and economic development lines of effort. Overall, as shown in table 5, event three received the best assessment based on the interagency support available to the BCT in addition to the CA teams supporting the battalions. Both supported the HBCT's efforts with the governance and economic development lines of effort.

Conduct Information Engagement

HBCTs training for full spectrum operations included leader engagements and media interview training into their scenario training at home station, within Army schools, as well as at training centers. The Army increased their ability to conduct IO at the tactical level by augmenting BCTs with additional PAO support, PSYOP teams, and combat camera to focus messages on Iraqi progress. Companies conducted dismounted patrols with these enablers while distributing IO messages carried with them which emphasized the progress made by the ISF and government councils (Marr et al. 2008, 20). Larger BCT projects included establishing radio stations for the government councils to inform the communities (Fivecoat and Schwengler 2008, 20). Overall, the BCTs in each case event successfully partnered with civil authorities and community leaders within their AOs. Table 5 shows their capability to conduct IO increased over time with additional PAO support, combat camera, and PSYOP teams which supported the battalions.

Summary of the Evaluation Criteria Analysis

The table below shows the relationship between the BCTs from the three case events and the additional capability packages they received to conduct their COIN campaign.

	Establish Civil Security	Establish Civil Control	Support H N Security Forces	Support Governance	Restore Essential Services	Support Economic Development	Conduct Information Engagement	Assessment
Case 1 Pre- Modular BCT	7 BNs Multiple FOBs	Leader Engagement Attached MPs	Internal ICDC/ Police Training	BCT/BN S5 CA at BCT level CERP	Engineer BN CA at BCT Level CERP	BCT/BN CMO (S9) CERP CA at BCT level	Limited PSYOP support Newspaper Leader Engagement	Sufficient
Case 2 Modular HBCT	6 BNs Improved Dismounted capability Wheeled Mobility and Theater Equip Improved Training Improved ISR/HUMIN T	Contracted Interpreters Limited PRT support at BCT level Attached MPs	BCT/BN MiTT External TTs	CA team Support to BNs CERP Limited PRT support	CA teams at BN level CERP Construction Engineers PRT	CA teams at BN level CERP	PSYOP Leader Engagement Combat Camera	Sufficient
Case 3 Modular HBCT (Surge)	5 BNs Multiple Outposts	HTT LEP Contracted Interpreters Increased HUMINT/ ISR at BCT HCTs Biometrics JSS	MiTTs Internal Police Trainers LEP Improved Transition Team training JSS CLC/SoI	ePRT/OGA CA teams at Bn level	CERP ePRT CA teams	CERP ePRT CA teams	PSYOP Teams Leader Engagement IO basic load Prepared Pamphlets/ Handouts Combat Camera Radio station	Best
Emergency I SQDN Squa	Response Progra	m. PSYOP Psyc . CA Civil Affai	hological Operat irs. S9 Civil Mili	ions. LEP Law I tary Operations	Enforcement Pro Officer (formert	Civil Defense Co fessionals. CAB y S5). MiTT Mil ction Team	Combined Arms	Battalion.

 Table 5.
 Results of the Evaluation Criteria Analysis

Source: Created by author.

The analysis of the HBCT's capability across the doctrinal COIN lines of effort showed heavy brigades growth from sufficient to best ratings. The analysis highlighted key factors associated with DOTMLPF which improved HBCT's effectiveness in COIN since OIF 1. The HBCT proved to be an adaptable organization which excelled as a result of improved doctrine, training, and augmented enablers for COIN operations. Below is a table summarizing DOTMLPF improvements which added to HBCT's effectiveness in the clear-hold-build-sustain success approach to COIN operations. The DOTMLPF factors are summarized in the next section which presents the findings from the analysis.

	Doctrine	Organization	le 6. DOT	MLPF Asse	Leadership/	Personnel	Facilities
Case 1 Pre- Modular BCT	Lacked COIN and stability operations doctrine	3 Maneuver BNs Engineer BN Pure task organization	MCO focused Lacked culture/ language training CTCs focused on MCO	Lacked equipment for dismounted Ops Lacked wheeled mobility Lacked ISR capability	Education MCO focused	Lacked specialty MOS	Multiple unimproved FOBs and outposts
Case 2 Modular HBCT	Incorporated COIN lessons learned	Combined Arms Battalions Engineer Companies in CABs BCT/BN MiTT	Full Spectrum training COIN academy Contracted cultural training Improved pre- deployment training opportunities	Improved Soldier equipment Augmented wheeled assets Theater specific equipment RFI/REF	Limited Cultural training Leader engagement Media	Increased special skill sets at BN level Combined arms formations	Improved infrastructure at training centers Improved RSOI facilities Improved operating bases
Case 3 Modular HBCT (Surge)	COIN Doctrine	Interagency and other government support Dynamic task organization	Full Spectrum CTCs replicate COIN Contracted support IED Training	Improved ISR capability IED defeat equipment Biometrics	Human Terrain Mapping Internal COIN academy COIN doctrine	Companies employed special skill support	Multiple operating bases Joint security sites (JSS)

Source: Created by author

Section 5: Findings

HBCT's effectiveness in COIN operations: Clear-Hold-Build-Sustain Success

Secondary Research Question 1

The first secondary question refers to the transformation from legacy heavy brigades to modular HBCTs and the impact on COIN operations: Is the modular HBCT structure effective in COIN?

