Putting Armor Back Into the 82nd Airborne Division: Revisiting the AGS Decision

A Monograph

by

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14. ABSTRACT

The Army Times has reported that the Chief of Staff of the Army, General Peter Schoomaker, has directed the army to pursue more effective organizational structures. Since that is the case, now is the perfect time to revisit the decision to remove armor from the 82nd Airborne Division. While much has been written in the last ten years on the topic of heavy/light integration in general, and specifically on the armor requirements of an airborne forcible entry operation, the literature available does not agree on the impact and implications of the mid-1990s decision to cancel the Armored Gun System Program and inactivate the 82nd's airborne armor battalion. This study examines strategic documents, joint and army doctrine, and observations from recent operations in Afghanistan and Iraq to determine if a need exists to return organic armor assets to the 82nd Airborne Division. This study concludes that while we cannot predict whether future warfare will be more like Operation Enduring Freedom or Iraqi Freedom, the doctrinal requirement for forces to be strategically responsive and the Chief of Staff of the Army's demand for modularity are intended to address this uncertainty and demand the reintegration of armor forces not only into the 82nd Airborne Division, but into all conventional light forces as well. Based on these findings, it is recommended that the 82nd Airborne Division immediately field the four remaining Armored Gun Systems as the first step to increasing the strategic responsiveness of the division. The second recommendation is to begin the development of an air-droppable Future Combat System for inclusion in the airborne Unit of Action of the Future Force. Finally, this study recommends the redesign of all light forces to include an armor capability. Only then will our light Units of Action be truly strategically responsive and modular.

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Abstract

PUTTING ARMOR BACK INTO THE 82ND AIRBORNE DIVISION: REVISITING THE AGS DECISION by MAJ Andrew D. Preston, United States Army, 55 pages.

The Army Times has reported that the Chief of Staff of the Army, General Peter Schoomaker, has directed the army to pursue more effective organizational structures. Since that is the case, now is the perfect time to revisit the decision to remove armor from the 82nd Airborne Division.

While much has been written in the last ten years on the topic of heavy/light integration in general, and specifically on the armor requirements of an airborne forcible entry operation, the literature available does not agree on the impact and implications of the mid-1990s decision to cancel the Armored Gun System Program and inactivate the 82nd's airborne armor battalion. This division has been in combat on two occasions since. These occasions provide the opportunity to validate or invalidate the AGS decision. This study examines strategic documents, joint and army doctrine, and observations from recent operations in Afghanistan and Iraq to determine if a need exists to return organic armor assets to the 82nd Airborne Division.

This study concludes that while we cannot predict whether future warfare will be more like Operation Enduring Freedom or Iraqi Freedom, the doctrinal requirement for forces to be strategically responsive and the Chief of Staff of the Army's demand for modularity are intended to address this uncertainty and demand the reintegration of armor forces not only into the 82nd Airborne Division, but into all conventional light forces as well. By analyzing the experiences of light forces in both OEF and OIF based on the attributes of strategically responsive forces (responsive, deployable, agile, versatile, lethal, survivable, and sustainable), it is clear that redesigning the 82nd Airborne Division's force structure would increase its strategic responsiveness and broaden the options of the Joint Force Commander.

Based on these findings, it is recommended that the 82nd Airborne Division immediately field the four remaining Armored Gun Systems as the first step to increasing the strategic responsiveness of the division. Not only would this provide an immediate enhanced forcible entry capability, but would also permit the redesign process of the 82nd and future light forces to be better informed. The second recommendation is to begin the development of an air-droppable Future Combat System for inclusion in the airborne Unit of Action of the Future Force, in order to help ensure that the Future Force maintains an airborne, forcible entry capability. Finally, this study recommends the redesign of all light forces to include an armor capability. Only then will our light Units of Action be truly strategically responsive and modular.

SCHOOL OF ADVANCED MILITARY STUDIES

MONOGRAPH APPROVAL

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Introduction

In the hours of darkness, 19 OCT 01, a battalion (minus) of U.S. Army Rangers from 3rd Battalion, 75th Ranger Regiment, conducted a parachute assault and seized Objective Rhino, an airstrip near Kandahar, Afghanistan. As part of Operation Enduring Freedom (OEF), in what was the first combat airborne operation of the 21st century, the Rangers were sent to demonstrate U.S. resolve and put boots on the ground, as well as to provide support to the main effort (the main effort was a raid taking place at another location). The duration of the mission was less than one cycle of darkness.[1] Approximately five and one half hours later, the mission was accomplished and Objective Rhino was again void of U.S. forces. It would be over thirty days before the airstrip would be occupied again, this time by the U.S. Marines.[2]

On the same day as the parachute assault, U.S. Army Special Forces (SF) were launched into Afghanistan at multiple locations. The concept of the operation was for special forces teams to establish contact with three of the most powerful leaders of the Northern Alliance, Generals Abdur Rashid Dostum in the Mazar-I-Sharif area, Mullah Daoud in the Taloqan-Konduz area, and Fahim Khan at the Bagram air base. After establishing contact, the teams were to encourage the Northern Alliance to expand their foothold, assisted by U.S. air support. This organization proved effective. A little more than a month later, six provinces in Afghanistan had been liberated, including several key cities (Mazar-I-Sharif, Konduz, Khanabad, and Taloqan, among others). Suffering from only a few American casualties, Army SF soldiers and Northern Alliance forces inflicted thousands of enemy casualties while virtually eliminating Taliban and Al

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[1] LTC Stefan Banach, commander of 3/75th during OEF and OIF, interview with MAJ Andrew Preston, 18 DEC 03.

[2] Richard W. Stewart, *The U.S. Army in Afghanistan: October 2001-March 2002*, unpublished draft dated 3 Dec 03.

Qaeda from the northern part of the country, as well as liberating the city of Kabul.[3]

After liberating the north, attention shifted to Kandahar, the spiritual and political center of the Taliban. Using methods similar to those that had been successful previously, a special forces team linked up with another powerful regional leader, Hamid Karzai. Simultaneously, another team joined Gul Sharzai, an anti-Taliban leader located south of the city. Both advanced on Kandahar, one from the north and one from the south, meeting varying levels of resistance along the way. Several major clashes occurred, but the local Afghan troops, supported by U.S. airpower, were eventually able to defeat all enemy forces. Finally, on December 7th, as Sharzai's forces prepared for an assault, he received word that the Taliban had evacuated Kandahar. Without the bloody battle for the city which had been expected, Kandahar had fallen, and Sharzai reclaimed his previous position of governor.[4]

While Kandahar was falling, other Special Forces teams were beginning operations in the Tora Bora Mountains, south of Jalalabad near the Pakistani border. Taliban and Al Qaeda fighters had occupied the region in force following the fall of Kabul, in an area which had served as a stronghold for years. Although the resistance was better organized than in previous regions, and despite local anti-Taliban fighters which were more poorly organized, special forces again contacted a local leader to help coordinate an attack, this time Hazrat Ali. Once again, indigenous fighters were used with U.S. airpower in support. By mid-December, the fighting tapered off, and the last major area of resistance had been conquered. Approximately two months had elapsed since the Rangers dropped on the airstrip near Kandahar and the initial SF teams had been inserted, and Afghanistan was in effect liberated.[5]

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[3] Ibid, pp. 5-15.
[4] Ibid, pp. 15-25.
[5] Ibid, pp 25-26.

It was not long, however, before intelligence detected another enemy concentration, this time south and west of the Tora Bora Mountains. This concentration, in the Shahi Kowt Valley, was the sight of the last major combat operation in Afghanistan for several months, in an operation named Anaconda. Unlike previous operations, this one would include not only local Army SF, Afghan fighters and U.S. airpower, but a sizable number of conventional U.S. forces as well. The results, however, were essentially the same. From March 2nd to March 19th, 2002, elements of the 101st Airborne Division, 10th Mountain Division, and approximately 1000 Afghan fighters were able to attack in conjunction with U.S. airpower and defeat the Taliban and Al Qaeda forces which were in the valley. Although parts of the operation did not succeed (including the initial Afghan ground attack), the overall operation was a success. Unlike previous operations, many of the enemy chose to stand and fight, rather than flee. Many of the most experienced Al Qaeda fighters were killed, and the enemy lost access to a large stockpile of supplies and equipment.[6]

Operation Anaconda was a success despite the absence of any type of U.S. armor support. Light forces successfully defeated well-armed, dug-in enemy forces. Was this to become the model of future warfare, the "new norm?" Did Operation Enduring Freedom (OEF) demonstrate that light forces, with supporting airpower, have sufficient combat power to win the wars of the 21st Century? The United States Army did not have to wait long to learn the answers to these questions.

Approximately one year after Operation Anaconda ended in Afghanistan, the United States commenced combat operations in Iraq. In an operation known as Operation Iraqi Freedom (OIF), the United States was able to remove the regime of Saddam Hussein successfully, just as it had successfully removed the Taliban regime in Afghanistan. The operation, however, was much

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[6] Ibid, pp 31-44.

different. So were the lessons to be learned. In many situations in which light forces were committed, heavy elements were included. Operational differences dictated heavy augmentation to brigades of the 82nd Airborne Division, as well as the 173rd Airborne Brigade and both 1st and 3rd Battalions of the 75th Ranger Regiment, in order to ensure that their mission could be accomplished. The question, then, is clear. From which operation should force structure conclusions be drawn?

CHAPTER ONE

Defining the Issue

Problem, Significance, and Background

According to Joint Pub 3-18, Joint Doctrine for Forcible Entry Operations, "To be credible both as a deterrent and as a viable military option for policy enforcement, US armed forces must be capable of deploying and fighting to gain access to geographical areas controlled by forces hostile to US interests."[7] This type of operation is termed a "forcible entry operation." Combatant commanders who must conduct forcible entry operations have three options from which to choose. They are airborne assault, amphibious assault, and air assault.[8] As the army's only airborne division, the 82nd Airborne Division trains to conduct airborne assault forcible entry operations. Prior to the mid-1990's, the 82nd possessed an organic armor battalion (3-73d AR) to help the division conduct these operations. Although this battalion was scheduled to upgrade their aging M551 Sheridans to the newly designed Armored Gun System (AGS), the AGS program was cancelled prior to its fielding and the battalion was inactivated. As a result, the 82nd Airborne Division no longer possesses an organic armor capability. In an effort to offset this capability shortfall, the 3d Infantry Division maintains a mechanized company sized task force (an Individual Ready Company, or IRC) designed to deploy into battle with the 82nd.[9]

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[7] Joint Chiefs of Staff. Joint Publication (JP) 3-18. *Joint Doctrine for Forcible Entry Operations,* (16 July 2001) p. I-1.

[8] Ibid, p. I-4.

[9] William D. Wunderle. *Forced In, Left Out: The Airborne Division in Future Forcible Entry Operations,* (Fort Leavenworth, KS: School of Advanced Military Studies, U.S. Army Command and General Staff College, December, 1997), p. 29.

Since the inactivation of 3-73d AR, the division has deployed and conducted combat operations as part of Operation Enduring Freedom (OEF) in Afghanistan and Operation Iraqi Freedom (OIF) in Iraq, but did not deploy with their IRC. Did these operations validate the decision to remove armor from the airborne division? Did the lack of an organic armor capability limit the flexibility of war planners as they crafted a campaign plan for OIF? What impacts did the lack of an armor capability have on light units as they conducted combat operations?

This study examines if recent military operations demonstrate a need to return an organic armor capability to the 82nd Airborne Division. While new technologies and weapon systems give the division an anti-armor capability that it did not have in the days of Sheridan tanks, does the reduced protection and mobility adequately account for the operational realities of today's operating environment? The Army Times has reported that the new Chief of Staff of the Army, General Peter Schoomaker, has decided that it is time to redesign active duty divisions.[10] If that is the case, now is the perfect time to revisit the decision to remove armor from the 82nd Airborne Division.[11] The thesis of this monograph is that current operations demonstrate a need to return armor to the 82nd Airborne Division in order to meet the requirements of the modern battlefield.

Methodology

This study begins by reviewing works that have addressed this issue prior to Operations Enduring Freedom and Iraqi Freedom, and the history of the AGS program. Included in the text is a description of the capabilities that the AGS was designed to provide as well as the manner in which the impact of the program's cancellation was to be offset. Second, this study reviews current and emerging doctrine that requires the Army not only to maintain airborne forces but

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[10] Sean D. Naylor, "Fast Forward," *Army Times* (6 October 2003), p. 14.

[11] While it is beyond the scope of this monograph, the issue could, and perhaps should, be expanded to include all light U.S. Army formations, to include the 10th, 25th, 101st, and light National Guard units as well.

also to use these forces to conduct forcible entry operations as well. In addition, the doctrinal review includes a look at recent OSD and JCS documents such as the QDR, Transformation Planning Guidance (TPG), and Joint Vision statements to examine the validity of the current doctrine. Strategic Responsiveness serves as the overarching criterion for evaluating the need for an armor force organic to the 82nd Airborne Division. FM 3-0 defines strategically responsive Army forces as forces that, "…generate and sustain maximum combat power at the time and place joint force commanders (JFCs) require."[12] The manual lists the seven attributes of strategically responsive forces. They are: Responsive, Deployable, Agile, Versatile, Lethal, Survivable, and Sustainable.[13] This monograph examines recent operations in light of these characteristics in order to determine whether organic armor would have increased the strategic responsiveness of several light units that were sent into combat. After action reviews and interviews from the CFLCC C-5, 173d Airborne Brigade, 82nd Airborne Division, 1st and 3rd Ranger Battalion's experiences in Operation Iraqi Freedom help explore the subject.

[12] U.S. Department of the Army, FM 3-0 *Operations*, (Washington, D.C.: Department of the Army, June 2001), p. 3-0.

[13] U.S. Department of the Army, FM 3-0 *Operations*, (Washington, D.C.: Department of the Army, June 2001), p. 3-1.

CHAPTER TWO

Historical Review of Airborne Armor Issue

To understand why this issue should be revisited, it is first useful to review recent works that have addressed this topic. The chapter begins by reviewing four articles that were published in military journals from 1992 to 2000.[14] In addition, this chapter will review six monographs that were written by School of Advanced Military Studies (SAMS) students since 1993. [15]

Military Journals

The first article reviewed was written by Captain John A. Nagl and published in the July-August 1992 issue of Armor. He believes that light forces will need firepower, armor protection, and mobility to win on the battlefields of the 21st Century. In "The Armored Gun System: Sheridan Replacement Offers Better Firepower Plus Worldwide Mobility," Nagl contrasts the Armored Gun System (AGS) under development with the M551 Sheridan, describes its

[14] In addition to the works described, the following works were reviewed: "Armored Gun System Debate: Let it begin before it is too late" by LtCol James Etchechury, *Armor* (Jan-Feb 1991), "M8 armored gun system," by Scott Gourley, *Army* (Jan 1996), "Why not AGS?" by Stewart M. Hickey, *Marine Corps Gazette* (Aug 1992), "US Army dusts off AGS," by Ramon Lopez, *International Defense Review*, (Sep 1990), "Sayonara AGS! Sayonara scout? Sayonara armor?" by Don Loughlin, *Armor* (Jul-Aug 1998), "What Can We Do Without Light Armor?" by Kevin Rieders, *Armor* (May-June 1994), "Winds of Change favor Armored Gun System," by Julius G. Silers, *Ordnance* (Aug 1994), and "AGS in low-intensity conflict: Flexibility is the key to victory," by Scott Womack, *Armor* (Mar-Apr 1994).