Discussion

COIN operations are resource and manpower intensive. The case events analyzed in this project shared common challenges of conducting full spectrum operations across multiple lines of effort in equally large areas of operation. One of the main objectives for the modular transformation was to create more deployable BCTs to sustain efforts in Iraq and Afghanistan. While the Army successfully increased the number of available BCTs for deployments, some question the validity of the organization in terms of the reduced number of maneuver battalions as well as the lack of critical support enablers organic to the organization (Feikert 2006, 7-8).

Irregular Warfare and more specifically COIN operations have traditionally been conducted by SOF and light infantry forces prior to OIF 1. This traditional mindset argues against the heavy brigade's effectiveness for conducting the propensity of dismounted operations associated with COIN such as dismounted patrols, ambushes, raids, and searches. However, as doctrine states, COIN encompasses aspects of offense, defense, and stability operations weighted by commanders depending on the situation and mission (Headquarters, Department of the Army 2006b, 1-19).

<u>Findings</u>

Analysis supports that the HBCT's mix of armor, infantry, and support personnel were effective in both lethal and non-lethal operations. Moreover, there were intangible benefits to the CAB's company team organizational structure in regard to training as well as the mix of capability the organizations provided to commanders. The BCTs in each case event used all available assets to conduct combined arms operations. As a result, the modular HBCT's combined arms battalions provided commanders with more flexibility without the task organization challenges inherent in the legacy brigade's pure armor and infantry battalions.

The HBCT in case event three had a dynamic task organization during their deployment. The HBCT detached one CAB in addition to the artillery battalion to another BCT. A National Guard infantry battalion was attached to the HBCT after the artillery battalion returned to the BCT's task organization. As this type of task organization among the modular BCTs became more frequent, the modular organization's flexibility is apparent.

The modular HBCT structure is flexible in the COIN environment. However, the number and type of battalions available to the BCT impact progress beyond the clear phase. This means HBCTs should be task organized with the appropriate number of battalions to hold and build in conjunction with host nation security forces. More investigation is necessary to determine whether HBCTs should include a broader mix of battalion types such as infantry and Stryker battalions to compliment the heavy and mechanized infantry assets. Therefore, the HBCT organization has limited effectiveness

in a COIN environment based on the number of battalions to hold areas and build support.

DOTMLPF Implications

It is important for HBCTs to continue capturing recent lessons learned from their unique deployed task organizations in order to address the benefits and burdens of mixing different types of battalions such as CAB, infantry, and Stryker. The fact that the HBCT uses all of its battalions as COIN forces that own battle space and conduct the same types of operations, highlights the importance of full spectrum training to successful COIN campaigns.

Secondary Research Question 2

The second secondary research question asked whether HBCT's are equipped for COIN operations.

Discussion

The majority of the HBCT's combined arms battalions and reconnaissance squadron equipment is heavy tracked vehicles. Armor and mechanized infantry were essential to offensive operations in urban terrain, base camp defense, and a number of other tasks associated with operations in complex terrain. With that in mind, COIN doctrine also states the importance of carefully measuring the use of force and knowing when the use of force might be counterproductive to the COIN campaign (Headquarters, Department of the Army 2006b, 1-27). Furthermore, COIN doctrine states dismounted operations are more effective to maintain contact with the populace as well as the enemy, and to share risk with the population to maintain support (Headquarters, Department of the Army 2006b, 1-27). The doctrine coupled with COIN guidance from the commander of Multi-National Force-Iraq to "Patrol on foot and engage the population–with the ISF in front whenever possible" highlights the importance for BCTs to employ mix of mounted and dismounted capabilities (Headquarters, Multi-National Force-Iraq 2008, 1).

Findings

The HBCT in the first case event lacked the armored wheeled vehicles, dismounted Soldier equipment, and ISR assets required for sustained COIN and stability operations. Nevertheless, the units adapted to their constraints and applied the combined arms approach to solve the problem by leveraging aviation assets for reconnaissance, air assault operations, and distributed equipment accordingly to accomplish the mission. The HBCT's in the subsequent case events received additional equipment to outfit all Soldiers for dismounted operations as well as up-armored HMMWVs which minimized impact on the population. The additional equipment improved the HBCT's overall capability in the hold and build phases, especially for traversing large areas of operation.

Therefore, HBCTs augmented with wheeled assets and equipment for dismounted operations across the formation are equipped for COIN operations. A variety of equipment to include vehicle types, dismounted capability, as well as ISR assets improved the HBCT's overall capabilities in the COIN environment.

DOTMLPF Implications

Theater specific equipment is essential to augment HBCTs with equipment beyond their mix of armored assets to conduct sustained COIN or stability operations. Maintaining packages of equipment for HBCTs to draw in theater reduces the time to prep for deployment as well as the logistics burden associated with deploying heavy brigades. HBCT Soldiers, regardless of MOS, currently operate an array of equipment and use multiple platforms to conduct missions in COIN. As a result, the Army must provide simulation, virtual, and live training for Soldiers to maintain proficiency on the variety of platforms and associated weapon systems.

Secondary Research Question 3

The third secondary research question asked whether the HBCT is manned with the skill sets for COIN.

Discussion

COIN doctrine, as well as lessons learned from COIN operations in Iraq, highlighted the importance for BCTs to conduct balanced operations across multiple lines of effort. Furthermore, BCTs must ensure unity of effort by coordinating with the host nation and other non-military organizations to achieve the desired end state (Headquarters, Department of the Army 2009, 4-6). FM 3-24 also states that "Everyone has a role in nation building, not just Department of State and civil affairs personnel" (Headquarters, Department of the Army 2006b, 1-27). HBCTs are optimized for major combat operations however, the assessment of the case events in this study determined that HBCT's are effective at conducting operations across multiple lines of effort to include governance, essential services, and economic development. Their effectiveness increases with augmented capability to focus expertise along the governance, essential services, and economic development lines of effort.

The Rand Counterinsurgency Study Final Report described the importance of close coordination from the mix of departments, agencies, and organizations required for successful COIN campaigns:

From the perspective of the U.S. government, a mosaic of participants will contribute to the success of civil COIN. In many cases, dozens or even hundreds may be operating at the same time in a country torn by insurgency. Coordinating their efforts is a major challenge, but it is vital to effectiveness. (Gompert and Gordon IV 2008, 97)

This is paramount for BCTs at the tactical level working among the communities. The HBCT's ability to employ a "mosaic" of participants within their organization as well as leverage available external support contributes to applying resources across all lines of effort simultaneously. In order to effectively accomplish this unity of effort, HBCTs require augmentation beyond their organic capabilities to fulfill critical skill requirements provided by CA, PSYOPs, engineers, and military police which reside within the modular support brigades. Non-military resources such as ePRTs including Departments of State, Agriculture, Justice, Labor, Treasury, and USAID focus on building capacity as well as sustaining success.

<u>Findings</u>

Military Organizations

The increase in the number of CA teams, PSYOP teams, and HUMINT collection teams (HCT) available down to the battalion level increased the HBCT's effectiveness in holding and building operations. The HBCT in case events one and two each had organic as well as attached engineer support which provided the commanders with more depth in their battle space across their lines of effort. The Army's efforts implementing modularity to increase the number of critical skill enablers such as CA and PSYOPs teams increased the number of critical high-demand low, density forces available to HBCTs to support their battalions (Feikert 2006, 19).

Non-military Organizations

Embedded provincial reconstruction teams increased the HBCT's capability to build capacity and sustain success. The Secretary of Defense quoted a BCT commander in Baghdad who characterized ePRTs as "pivotal" to efforts in his AO by "getting Iraqis in his sector to better manage their affairs" (Gates 2008, 5). Other contracted support organizations provided essential cultural training and law enforcement training for the units to understand their environment as well as improve security force capability.

Therefore, the HBCT's capabilities to clear-hold-build-and sustain success increased with attached CA, PSYOP, and engineer assets to support down to the battalion level. Embedded PRTs provided expertise directly to the HBCT units as well as the municipal and district governments they supported. Contracted support augmented the HBCTs to provide additional training where Soldiers lacked skills in areas such as law enforcement to build proficiency with training their police partners.

DOTMLPF Implications

Many of the special skill attachments associated with the HBCTs increased effectiveness in COIN come from other support brigades or external non-military organizations. To minimize organizational differences, external assets should join the BCTs as early as possible prior to deployment for training and TTP development. Additionally, "expanding opportunities for interagency team members to work routinely with military organizations" (Chiarelli and Smith 2007, 13) would expand understanding of shared capabilities and limitations. Units must continue to capture lessons learned from working with attached units and interagency teams to improve tactics in COIN doctrine reflecting recent lessons learned from the HBCT-interagency cooperation during the recent surge.

Secondary Research Question Four

The fourth secondary question asked if lessons learned from Iraq validate the modular HBCT? This study used three case events to assess the capabilities of the legacy brigade against the modular HBCT. Additionally, the study incorporated two modular HBCTs to account for applied lessons learned and doctrinal improvements HBCTs incorporated into COIN operations in Iraq.

Discussion

Less is always not better in terms of battalions available to HBCTs in COIN. Holding terrain is manpower intensive and requires units to maintain continuous presence to destroy the insurgent infrastructure. Lessons from each case event show the need for additional engineer assets to support mobility, counter-mobility, construction, and assessment efforts.

Doctrine and training improvements were significant factors to the HBCT's overall effectiveness in COIN between the three case events. Case event three demonstrated that integrated doctrine and COIN lessons learned throughout the HBCT campaign plan resulted in marked improvement in security as well as government capacity in their AO. The HBCT units improved capability against the insurgent's irregular tactics by combining lessons learned with TTPs and equipment innovations to counter the threats.