[15] These works are: America's Middleweight Force: Enhancing the Versatility of the 82nd Airborne Division for the 21st Century by John Nicholson in 1993, Where's the Light Armor? Enhancing the Firepower of Early Entry Forces by Burdett Thompson in 1996, Employment of Light Infantry in Contingency Operations: What Do We Do Without Light Armor by Marshall Hagen in 1997, Forced In, Left Out: The Airborne Division in Future Forcible Entry Operations by William Wunderle in 1997, The 82nd Airborne Division in Transformation: Is it Possible to Significantly Increase the Combat Power in the Division Ready Brigade and Reduce Deployment Sorties Using Current, Fielded Technology? by Douglas DeLancey in 2000, and Integration of Armored Forces in the U.S Army Infantry Division by John Washburn in 2000.

characteristics, and examines the intended capabilities of the system. He concludes that the Army will increase its ability to respond to contingencies by fielding of the AGS.[16]

In 1997, after the cancellation of the AGS program, Stanley C. Crist wrote two articles addressing the issue. In the January-February issue of *Armor*, Crist argues that parachute infantry forces will need a large-caliber, direct fire weapon system in modern warfare, and that there are few alternatives to the AGS that can be implemented at a low cost. Crist examines six possible solutions, and concludes that the only feasible alternative is to field M113's with MK19s and Javelins. While acknowledging that the M113 is not a tank, he believes that there is no option more viable which is available for immediate employment.[17]

Crist's second article was published in the July-December issue of *Infantry*. In this article he again argues the need to mechanize parachute infantry. Crist notes that while Israeli, Russian, and German airborne units have incorporated mechanized and armor units into their airborne force structure, the United States has lacked the interest and vision to modernize their airborne units. Crist again recommends the addition of M113's as an immediate enhancement to the 82nd's force structure, and concludes that failure to mechanize will lead to military obsolescence and battlefield defeat.[18]

Finally, the July-August 2000 issue of *Armor* magazine contains an article by Captain Francis J. H. Park entitled, "A Second Look at the Armored Gun System." Park notes that the focus on improving deployability and the development of the IBCT has brought AGS back into the discussion. In his article he reviews the anti-armor capabilities of light forces, as well as the capabilities of the AGS. According to Park, "If the future of the Army is to transition light

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[16] John A. Nagi. "The Armored Gun System: Sheridan Replacement Offers Better Firepower Plus Worldwide Mobility." *Armor*, (July-August 1992), pp. 26-29.

[17] Stanley C. Crist. "Too Late the XM8: Alternatives to the Armored Gun System." *Armor* (January –February 1997) pp. 16-18.

[18] Stanley C. Crist. "Modernizing the Airborne." *Infantry* (July-December 1997), pp. 8-11.

infantry divisions to something based on the IBCT or its successor, fielding a mounted gun system to the light infantry and airborne divisions would be a logical transition."[19]

SAMS Monographs

The 1993 monograph by John Nicholson examines the U.S. Army's need for a middleweight force. This need is based on anticipated security requirements of the 21st century (which he describes as consisting of high technology, hybrid, and low technology threats), the availability of information technologies which provide information access to opponents which may provide them early warning and permit them to concentrate forces at lodgment areas to deny access, and doctrinal requirements which require rapid power projection to deter and defeat regional aggression. He concluded that in order to project the force we must be forced entry capable, and that U.S. early entry forces designed to fight light infantry in low intensity conflict are inadequate to address this requirement.[20]

John Nicholson believed that the 82nd "must possess the versatility to tailor lethal and survivable force packages appropriate for a variety of threats and terrain conditions."[21] In order to ascertain the 82nd's ability to do this, he continued his study with a look at the Division Ready Brigade (DRB) and its various task organizations. One of these task organizations, called a "Heavy DRB," is analyzed with the Wass de Czege Relative Combat Power Model against three

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[19] Francis J.H. Park. "A Second Look at the Armored Gun System." *Armor* (July-August 2000), p. 12.

[20] John W. Nicholson, Jr. *America's Middleweight Force: Enhancing the Versatility of the 82nd Airborne Division for the 21st Century*, (Fort Leavenworth, KS: School of Advanced Military Studies, U.S. Army Command and General Staff College, December, 1993), pp. 1-14.

[21] Ibid, p. 14.

hybrid threats based on anticipated forces available by 1997.[22] He terms his analysis a "Versatility Analysis," which he attempts to measure using maneuver, firepower, protection, and leadership as his criteria. From his analysis he concludes that the heavy DRB has insufficient firepower and mobility, and recommends motorization of the rifle companies, reconnaissance platoons, and combat service support assets to these inadequacies. Recognizing that airlift assets are a constrained resource, Nicholson further recommends that these assets be prepositioned in set (much like today's APS) to allow any light division, not just the 82nd, to upgrade rapidly to a middleweight force without requiring additional intertheater lift.[23] Unfortunately, these recommendations were not implemented. Not only are there no "middleweight force prepositioned equipment sets" in existence, but the 1997 force structure used in the study was never fully fielded (the heavy DRB included 14 X M8 AGS, whose program was cancelled as will be discussed in Chapter 2). Therefore, the versatility enhancement that John Nicholson believed necessary was never achieved.

The 1996 monograph by Burdett Thompson was written after the AGS program cancellation had been announced, and proposed that a gap would result in the U.S. Army's rapid deployment forces. In his paper he states that armor inventories were increasing worldwide, and that these forces would leave early entry forces particularly vulnerable. Noting that the AGS program cancellation yields cost and personnel space savings, he did not believe that these savings were offset by the increased risk resulting from the lack of AGS in the force structure. After a review of current doctrine, Thompson turns his attention to historical events that include World War II, Vietnam, Panama, and Haiti, and concludes that these events demonstrate a need for light armor in an infantry support role. In order to determine what type of light armor is

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[22] This model is a tool for comparing relative combat power of adversaries by looking at factors, in addition to force ratios, that influence the outcome of battles and campaigns.

[23] Ibid, pp. 14-39.

required, he next explores the requirements of early entry forces, the capabilities and limitations of the current (although in the process of being phased out as he was writing his paper) weapon system, the M551A1 Sheridan, and the Requirement Operational Capability (ROC) of the cancelled AGS. Having concluded that there is a valid requirement for light armor, his study then explores alternative options that include the Light Assault Vehicle (LAV) 105, the Cadillac Gage LAV-600 Armored Car, the Cadillac-Gage Stingray Light Tank, the Teledyne Vehicle Systems Expeditionary Tank, and the Product-Improved M551A2 Sheridan. Thompson concludes that light armor forces have a role in modern forces, and that many viable options exist. He ends by urging the Army to act immediately to recover the firepower critical to airborne forces in accomplishing its mission.[24]

The 1997 monograph by Marshall Hagen takes a slightly different approach. Written post inactivation of the 3-73d Armor Battalion of the 82nd, Hagen addresses the issue from a commanders perspective, asking, "What do we do now?" to employ light infantry in contingency operations. In order to answer this question Hagen first explores the role of light infantry - its force projection capabilities. He determines that while its ability to deploy rapidly a tailored force package is an advantage, its drawbacks are its lack of mobility and armor (as well as its limited CSS structure which will not support armored attachments). He further notes that five of the most recent six contingency operations employed armor augmentation. Next he investigates the employment of armor in contingency operations, noting the tactical value it adds to light infantry such as mobility, lethality, flexibility, and shock effect. The downside, however, is the increased air transport and logistical support requirements. In a chapter titled "What We Have Learned," Hagen describes how Operation Just Cause and CTC rotations have demonstrated the

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[24] Burdett K. Thompson. *Where's The Light Armor? Enhancing The Firepower of Early Entry Forces*, (Fort Leavenworth, KS: School of Advanced Military Studies, U.S. Army Command and General Staff College, December, 1996), pp. 1-44.