Findings

Modularity Works. The HBCTs in the case events showed the organization's adaptability, flexibility, and ability to sustain dispersed COIN operations in large areas of operation. Of note, each BCT had a different task organization to include detached CABs and other battalions required by their higher headquarters to support operations in other areas. The assessment found HBCTs with fewer battalions could not hold key areas and relied on continuous clearing operations to disrupt insurgent networks. However, the HBCTs demonstrated abilities to incorporate a variety of attached units into the organization to include reserve and National Guard forces as well as interagency teams which improved their overall effectiveness.

Therefore, the HBCT with augmented skill sets and interagency support was the best solution to apply the clear-hold-build-and sustain success COIN approach. The HBCT should be augmented with additional maneuver battalions, engineer support, and other enablers based on careful analysis of the number of specified missions, the size of their area of responsibility, and the available number of capable host nation security forces. Permanently adding a third maneuver and engineer battalion back to the formation arguably could benefit the HBCT's ability to conduct full spectrum operations noted by the tactical assessment of case event one.

DOTMLPF Implications

Simply adding additional maneuver battalions or engineer assets to improve capabilities in COIN would insufficiently address the larger problem of improving the HBCT's capabilities across the governance, services, and economic lines of effort. As a result, the Army and interagency teams must jointly determine the right support packages for incorporating civil-military teams into the HBCT to conduct COIN operations.

Section 6: Summary

Are modular HBCTs effective in COIN operations providing commanders with the capabilities to clear-hold-build-and sustain success in COIN? This chapter included a tactical assessment wargame of three heavy BCTs that conducted COIN operations in Iraq which resulted in identifying strengths weaknesses, opportunities, and threats of the organizations capabilities. The subsequent analysis of the HBCT's capabilities against the doctrinal COIN lines of effort identified additional augmented assets necessary to build and sustain success. The findings outlined DOTMLPF factors which increased the HBCT's overall capability over time in addition to the impacts associated with the modular redesign. Together, the tactical assessment wargame and analysis of the HBCT capabilities against the doctrinal COIN lines of effort helped answer the secondary research questions. Answering the secondary research questions highlighted the adaptability and versatility of modular HBCTs in COIN. Furthermore, the DOTMLPF assessment showed the HBCT's increase in effectiveness between OIF 1 and the surge as a result of improved doctrine, training, equipment, methods for conducting COIN, augmented assets, and the increase in capable Iraqi security forces.

Chapter 5 provides the response to the primary research question, conclusions developed from this study, and recommendations for future research.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this research was to assess the modular HBCT's effectiveness in COIN based on its structure, equipment, skill sets, and lessons learned from COIN campaigns in Iraq. The primary research question asked whether HBCTs are effective in COIN operations providing commanders with the capabilities to clear-hold-build-and sustain success. The answer to the primary research question is yes, HBCTs are effective in COIN operations and their capabilities to clear-hold-build-and sustain success increase with augmented equipment and skill sets.

The analysis used to develop a response to the primary research question included a tactical assessment wargame of three HBCTs in COIN to determine their capabilities to clear-hold-build-and sustain success. The analysis continued with an assessment of the HBCT's capabilities against the doctrinal COIN lines of effort which yielded findings structured according to DOTMLPF which helped answer the following secondary research questions:

1. Is the modular HBCT structure effective in COIN?

2. Is the HBCT equipped for COIN operations?

3. Is the HBCT manned with the skill sets for COIN?

4. Do lessons learned from Iraq validate the modular HBCT?

The findings presented in chapter 4 suggested that HBCTs are effective in COIN because of increased enablers and deliberate change executed across DOTMLPF which improved their overall capability in COIN since OIF 1. This chapter first summarizes the findings from the analysis of the HBCTs represented in the case events and their ability to clear-hold-build-and sustain success in their areas of operation. The chapter then summarizes the findings that answered the secondary research questions and addresses recommendations for future research followed by the chapter summary.

Clear-Hold-Build-Sustain Success

The BCTs studied in the case events all demonstrated the capability to clear-holdand build. Sustaining success depended on external assets such as PRTs and the number of available capable security forces to maintain momentum in an area. The legacy heavy BCT in case event one adapted to the full spectrum environment as well as equipment shortfalls with combined arms approaches to solving complex problems. The modular transformation and the repetition of HBCTs conducting COIN resulted in lessons learned that drove changes to organizational structure, theater specific equipment, and additional skill sets attached to the BCTs. Factors associated with each are described in the following sections.

Organizational Structure

The common theme across the case events was that more battalions are needed to hold areas in conjunction with host nation security forces. The BCTs were responsible for controlling large areas of operation that included complex terrain and a diverse mix of environmental variables. Additionally, the modular design seemed to provide the flexibility necessary to task organize units with assets according to their mission and area of responsibility. This means HBCT's should be task organized with the requisite number of battalions and additional support units to include special skill units such as engineers, civil affairs, PSYOP, HUMINT collection teams, and military police to support the battalion areas of operation.

Equipment

The BCT in case event one did not have the best mix of equipment for COIN operations. The HBCTs in case events two and three had the required dismounted equipment for every Soldier regardless of MOS, as well as the necessary armored wheeled mobility. This means that HBCTs require a variety of equipment to be successful clearing-holding-building-and sustaining success in their area of operation. The augmented wheeled mobility and other theater specific equipment such as route clearance and mine resistant vehicles improved the HBCTs overall capabilities to conduct COIN operations. As a result, HBCTs must be augmented with additional equipment beyond their armored and mechanized assets. The number and types could vary, depending on the HBCTs task organization as well as the number and type of outposts the units occupy in their specific areas of operation.

Skill Sets

The HBCTs that receive augmented or attached assets such as civil affairs, PSYOP, HCTs, engineer assets, and military police achieved better ratings holding, building, and sustaining success. The HBCT in case event 3 received an embedded provincial reconstruction team (ePRT) which worked the governance and economic development lines of effort. The ePRT brought with it expertise in governance, city management, economics, and agriculture. The interagency teams assisted the BCT leadership with building capacity in the local municipal and district governments as well as coordinating resources at the provincial government level. This means that HBCTs should be task organized with interagency support such as an ePRT properly resourced to support the BCT's COIN campaign. Additionally, the HBCT must be augmented with the right number of CA, PSYOP, HCTs, military police, and other high demand skill sets to adequately resource the battalions to conduct decentralized operations.

Lessons Learned

This study determined that heavy brigades are a flexible and adaptable organization capable of full spectrum operations. The units in each case event scored sufficient ratings clearing-holding-and building within their AO while improving capability over time based on augmented assets to achieve the best results. Much of their improved capability is a result of DOTMLPF factors described in the following section.

DOTMLPF Factors

Doctrine

The COIN methods the BCTs applied in their AO outweighed their equipment or technological advantages and shortfalls. This was apparent throughout the tactical assessment of the three case events as the HBCTs began applying aspects of the new COIN doctrine which incorporated years of lessons learned. One of the key aspects of COIN doctrine the BCTs continued to apply was developing the Iraqi Security Forces (ISF). The HBCTs invested in their partnerships which allowed them to hold key terrain, expand their influence, and maintain the conditions for building capacity. The BCTs improved their ability to train and resource the ISF across the three case events which resulted in successful results in the holding-building-and sustaining success phases. The HBCT in case event three applied the doctrinal COIN approach to clear-hold-build in their area of operation. The HBCT applied the doctrinal approach and achieved unity of effort with their interagency support, their local government councils as well as the ISF to build capacity as well as sustain success.

Organization

HBCTs augmented with interagency support, high demand support such as CA teams, PSYOPs teams, HCTs, military police, and engineers proved to be the best organization to clear-hold-build-and sustain success. Furthermore, HBCTs with additional wheeled assets and ISR capability proved to be more versatile with countering irregular threats in the complex COIN environment. As previously stated, the number of available battalions in addition to the number of capable ISF units impacted the BCT's ability to hold areas and build support. This means that HBCTs should be task organized with the appropriate packages of support based on the size of the area, the BCT's specified tasks, and the environmental factors of the AO.

Training

Full spectrum training incorporating COIN lessons learned and doctrine improved the HBCT's ability to conduct operations across multiple lines of effort simultaneously. The Army improved pre-deployment training, replicating the COIN environment at the combat training centers, and training resources specifically for COIN operations. Contracted support and mobile training teams prepared units for the myriad of missions in the COIN environment. The units incorporated cultural and human terrain aspects into training which better prepared Soldiers for establishing partnerships with their Iraqi counterparts. COIN academies instructed leaders on the imperatives for successful COIN operations found in the COIN doctrine and lessons learned. The successful impacts of training on COIN operations should continue with HBCTs capturing lessons learned from recent campaigns. The lessons learned should continue to feed doctrine and collective training with interagency partners.

Materiel

The findings in this study attributed HBCT's effectiveness in COIN more to doctrinal, training, and organizational developments than equipment or technological solutions. However, there were three primary equipment related themes prevalent in each of the case events which increased the HBCT's capability in COIN. The three equipment related themes were improved dismounted equipment for all Soldiers regardless of MOS, augmented wheeled assets, and intelligence, surveillance, and reconnaissance equipment. The ISR equipment included UAVs, full motion video, and biometrics equipment used to collect and store information about the population. This means that the army should continue investing in Soldier gear designed to increase capability against irregular threats in complex terrain. Furthermore, theater specific equipment should be available for HBCTs to draw based on their mission and AO.

Leadership and Education

The HBCT leaders and Soldiers from each case event were adaptive and innovative. They demonstrated the ability to adapt quickly to full spectrum operations and accomplish the wide array of missions. Armed with COIN doctrine and lessons learned from previous COIN campaigns, they were more effective at integrating available assets as well as establishing relationships among the communities in their AO. COIN doctrine as well as the growing availability of COIN references of which many are outlined in this paper's literature review, were paramount to units achieving successful results. This means that the aspects of successful COIN practices should be taught at Army educational institutions and reinforced in the BCT's training program.