critical capabilities armor brings to light forces, especially during urban operations. Unlike previous articles, however, his solution lies in technology. With in depth descriptions of new capabilities (such as the Javelin, attack aviation, C-17, Enhanced Fiber Optic Guided Missile (EFOGM), Line-of Sight Antitank (LOSAT) Weapons System), as well as the Individual Ready Company (IRC) of the 3rd Infantry Division, he concludes that employment of technology and increased airlift capability offset the loss of organic armor. He recommends, however, that the U.S. Army explore filling the void during the early stages of forced entry by deploying with LAV-25 equipped units from the United States Marine Corps.[25]

While Marshall Hagen was writing his paper, William Wunderle was simultaneously writing his own, drawing quite different conclusions. Wunderle agrees with Thomas' assertion that the AGS termination would result in a capability shortfall in U.S. Army rapid deployment forces. He arrives at this conclusion by beginning with a look at future requirements. His determination of the future threat, strategic requirements, and force projection requirements convince him that a forcible entry capability remains a valid future requirement. He then turns his attention to answering the question, "Why Light Armor?" A look at history (Operations Just Cause, Desert Shield, and Restore/Uphold Democracy), doctrine, and operational requirements convince him that armor is a necessary ingredient to successful forcible entry operations. After a review of the United States' forcible entry capabilities (airborne, air assault, amphibious), Wunderle discusses the employment considerations for each type and the capabilities and mission sets the 82nd Airborne Division has for conducting these operations. Finally, he turns his attention to the same possibilities for bridging the gap as Hagen does. His conclusion, however, differs from Hagen. Wunderle argues that light armor is required to support early entry forces.

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[25] Marshall A. Hagen. *Employment of Light Infantry in Contingency Operations: What Do we Do Without Light Armor*, (Fort Leavenworth, KS: School of Advanced Military Studies, U.S. Army Command and General Staff College, December, 1997), pp. 1-43.

He believes that because the IRC cannot airdrop, the time required to airland prevents the maneuver commander from using it in his tactical plan. He also notes that armor may be required just to secure the airfield. These factors cause his to conclude that the efforts to offset the lack of organic armor are not sufficient.[26] He recommends the development of an "operational needs statement for an air-droppable, large caliber, protected, direct fire weapons system able to operate with airborne forces." [27]

John Washburn's 2000 monograph explored the issue with an examination of armor and infantry integration. His purpose was to evaluate the different manners in which armor can be integrated, and use historical examples to determine which method was more effective. Washburn identifies four methods of organizing armor with infantry, which are: 1) ad hoc (attaching armor units from heavy divisions to infantry divisions), 2) pooling (attaching armor battalions from echelon above corps units to infantry divisions), 3) semi-permanent (like pooling, only duration of attachment is much longer, and 4) organic (armor permanently assigned to infantry divisions). His criteria for evaluating these methods are: organization, doctrine, and combined arms training. By comparing and contrasting the different employment methods with these criteria, Washburn concludes that the U.S. Army's armored forces are out of balance, and that the current method of organization is the problem. The ad hoc method, used prior to 1940 and after the Army of Excellence (AOD) transition in the 1980s until today, has two disadvantages. One is the lack of a habitual association, and second is the limited time armor units spend training on their close support to infantry roles. Washburn believes that adequate doctrine exists, but recommends a force structure change to re-balance the armor forces. He ultimately concludes that by allocating one armor battalion per light infantry division from the

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[26] Wunderle. Forced In, Left Out: The Airborne Division in Future Forcible Entry Operations, pages 1-39.

[27] Ibid, p. 39.

current force, a habitual association could be formed which would result in an organization in which the integration of armor and infantry is more effective than today.[28]

The final monograph to set the stage is the 2001 work by Douglas DeLancey. DeLancey believes that as the Army transforms, the 82nd Airborne Division is getting left behind. The U.S. Army, by reducing the amount of forces it maintains forward-deployed, has increased its reliance on power projection capabilities. Power projection, however, has three challenges. These challenges are: light forces quickly deployed lack protection and mobility, sealift is slow, and limited airlift is available.[29] DeLancey demonstrates the importance of maintaining forcible entry capabilities as directed by doctrine, and describes the composition and mission of the 82nd Airborne Division as the U.S. Army's dedicated asset to conduct airborne operations. The challenge of deploying the 82nd, he notes, is the sortie requirement generated mostly by its large quantity of wheeled vehicles. In order to make the division more strategically responsive, the number of sorties required must be reduced, without reducing its combat power. DeLancey believes that the HMMWV is at the root of the problem. Due to its weight and size, HMMWVs account for a large number of sortie requirements, which he says could be reduced by replacing these vehicles with a vehicle which can stack, such as the Flyer Family of Trucks. DeLancey concludes that by replacing HMMWVs with Flyers, strategic and tactical maneuver speed would be increased without increasing the number of sorties required. More vehicles could be deployed in the same number of airframes, which would increase combat power by improving mobility as well as increasing the number of command and control platforms available. Since the Flyer can

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[28] John W. Washburn, *Integration of Armored Forces in the U.S. Army Infantry Division*, (Fort Leavenworth, KS: School of Advanced Military Studies, U.S. Army Command and General Staff College, December, 2000), pp. 1-39.

[29] Douglas J. DeLancey, The 82nd Airborne Division in Transformation: Is it Possible to Significantly Increase the Combat Power in the Division Ready Brigade and Reduce Deployment Sorties Using Current Fielded Technology? , (Fort Leavenworth, KS: School of Advanced Military Studies, U.S. Army Command and General Staff College, May, 2001), pp. 13-14.

mount the same weapons as the HMMWV, he further notes that firepower would not be reduced.[30]

With the exception of Marshall Hagen, the works described concluded that the current force structure of the 82nd Airborne Division is not adequate. Even the Hagen monograph acknowledges that the technology improvements which help offset the lack of organic armor leaves the force at risk during the early stages of forcible entry operations. While these authors did not reach consensus on the optimal solution for addressing the capability shortfall, all agree that the shortfall exists, and that steps should be taken to alleviate the problem. Whether the optimal solution is the M113, the AGS, or some other technology or armor type vehicle, it is clear that many felt the force structure of the 82nd was insufficient prior to operations in Afghanistan and Iraq. While Chapter Five will use events that occurred in OIF to explore whether their beliefs were justified, the next chapter will examine the existing strategic, operational, and tactical requirements which make it necessary for the army to be prepared to conduct airborne operations.

[30] Ibid, pp 1-46.

CHAPTER THREE

Airborne Operations as a Current and Future Requirement

"The greater the threat, the greater is the risk of inaction— and the more compelling the case for taking anticipatory action to defend ourselves, even if uncertainty remains as to the time and place of the enemy's attack. To forestall or prevent such hostile acts by our adversaries, the United States will, if necessary, act preemptively."

The National Security Strategy of the United States of America, 17 Sep 02

Before turning to investigate the thesis of this monograph, this chapter investigates whether the ability to conduct forcible entry operations with airborne forces remains a valid requirement and whether future conflicts may require such a capability. By examining both the strategic and operational levels of war, this chapter demonstrates that airborne operations remain necessary, as our National Strategies and visions of future warfare require it. In addition, this chapter concludes by describing why, at the tactical level, these types of operations may demand an armor capability to ensure that the desired operational objectives are successfully achieved.

Strategic Requirements

The discussion of strategic requirements must start at the top with the United States National Security Strategy (NSS). The most recent document, published in September of 2002, clearly establishes the requirement to maintain a strategically responsive force. In addition to the passage that began this chapter, the NSS directs that as part of the Global War on Terrorism, the United States will defend the American people and their interests at home and abroad by

"destroying the threat before it reaches our borders."[31] The document is prescriptive in how this will be accomplished:

> "Before the war in Afghanistan, that area was low on the list of major planning contingencies. Yet, in a very short time, we had to operate across the length and breadth of that remote nation, using every branch of the armed forces. We must prepare for more such deployments by developing assets such as advanced remote sensing, long-range precision strike capabilities, and transformed maneuver and expeditionary forces. This broad portfolio of military capabilities must also include the ability to defend the homeland, conduct information operations, *ensure U.S. access to distant theaters*, and protect critical U.S. infrastructure and assets in outer space."[32]

In order to ensure that the nation maintains a capability to conduct rapid and precise operations to achieve decisive results, the strategy dictates that we maintain access to distant theaters. It also directs that the military must continue to transform. This paper will return to transformation in a later discussion of the Department of Defense Transformation Planning Guidance.

The next document in the strategic hierarchy is the National Military Strategy (NMS). The most recent NMS, however, was published in 1997. This document introduced the defense policy goals of Shape, Respond, Prepare. Since the results were published from the Quadrennial Defense Review (QDR) on September 30, 2001, however, virtually all subsequent Department of Defense documents address the defense policy goals of Assure, Dissuade, Deter, and Defeat which were introduced in the QDR results. This document now drives policy decisions.[33] One of the major outcomes of the QDR was the shift of the "basis of defense planning from a "threat-based" model that has dominated thinking in the past to a "capabilities-based model" for the future."[34] This model requires that the U.S. identify what capabilities will be required in order to deter and defeat future adversaries. One of the capabilities identified is the need to

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[31] The National Security Strategy of the United States, 17 Sep 2002, p10.
[32] Ibid, p.19.
[33] Richard S. Tracey, Strategic Studies Division, Department of Multinational Operations, Command and General Staff College, Fort Leavenworth, KS, email interview with MAJ Andrew D. Preston, 7 JAN 04.
[34] Quadrennial Defense Review Report, 30 September 2001, p. F-IV.

maintain the ability to conduct forcible entry operations. Maintaining this capability is essential to deter conflict and swiftly defeat an enemy's political and military objectives.[35]

Another major tenet of the QDR report is the demand to strengthen joint operations. These forces must "allow the combatant commander to draw on the appropriate forces to deter or defeat an adversary."[36] One of the listed requirements of these joint forces is to be able to conduct forcible entry operations in anti-access or area-denial environments.

In order to guide the military's efforts to comply with the directives of the QDR, on 28 January 2003, the Joint Staff published a document titled "An Evolving Joint Perspective: US Joint Warfare and Crisis Resolution in the 21st Century." This document was endorsed by General Peter Pace, the Vice Chairman of the Joint Chiefs of Staff. In his endorsement, he directs that the work be used as a common frame of reference for joint concept development. [37] The text itself states that the goal of the document is to provide a common joint warfighting perspective and describe key elements and capabilities to conduct joint warfare for the foreseeable future. One of the operational themes is to maintain tailored, expeditionary forces that are rapidly deployable. When identifying the necessary capabilities of the expeditionary forces, the Joint Staff lists "forcible entry into a joint operations area" as the second of six requirements.[38]

The final strategic document to be referenced here is the Department of Defense Transformation Planning Guidance (TPG). Published in April of 2003, the document "provides a clear, concise approach for transforming the Department of Defense."[39] The guidance outlines what capabilities forces must have by the end of the decade so that they will be able to execute the missions identified in the QDR. One of these missions is projecting forces in anti-

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[35] Ibid, p. 25-26.
[36] Ibid, p. 32.
[37] The Joint Staff. An Evolving Joint Perspective: US Joint Warfare and Crisis Resolution in the 21st Century, p. iii.
[38] Ibid, p. 11.
[39] The Department of Defense. Department of Defense Transformation Planning Guidance, p. 1.

access or area denial environments. This capability is important if the United States desires to "utilize the most effective avenues of approach while rapidly engaging adversary forces."[40]

Strategic guidance clearly requires that the military maintain an ability to conduct forcible entry operations. While the NSS requires the Department of Defense (DOD) to maintain the ability to access distant theaters, the QDR Report makes it clear that to DOD this means maintaining an ability to conduct forcible entry operations. Maintaining the ability to conduct these operations is part of the transformation vision, and The Joint Staff has issued guidance that makes this capability a requirement in the future force. Having demonstrated that forcible entry operations are an essential capability of current and future forces, the next section will examine what this means to the U.S. Army.

Operational Requirements

Since the referenced strategic documents require the military to maintain a forcible entry capability, the search for operational requirements begins with a definition. JP 1-02, *Department of Defense Dictionary of Military and Associated Terms*, defines forcible entry as "seizing and holding of a military lodgment in the face of armed opposition."[41] While the dictionary does not define anti-access or area denial, it is not unreasonable to conclude that seizing territory which the enemy is trying to deny access to would cause forces to encounter armed opposition, thus necessitating a forcible entry operation.

Both Joint and Service Doctrine mandate the maintenance of a forcible entry capability. JP 3-0, *Doctrine for Joint Operations*, states that "Opposed operations require a viable forcible entry capability with forces prepared to fight immediately upon entry. When the adversary can

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[40] Ibid, p. 10.

[41] Joint Chiefs of Staff. Joint Publication (JP) 1-02. *Department of Defense Dictionary of Military and Associated Terms.* 12 April 2001, p.173.

limit the entry of friendly forces, initial operations may be designed to suppress these enemy anti-access capabilities."[42] In fact, forcible entry may be required in some environments in order to introduce decisive force. These operations can be designed to attack enemy centers of gravity directly, or open new corridors and avenues of approach for military operations.[43]

JP 3-18, *Joint Doctrine for Forcible Entry Operations*, is an entire Joint Publication dedicated to describing the requirements and considerations of this type of operation. The publication further refines the previous definition, adding that forcible entry is "seizing and holding a lodgment in hostile or potentially hostile territory that, when seized and held, will enable continuous landing of troops and material and provide maneuver space for subsequent operations."[44] Operationally, there are three applications for forcible entry operations. They may be conducted during the initial phase of a campaign or major operation, as a major operation within a campaign, or as a coup de main. Regardless of the application, the armed forces train for three primary types of forcible entry operations. They are amphibious assault, air assault, and airborne.

Amphibious Assault Operations – project power to establish lodgment to facilitate the introduction of follow-on forces. An Amphibious Force (AF) consists of an Naval Amphibious Task Force (ATF) and either an Army or Marine Landing Force (LF).[45]

Air Assault Operations – project combat power in depth from land or water based facilities using either fixed or rotary wing assets. [46]

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[42] Joint Chiefs of Staff. Joint Pub 3-0, *Doctrine for Joint Operations*, 10 September 2001, p IV-4.
[43] Ibid, p IV-10.
[44] Joint Chiefs of Staff. Joint Pub 3-18, *Joint Doctrine for Forcible Entry Operations*, 16 July 2001, p I-2.
[45] Ibid, p.A-1.
[46] Ibid, p. I-5.

Airborne Operations – conducted by parachute assault into an objective area to eliminate armed resistance and secure designated objectives.[47]

Any of the three types may be conducted, either separately or in any combination, based on the Joint Force Commander's assessment of the requirements to accomplish the mission. Joint Doctrine states that merely possessing force entry capability may force the adversary to think or act differently.[48]

According to Army doctrine, conducting forcible entry operations is one of the Army's six mission essential tasks.[49] Although the Army is capable of conducting all three types of forcible entry operations, it specializes in air assault and airborne operations.[50] FM 90-26, *Airborne Operations*, states that airborne forces can be deployed strategically, operationally, or tactically. These forces have several advantages. They can respond quickly, bypass land and sea obstacles, surprise the enemy, and mass rapidly on critical targets. [51]

Tactical Requirements

"It doesn't do any good to drop a light, airborne unit somewhere if the limits of your tactical reach is the maximum effective range of your crew served weapons."