Personnel

The main theme for success conducting decentralized COIN operations across the case studies was the HBCT's ability to resource its battalions with the support they needed. The BCTs conducted operations across multiple lines of effort which required additional specialty skills to augment the battalions to achieve the best results building capacity. Many of these high demand skill sets reside in the modular support brigades and are attached to the HBCTs to support different phases of the campaign. Additionally, the interagency teams provided expertise required to exploit success building capacity and sustaining success. This means that to achieve best results across the COIN lines of effort requires HBCTs to resource the battalions with the necessary specialty skill sets required to build and sustain success in their AOs.

Facilities

This research focused on two aspects of facilities that impacted the HBCT's effectiveness in COIN which were improved training facilities and operating bases. Improved training facilities at home station, the combat training centers (CTCs), and RSOI locations enhanced the HBCT's preparation for full spectrum operations. They included IED lanes, live fire ranges, simulated urban environments, and improved living conditions. The FOBs included contracted support to improve life support and training areas. The main factor relating to operating bases was the unit's method for employing them among the populace. The BCTs that established multiple joint security outposts among the communities followed COIN doctrine and built trust among the populations. As a result, they were more effective at holding terrain and controlling the population. This means that HBCTs should be resourced to occupy multiple operating bases among the population with their host nation security partners to hold-build-and sustain success.

Recommendations

The review of findings and conclusions noted several aspects of the HBCTs organizational structure, equipment, skill sets, and applied lessons learned that resulted in successful COIN operations. Continued research is necessary to determine the benefits and burdens of dynamic HBCT task organizations such as the HBCT in case event three, the Army's capability to resource HBCTs with required support packages to include specialty support MOSs and interagency teams, and the viability of deploying HBCTs to support COIN efforts in Afghanistan. The following section describes the main points associated with each recommended topic.

Hybrid Organization

Case event three highlights an ongoing trend to task organize the HBCT with additional enablers as well as different battalions. The mix of armor, mechanized infantry, and engineer assets within the combined arms battalions proved to be a versatile organization and enhanced commanders' flexibility in complex environments. Therefore, continued research is necessary to analyze the lessons learned from recent deployments to determine if task organizing HBCTs with a broader mix of heavy, medium, and light capabilities adds to the organization's overall effectiveness against irregular threats in complex terrain.

Assets from Modular Support Brigades

This study concluded that enablers such as CA teams, PSYOPs teams, engineers, HCTs, and military police provide HBCTs with increased capabilities across the COIN lines of effort. Additional research is necessary to determine whether the modular support brigades are capable of providing HBCTs with the requisite support capabilities to sustain decentralized COIN operations. Furthermore, additional research is necessary to assess the results of the Army's effort to rebalance skills within the reserve components to provide BCTs with more high demand low density skill sets required for COIN.

Applicability of HBCTs in Afghanistan

This study concluded that HBCTs are effective in COIN, and with augmented assets provide commanders with the capabilities to clear-hold-build-and sustain success. This study analyzed three case events involving heavy BCTs in Iraq. The analysis showed the HBCT's adaptability in the full spectrum environment, its effectiveness against irregular threats, as well as its capabilities across the COIN lines of effort. Full spectrum training, doctrine, the modular transformation, and lessons learned from Iraq have broken the one-tracked major combat operations mindset. As a result, we must look beyond Iraq and determine how to train and resource the HBCT for continued COIN operations in Afghanistan. This would include pre-deployment training focused on dismounted operations in addition to providing the HBCT the special skill sets and equipment for the specific AO. Furthermore, many of the conclusions formed from this research are potentially applicable to the IBCT and SBCT. While an examination of HBCT capabilities in COIN was necessary, the same is true for the IBCT and SBCT.

Summary

In summary, this study concluded that HBCTs are effective in COIN operations providing commanders with the capabilities to clear-hold-build-and sustain success. Recent lessons learned from HBCTs that incorporated enabling capabilities down to their battalions to conduct decentralized COIN operations should be captured in doctrine as examples for future campaigns. Since the HBCT's success across the doctrinal COIN lines of effort requires interagency partnerships and critical supporting skill sets, the modular organization should be augmented with the required capability depending on their area of operation.