LTC Stefan J. Banach, Commander of 3rd Ranger Battalion during OEF and OIF[52]

Once an airborne force has conducted a parachute assault, it is vulnerable until follow-on forces can be delivered to the airhead.[53] According to LTC Banach, in order to be successful in

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[47] Ibid.
[48] Ibid, p. I-4.
[49] U.S. Department of the Army. FM 3-0, *Operations*, June 2001, p. 1-4.
[50] Ibid, p. 3-17.
[51] U.S. Department of the Army. FM 90-26, *Airborne Operations*, December 1990, p. 1-3 to1-4.
[52] LTC Banach, interview with MAJ Preston, 18 DEC 03.
[53] Ibid, p. 3-4.

combat operations, friendly forces need firepower overmatch, protection, and mobility. Light forces are not adequately equipped for this. During combat operations in western Iraq in early April of 2003, LTC Banach's battalion was given the mission to secure the dam in the vicinity of Haditha. After initial success, the battalion encountered difficulty clearing the area of enemy forces. LTC Banach identified the need for armor support, and subsequently received two tanks attached to his organization. He then ordered the tanks to attack the town of Haditha. The tanks conducted two attacks within a twenty-four hour period, with great effect. "The introduction of armor changed the complexion of the battlefield. But it was not only the physical destruction, but the psychological impact as well."[54] Even though the battalion received a great deal of air support (LTC Banach recalls having 17 aircraft on station at one time), the objectives could not be taken without the addition of armor assets. According to Banach, "The protection, mobility, and increased firepower of the tanks enabled the battalion to destroy the remainder of the enemy forces."[55]

Chapter 5 will go into greater details about many similar operations during OIF. Missions assigned to light forces often necessitated the attachment of armored forces. Nothing from LTC Banach's experience described here, however, would demand a change to force structure. His Ranger battalion does not possess organic armor, but was able to receive augmentation and apply it effectively. His experience does, however, demonstrate that airborne (and perhaps all light) forces may face tactical situations that require armor forces. Because 3/75th had a secure airfield, they were able to airland M1's with C-17s and receive the support they needed. What if there had been no such airfield?

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[54] LTC Banach, interview with MAJ Preston, 18 DEC 03.
[55] Ibid.

Despite the changing national security environment and the evolving threat, today's armed forces, and more specifically, the Unites States Army, are required to maintain the capability to conduct forcible entry operations. Strategic security documents mandate it, and joint and army doctrine prescribe it. The 82nd Airborne Division, the U.S. Army's only division that trains for airborne assault forcible entry operations, provides a capability that remains relevant today and will continue to be relevant in the foreseeable future. It is not optimally structured for conducting these operations, however, as the division identified many years ago. The next chapter describes how the 82nd identified the requirement, and the steps that were taken, or not taken, to address the needed capability.

CHAPTER FOUR

History of the Armored Gun System Program

In January 1996, just as production was set to begin, the U.S. Army cancelled the Armored Gun System. This decision, coupled with the termination of funding for the Sheridan program in 1997 that led to the inactivation of 3-73 AR, effectively eliminated the ability of airborne forces to jump into combat with armor support.[56] Even though the 82nd Airborne Division supported the AGS program, the division was overruled, and the capability was lost. This chapter will investigate the sequence of events that led us to where we are today, beginning with the M551 Sheridan.

Evolution of the M551 Sheridan

In response to calls to replace the M41 light tank and the M56 self-propelled tank gun, the Army initiated a program in 1961 to develop an armored vehicle that could perform both the airborne and cavalry roles.[57] The vehicle, named the Armored Reconnaissance/Airborne Assault Vehicle (AR/AAV) XM551, or Sheridan, attempted to overcome the difficulty of designing a chassis with the ability to absorb the shock of recoil yet was light enough for airborne operations. In order to decrease the initial velocity (and hence the amount of recoil), the XM551 was designed with the 152-mm Shillelagh missile that was fired at subsonic speeds. After firing, missile velocity was increased using a solid –fuel motor. The result was a round that could be

[56] Sean D. Naylor. "Domino effect of the AGS Cancellation." *Army Times* (March 18, 1996), p. 3.
[57] Steven J. Zaloga and Lt. Col James W. Loop. *Modern American Armor* (Harrisburg, PA: Arms and Armour Press, 1982) p. 32.

employed at distances in excess of 3000 meters, but was inaccurate at close distances under 1000 meters.[58] Production began in 1965, and by 1966 the initial models were exiting the assembly line.[59] Commanders in Vietnam had been calling for a vehicle with the mobility of their armored cavalry assault vehicle but with greater firepower,[60] so in early 1969 the first Sheridans were deployed, despite the fact that Australia had tested the new vehicle and determined that it was unsuitable for operations there. Problems persisted, yet the U.S. Army continued to produce more of the M551s up until the early 1970s, when there were over 1700 of them in the inventory.[61] Sheridans were shipped to Europe to replace both M41s and M56s, where the terrain was more suitable and the climate was more friendly, and was employed in training and exercises with some success.[62] The vehicle's record in Vietnam, however, was not as good.[63] Continued problems with the gun system, both missiles and conventional rounds, engine cooling malfunctions, and recoil problems ultimately led to its replacement with M60s. By the early 1980s, Sheridans existed only in the 82nd Airborne Division and as Opposing Force vehicles at the National Training Center.[64]

It would be another 18 years before the Sheridans of the 82nd Airborne Division were retired. Despite the mechanical problems, the airborne unit needed a tank light enough to be easily airlifted, and the Sheridan was the only available solution.[65] As the early ammunition and engine problems were overcome, the vehicle ultimately had a satisfactory operational readiness

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[58] Ibid, p. 32.

[59] Carl H. Freeman. *The Army Needs a Strategic Armored Gun System—Now*! (Carlisle Barracks, PA: U.S. Army War College, 1991), p. 8.

[60] Thompson. Where's the Light Armor, p. 14.

[61] Freeman. The Army Needs a Strategic Armored Gun System—Now!, p. 8.

[62] Steven J. Zaloga and Lt. Col James W. Loop. *Modern American Armor*, p. 33.

[63] It should be noted that the Army's Sheridan experience in Europe was limited to garrison and training operations, not combat operations as in Vietnam.

[64] Freeman. The Army Needs a Strategic Armored Gun System—Now!, p. 9.

[65] Steven J. Zaloga and Michael Green. *Tank Attack* (. Osceola, WI: Motorbooks International & Wholesalers, 1991, p. 29.

rate. The Sheridan was light enough to be dropped using low-velocity airdrop (LVAD), and could be airlifted using C-130, C-141, and C-5 aircraft. The Sheridan was available almost immediately after being airdropped, taking just seven minutes to de-rig and drive away to its combat mission. In addition, it could be dropped with up to 28 rounds of ammunition, reducing the time required to be ready to conduct operations. Additionally, each tank possessed a coaxially mounted 7.62mm machine gun as well as a .50 cal ring mounted, anti-aircraft gun which was mounted forward on the commander's cupola.[66]

The Sheridan's abilities were demonstrated in 1989 during Operation Just Cause. As part of 1st Brigade, 82nd Airborne Division, eight Sheridans were dropped in the first combat drop of armored vehicles in history. These tanks were integrated with the infantry and performed classic armored cavalry roles such as reconnaissance, security, support to dismounted forces, and shock effect. The Sheridans were part of the plan for Operation Uphold Democracy in Haiti as well. Although the airborne assault was cancelled, elements of 3-73d Armor assisted 10th Mountain Division soldiers as they conducted peace operations. [67]

The Need for Change – A Move Toward AGS

The problems experienced in Vietnam coincided with the beginning of a series of events that explored the development and acquisition of a light armored vehicle. During the 1970s, the Defense Advanced Research Projects Agency (DARPA), the United States Marine Corps, and the U.S. Army Training and Doctrine Command (TRADOC) conducted separate studies aimed at establishing requirements and developing a recommendation for a replacement system. Studies

[66] Freeman. The Army Needs a Strategic Armored Gun System—Now!, p. 10.
[67] Thompson. *Where's the Light Armor*, p. 16-18.