REFERENCE LIST

- Association of the United States Army (AUSA) Institute of Land Warfare. 1997. *Profile* of the Army: A reference handbook. Arlington: Institute of Land Warfare.
- Aylwin-Foster, Nigel. 2005. "Changing the Army for Counterinsurgency Operations." *Military Review* 86, no. 6: 2-15.
- Babcock, Robert O. 2005. *Operation Iraqi Freedom I: A year in the sunni triangle*. Tuscaloosa: St. John's Press.
- Bogart III, Adrian. 2006. "The nine principles of combined arms action in a counterinsurgency environment." *Military Review* 86, no. 2: 112-113.
- Card, Mary E. 2009. How can the United States Army and the interagency community better define and develop rule of law and doctrine and initiatives to include projects which will impact the human rights of women in Afghanistan and Iraq? Master's Thesis, Command and General Staff College.
- Cassidy, Robert M. 2006. *Counterinsurgency and the global war on terror*. Westport: Praeger Security International.
- Chiarelli, Peter W., and Stephen M. Smith. 2007. "Learning from our modern wars: The imperatives of preparing for a dangerous future." *Military Review* 87, no. 5: 2-15.
- Department of the Army. 2005. Army strategic planning guidance 2005. Army.mil. http://www.army.mil/references (accessed June 14, 2009).
 - ———. 2006. 2006 game plan. Office of the Chief of Staff, Executive Office of the Headquarters Staff Group. Army.mil. http://www.army.mil/features/2006 ArmyGamePlan/ (accessed June 1, 2009).
- Department of Defense. 2006. *Quadrennial defense review (QDR) report*. Defense Link. http://www.defenselink.mil/qdr/report/Report120060203.pdf (accessed November 13, 2009).
- Donnelly, Sally B., and Douglas Waller. 2005. "10 questions with Peter Schoomaker." *Time*, April 22, 2005. http://www.time.com/time/ nation/article/0,8599,1053555, 00.html (accessed May 16, 2009).
- Donnelly, William M. 2007. *Transforming an Army at war: Designing the modular force,* 1991-2005. Washington, DC: United States Army Center of Military History.

- Feikert, Andrew. 2006. U.S. Army's modular redesign: Issues for congress. Washington, DC: Congressional Research Service, Library of Congress. http://fpc.stategov/ documents/organization/67816.pdf (accessed October 23, 2009).
- Fivecoat, David G., and Aaron T. Schwengler. 2008. "Revisiting modern warfare: The 3rd HBCT, 3rd ID's experience in Mada'In Qada, Iraq." *Infantry* 97, no. 4: 24-30.
- Fontenot, Gregory, E. J. Degen, and David Tohn. 2004. *On point: The United States Army in Operation Iraqi Freedom.* Fort Leavenworth: Combat Studies Institute Press.
- Friederich, Anna. 2006. MND-B transfers Najaf province operational area to Iraqi Army. *The Ivy Leaves* (Summer 2006): 18. http://a-1-8.org/Docs/Leaves/Jun06/ summer_2006.pdr
- Galula, David. 1964. *Counterinsurgency warfare theory and practice*. St. Petersburg: Hailer.
- Garamone, Jim. 2008. Commander charts progress in Baghdad, Diyala. *Defense Link.mil.* http://www.defenselink.mil/newsarticle.aspx:id=49882 (accessed October 20, 2009).
- Gates, Robert M. 2008. "Beyond guns and steel: Reviving the nonmilitary instruments of american power." *Military Review* 88, no. 1: 209.
- Giovannelli, Danielle. *Profile of the U.S. Army 2008: A reference handbook.* 2008. Ed. Sandra J. Daugherty. Arlington: Institute of Land Warfare Association of the United States Army.
- Gompert, David C., and John Gordon IV. 2008. War by other means: Building complete and balanced capabilities for counterinsurgency. Santa Monica: RAND Corporation.
- Headquarters, Department of the Army. 2004. Field Manual (FM) 1-02, *Operational terms and graphics*. Washington, DC: Government Printing Office.
- ———. 2005. Field Manual (FM) 1, *The Army*. Washington, DC: Government Printing Office.
- ———. 2006a. Field Manual (FM) 3-90.6, *The brigade combat team*. Washington, DC: Government Printing Office.
- 2006b. Field Manual (FM) 3-24, *Counterinsurgency*. Washington, DC: Government Printing Office.

-. 2008b. Field Manual (FM) 3-07, *Stability operations*. Washington, DC: Government Printing Office.

2009. Field Manual (FM) 3-24.2, *Tactics in counterinsurgency*. Washington, DC: Government Printing Office.

- Headquarters, International Security Assistance Force Afghanistan. 2009a. General McChrystal's initial guidance, June 13. *Small Wars Jounal.com.* http://smallwars journal.com/blog/2009/06/general-mcchrystals-initial-gu/ (accessed June 20, 2009).
 - 2009b. ISAF commander's counterinsurgency guidance, August 2009. Scribd. http://www.scribd.com/doc/19075680/COMISAF-COIN-GUIDANCE (accessed November 7, 2009).
- Headquarters, Multi-National Force-Iraq. 2008. Multi-national force-Iraq commander's counterinsurgency guidance, September 16, 2008. MNFI-Iraq.com. http://www.mnf-iraq. com/images/CGs_Messages/080621_COIN%guidance.pdf (accessed June 18, 2009).
- Kagen, Kim. 2007. Transcript of interview with COL Wayne Grigsby, December 7, 2007. *Institute for the Study of War*. http://www.understandingwar.org/ files/ Transcript%20of%20Interview%20with%20COL%20Wayne%20Grigsby.pdf (accessed September 23, 2009).
- LCNJ. 2009. Iraqi Advisor Jobs. *LCNJ.com*. http://www.lcnj.com/iqaf-jobs.htm (accessed October 11, 2009).
- Marr, Jack, John Cushing, Brandon Garner, and Richard Thompson. 2008. "Human terrain mapping: A critical first step to winning the COIN fight." *Military Review* 88, no. 2: 18-24.
- McGrath, John J. 2004. *The brigade: A history*. Fort Leavenworth: Combat Studies Institute Press.
- Melton, Stephen L. 2005. "Why small brigade combat teams undermine modularity." *Military Review* 85, no. 4: 58-63.
- Modular Brigade Combat Teams: Task Force Modularity White Paper Part III (draft). 2004.
- Molinero, Michael. 2006. MiTTs take training to the next level. *Digital Video and Imagery Distribution System*. http://www.dvidshub.net/index.php?script=news/ news_show.php&id=5688 (accessed October 8, 2009).