continued during the 1980s, resulting in a 1985 decision by the Vice Chief of Staff of the Army to fund an Armored Gun System (AGS). Although the Chief of Staff of the Army (CSA) did not support the funding in 1986, the requirement for the AGS was reaffirmed by both the incoming and outgoing CSA in 1987, and a second required operational capability (ROC) was approved. Funding was again not available, however, and the program was dropped in a move that foreshadowed the demise of the program. The CSA was undeterred, issuing a promise to replace the M551 Sheridans by 1995. In 1989, the focus returned to the AGS program. In August, the XVIII Airborne Corps Commander renewed the call for a system to replace 3-73 AR's aging M551 fleet, which resulted in the Army Deputy Chief of Staff for Operations and Plans convening a General Officer Steering Committee (GOSC) to assess the Army's needs for such a system. The committee concluded that the requirement was valid, and directed the initiation of an acquisition strategy that would result in the fielding of the first systems in FY 1995.[68] As a result of these meetings, in April, 1990 the Army issued an updated ROC which "established the need for an AGS armed with a 105mm weapon capable of firing NATO-standard ammunition."[69] The requirement was outlined in four categories: deployability, lethality, survivability, and sustainability. Using this framework, the following requirements were established:

Deployability – Multiple configurations of the vehicle is acceptable, but at least one battalion configuration must be capable of LVAD from C-130, C-141B, and C-17 aircraft, and be capable of employment with all weapons systems within fifteen minutes after de-rigging. In addition, all vehicle configurations must be capable of "vehicle-powered roll-on, roll-off from the same aircraft for airland delivery."[70]

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[68] Freeman. The Army Needs a Strategic Armored Gun System—Now!, pp. 11-15.
[69] Wunderle. Forced In, Left Out: The Airborne Division in Future Forcible Entry Operations, p. 18.
[70] Freeman. The Army Needs a Strategic Armored Gun System—Now!, p. 17.

Lethality - The main gun must be at least a 105mm cannon, capable of firing kinetic energy rounds and defeating T-72 tanks with reactive armor at a range of 2000 meters. In addition, the system must be capable of mounting a M240, 7.62mm coaxial machine gun as well as a .50 caliber machine gun at the commander's station. The target acquisition system must provide fire on the move capability for both the main and coaxial machine gun, and include an integrated laser rangefinder on the fire control system. Both auxiliary and primary sights must remain boresighted after airdrop, and have night vision capabilities.[71]

Survivability – All configurations (to include armor add-on configurations) must be at least as mobile as the M551, and possess sufficient armor protection to survive small arms and indirect artillery fire. Although not required during airborne assaults, the vehicle must be capable of accepting add-on modular armor to upgrade its protection level and have a Nuclear, Biological, Chemical protection system.[72]

Sustainability – The system must maintain very high operational reliability (in anticipation of its requirement to operate in austere conditions), and should to the extent possible maximize common parts with the M1 Bradley or other existing systems. It must also be capable of accommodating current and planned communications systems, and be equipped with an external telephone for communicating with dismounted infantry troops.[73]

A vehicle that possessed the capabilities outlined above would have served as a viable replacement for the M551 Sheridan. Not only would the airborne community retain its ability to employ armor immediately as part of forcible entry operations, but guaranteed armor support would be available to conduct follow on combat operations as well.

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[71] Ibid, p. 17.
[72] Ibid, p. 18.
[73] Ibid, pp. 18-19.

AGS Final Specifications

The 1990 ROC resulted in a program that was awarded to FMC Corporation Ground Systems Division (later renamed United Defense L.P.) in June of 1992, and the first prototype began testing in February 1994. Testing continued until late 1995, when a decision was made to begin low rate initial production. At that time, the full-rate production decision was expected to made in 1997, with initial fielding to 3-73 Armor in early 1999. All three squadrons of the 2nd Armored Cavalry Regiment were to be fielded subsequently. The U.S. Army was not the only one interested in fielding the system, as Taiwan, Singapore, and Turkey expressed an interest in the system as well.[74]

As the M8 prepared to enter into low-rate initial production, its specifications met all of the criteria previously identified. The system contained all the prescribed armament and equipment, and consisted of several levels of armor protection which could be varied based on the expected level of threat. Level 1, the only level at which the system could be airdropped (due to weight restrictions), provided protection against machine-gun fire. Level II protection provided greater survivability against medium cannon rounds, and Level III defeated infantry antitank rockets.[75]

Despite its increased degree of protection, the system maintained its strategic deployability. It could be air dropped from a C-130 or C-17, and could be air landed by both aircraft, as well as by C-141 and C-5 aircraft, in a roll-on/ roll-off configuration. For air land operations, a C-130 could carry one AGS, and the C-141, C-17, and C-5 aircraft could carry 2, 3, and 5 respectively.[76]

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[74]Scott R. Gourley, "M8 Armored Gun System," *Army*,(January 1996, pp. 39.
[75] Ibid, p. 38-39.
[76] Victor Holman, *Cavalry Operations in Support of the Force XXI Commander* (Fort Leavenworth, KS: School of Advanced Military Studies, U.S. Army Command and General Staff College, May, 2001), p 20.

Death of a Program – The Rationale for Cancellation

Just three months after the decision to enter the AGS into low rate initial production was made, a subsequent decision was made to cancel the program as a bill-payer for other programs. Eight months later, Army Chief of Staff Dennis Reimer made the decision to inactivate 3-73 AR, leaving the 82nd without an air-droppable armor platform. These decisions were made based on an expectation that "a variety of new weapon systems, combined with some new ways of using established systems, will fill the gap left by the AGS cancellation."[77]

In an interview in August 1996, the CSA identified the new ways and new systems with which he intended to fill the gap. They included:

C-17 – the newest strategic lift aircraft, which requires shorter runways and can be landed on dirt airstrips if necessary. Once an airstrip close to the fight is under control of U.S. troops, the C-17 can be used to transport M1 tanks or Bradley Fighting Vehicles to support the light contingency troops.

Immediate Ready Company (IRC) – a company sized task force consisting of four M1 Abrams tanks and four M2A2 Bradley Fighting Vehicles assigned to the 3d Infantry Division and permanently located at Hunter Army Airfield. The IRC can be wheels up in 18 hours to provide heavy augmentation to a light contingency force from the 82nd.

18th Aviation Brigade – also located at Fort Bragg, the brigade possesses AH-64 Apache Helicopters which can be used to enhance the 82nd's firepower.

Javelin - the replacement for the Dragon anti-tank missile. A man-portable, fire and forget system designed to defeat tanks.

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[77] Sean D. Naylor. "Goodbye, Sheridan." *Army Times* (September 23, 1996), p. 15.

Enhanced Fiber Optic Guided Missile (EFOGM) – mounted on a HMMWV chassis, designed to destroy tanks at ranges up to 15 km.

Line of Sight Antitank (LOSAT) – a kinetic energy missile launcher mounted to an armored chassis.[78]

As discussed in Chapter 2, these are the same systems Marshall Hagen used in his 1997 monograph to argue that the lost armor capability was adequately offset. As this paper is written, however, the EFOGM program has been cancelled and the LOSAT has yet to be fielded to the force. Was this offset argument valid? This study now examines recent operations to determine if the decision to remove an organic armor capability from the 82nd was justified.

[78] Ibid, p. 15-16.

CHAPTER FIVE

Airborne Units as Strategically Responsive Forces

"Strategically responsive Army forces…generate and sustain maximum combat power at the time and place Joint Force Commanders (JFCs) require."