Morgan, Rod. 2008. "Company intelligence support teams." Armor 117, no. 4.

- National Security Council. 2005. *National strategy for victory in Iraq*. Archives.gov. http://georgewbushwhitehouse.archives.gov/infocus/iraq/iraq_national_strategy_2 0051130.pdf (accessed November 11, 2009).
- Odierno, Raymond T., Nichole E. Brooks, and Francesco P. Mastracchio. 2009. ISR evolution in the Iraqi theater. *Trackpads.com*. http://www.trackpads.com/ home/magazine/armor_and_cavalry/172.txt (accessed October 21, 2009).
- Office of the Special Inspector General for Iraq Reconstruction. 2007. *Status of the provincial reconstruction team program in Iraq* (July 2007), by Special Inspector General for Iraq Reconstruction. Sigir.mil. http://www.sigir.mil/ reports/pdf/audits/06-034.pdf (accessed October 22, 2009).
- Petraeus, David H. 2007. Multi-national force-Iraq commander's counterinsurgency guidance. *NDU.edu*. http://www.ndu.edu/jrac/docUploaded/MNF-I%20COIN% 20Guidance%20Summer%202007%20v7.pdf (accessed November 13, 2009).
- Pirnie, Bruce R., O'Connell, Edward. 2008. *Counterinsurgency in Iraq (2003-2006)*. Santa Monica: RAND National Defense Research Institute.
- Romjue, John L. 1993. *The army of excellence: The development of the 1980s army*. Fort Monroe: Office of the Command Historian, United States Army Training and Doctrine Command.
- Simms, Ben R., Taylor, Curtis D. 2007. "The battle for salem street." *Army History* PB 20-07-2, no. 65: 5-15.
- Turner, David. 2008. How to build a government: ePRT and human terrain team chart a roadmap for the future. *Task Force Mountain.com*. http://www.taskforce mountain.com/ top-stories/1496-20081204-p4-4 (accessed October 15, 2009).
- U.S. Congress. Senate. 2000. General Eric K. Shinseki, Chief of Staff, United States Army before the Airland Subcommittee Committee on Armed Services United States. 106th Congress., 2nd sess., March 8. Senate.gov. http://armed-services. senate.gov/statement/2000/000308es.pdf (accessed November 10, 2009).
- U.S. President. 2006. *National security strategy of the United States of America*, 2006. Army.mil. http://www.strategicstudiesinstitute.army.mil/pdffiles/nss.pdf (accessed November 11, 2009).
- United States Army Combined Arms Center. Center for Army Lessons Learned. CALL Products. 2009. *Commander's guide to money as a weapon handbook*. http://www.usacac. army.mil/cac2/call/products.asp (accessed October 20, 2009).
- United States Department of Defense, Office of the Assistant Secretary of Defense for Public Affairs. 2006. Department of defense news transcript, DoD news briefing with COL John Tully, commander, second brigade combat team, fourth infantry

division, July 28, 2006. *Defense Link*. http://www.defenselink.mil/transcripts/ transcript.aspx?transcriptid=3683 (accessed September 23, 2009).

- Wright, Donald P., and Timothy R. Reese, 2008. On point II transition to the new campaign: The United States army in operation Iraqi freedom May 2003-January 2005. Fort Leavenworth: Combat Studies Institute Press.
- Zynda, Steven P. 2008. How the army meets future requirements. Thesis, Irregular Warfare Seminar, Command and General Staff College.

INITIAL DISTRIBUTION LIST

Combined Arms Research Library U.S. Army Command and General Staff College 250 Gibbon Ave. Fort Leavenworth, KS 66027-2314

Defense Technical Information Center/OCA 825 John J. Kingman Rd., Suite 944 Fort Belvoir, VA 22060-6218

Dr. Thomas G. Clark Department of Tactics USACGSC 100 Stimson Avenue Fort Leavenworth, KS 66027-2301

Mr. Stephen L. Melton Department of Tactics USACGSC 100 Stimson Avenue Fort Leavenworth, KS 66027-2301

Mr. Lowell E. Solien DLRO USACGSC 100 Stimson Avenue Fort Leavenworth, KS 66027-2301