FM 3-0, *Operations*, June 2001

According to army doctrine, the reward for mastering the art of strategic responsiveness is operational success. Responsive forces provide the Joint Force Commander with the ability to deter the enemy, shape the situation, and conduct decisive combat operations if necessary. The army is redesigning its forces around this concept. There are seven attributes of strategically responsive forces. Strategically responsive forces are: 1) responsive, 2) deployable, 3) agile, 4) versatile, 5) lethal, 6) survivable, and 7) sustainable.[79] As described in Chapter 1, this monograph will evaluate the thesis using these characteristics. The 82nd Airborne Division, the 173rd Airborne Brigade, and elements of the 75th Ranger Regiment are all airborne units that participated in Operation Iraqi Freedom. In addition, all of these organizations conducted missions that required augmentation of armor units that were not organic to the organization. It is not hard to imagine that a light force in contact would be more lethal if accompanied by tanks. The same scenario would undoubtedly conjure images of a more survivable force as well. But what of the other five characteristics? By examining the lessons learned and after action reviews of these organizations, this chapter will answer the question, "Would adding an armor capability

[79] FM 3-0 *Operations*, p. 3-1.

to the force structure of the 82nd Airborne Division make the division more strategically responsive?"

Responsiveness

According to FM 3-0, there will not be time to correct deficiencies between the time a unit is alerted and when it is deployed, so commanders must ensure that their units are capable of accomplishing their Mission Essential Task List (METL) prior to being alerted.[80] Responsiveness is an attitude that spans operational planning, preparation, execution, and assessment. It establishes the conditions for successful operational and tactical maneuver at the outset of operations. "Responsiveness is more than the ability to quickly deploy: it requires that the right Army forces…deploy to the right place at the right time."[81] All four airborne units addressed in this monograph received their armor augmentation after deploying to the operational theater. How did the requirement to augment the task organization with armor from outside the organization impact the responsiveness of the organization?

According to the "Lessons Learned by the 82nd Airborne Division During Operation Iraqi Freedom," the lack of organic armor did not provide them the right Army forces deployed to the right place at the right time. This impact was felt most notably while conducting operations in urban terrain. According to the document, "the lack of an organic armored gun system in the interim urban fight delays rapid destruction of the enemy until additional armored assets arrive on the battlefield and are integrated into the fight."[82] From this experience the 82nd concludes that

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[80] Ibid.
[81] FM 3-0 *Operations*, p. 3-2.
[82] U.S. Department of the Army. *Lessons Learned by the 82nd Airborne Division during Operation Iraqi Freedom.* Fort Bragg, NC: Headquarters, 82nd Airborne Division, 1 May 2003, p. 5.

light infantry working together with organic armor would be able to achieve the decisive results desired while maintaining the capability to continue combat operations.[83]

Combat operations in As Samawah and Ad Diwaniyah specifically highlighted the effect that armor augmentation can have. When the 82nd was augmented with a heavy force (1-41 IN (M) was attached to the 2nd Brigade Combat Team (325th Airborne Infantry Regiment (AIR)) for part of the operation, the results were decisive. During these operations, light infantry would customarily move ahead of the heavy forces, isolating the objective area so that the heavy force could act at the decisive point. By providing direct fire support, heavy forces were able to deliver the "firepower that rapidly and decisively terminated the conflict."[84]

The 1st Battalion, 75th Rangers also found the need for armor augmentation during OIF. During one specific operation, the Ranger battalion received augmentation of a tank team (-) from a 1st Armored Division company out of Fort Riley. The team included 10 tanks (two armor platoons plus the commander and executive officer's tanks), as well as associated supporting vehicles (including a command M113, a FISTV, maintenance and medic M113s, M88, HEMMT fuelers, PLL truck, tool truck and a HMMWV). The task force's mission was to interdict Highway 1 vicinity Tikrit, with a specified subtask to block Highway 1 for limited periods of time. According to Lieutenant Colonel Michael M. Kershaw, commander of 1st Battalion, 75th Rangers, the tanks gave them the ability to accomplish their mission, due to their "protected firepower, shock effect, and the ability to block in daylight."[85]

There were drawbacks to this organization, however. According to LTC Kershaw, the "biggest problem we faced was that we put together an "ad hoc' unit to do this; while the tanks have impressive night capabilities, they were not at our level of proficiency at night operations

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[83] Ibid.
[84] Ibid, p.4.
[85] LTC Michael Kershaw, email interview with MAJ Andrew Preston, 17 Oct 2003.

(and we almost operated exclusively at night)."[86] As previously noted, FM 3-0 accurately predicts that there will not be enough time to train up between alert and deployment. Although both units were already in theater upon alert for this mission, it demonstrates the difficulty ad hoc units have in being responsive. LTC Kershaw's unit also experienced other difficulties with this organization, which will be discussed in later sections.

LTC Stefan Banach, commander of 3rd Battalion, 75th Rangers, also participated in combat operations with a team of armor augmentation. The mission of the Rangers was to seize H1 airfield (an airfield in western Iraq) for three reasons. The first reason was to facilitate the establishment of a second front that would force the Iraqis to defend against attack from two directions. Second was to cut off escape routes from Baghdad to the west, and the third reason for seizing the airfield was to interdict the enemy's logistics and line of communications. According to Banach, all three missions demanded some type of mobile gun system. Without the armor augmentation, they would not have been able to stand toe-toe with enemy armor or mechanized forces. By having the armor forces attached, the Rangers were able to push north from H1, seize key dams, and accomplish all assigned tasks.[87] This was only possible, however, because of the secure airfield. The armor team was brought in by C-17, which could not have been done had there been an air defense threat, or if an airfield capable of air-landing C-17s had been unavailable.

The 173rd Airborne Brigade had armor augmentation as well. While conducting operations on the Northern Front of Iraq, the brigade received TF 1-63 Armor as the U.S. Army Europe Immediate Ready Task Force (IRTF). The IRTF is a battalion-sized task force consisting of a heavy ready company (HRC), a medium ready company (MRC), and up to five force

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[86] Ibid.
[87] LTC Stefan Banach, interview with MAJ Andrew Preston.

enhancement modules (FEM). The HRC consists of one M1A1 platoon, one M2 platoon, and two dismounted infantry squads. The MRC consists of two mechanized infantry platoons and four dismounted infantry squads. The IRTF is designed to provide armor capability to light infantry organizations.[88]

The deployment of the IRTF in OIF again illustrates the potential lack of responsiveness of armor augmentation. Although elements of the 173rd parachuted into Iraq on March 26, 2003, the first armored vehicle did not arrive until April 8th.[89] Unfortunately, the rest of the task force was not close behind. In fact, it would be 15 days after the parachute assault before a company-sized element would finally close the arrival airfield. Only a single tank from C/1-63 AR arrived on the first day, and it remained the lone armored vehicle until the remainder of the company began to arrive two days later. In all, it took four days from time the initial vehicle arrived until the company had sufficient combat power to conduct operations.[90] The remainder of Task Force 1-63 continued to flow-in for another two weeks.[91]

Responsive army forces deploy the right type of force at the right time. The combat operations described clearly demonstrate the light forces' need for armor augmentation in order to be the right force. However, all three organizations experienced difficulties stemming from a lack of responsiveness. The 82nd did not always have armor augmentation available. The Rangers experienced a training level deficiency that hampered operations, and the 173d Airborne Brigade did not have armor support until two weeks had elapsed. In addition to forcible entry operations, the 82nd must be able to conduct the types of operations that they and the other units described were required to conduct during OIF. Assigning an armored gun system capability

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[88]MAJ Brian Maddox. "Checkmate on the Northern Front." *Armor*, September-October 2003, pp.6-7.

[89] Ibid, p.7.

[90] CPT Joel Fischer, Commander C/1-63 AR, interview with LTC Manning, 28 May 03.

[91] LTC Kenneth Riddle, Commander 1-63 AR, interview with LTC Manning, 28 May 03, p.3.

directly to the 82nd would effectively solve the problems experienced by the division and prevent those experienced by the other units. The division commander would have armored forces he could count on, with which he had trained, and whose readiness he could verify.

Deployability

Availability of lift assets was also a limiting factor. While CPT Fischer anticipated joining the 173rd within 24-28 hours after they hit the ground, the actual deployment took much longer.[92] According to the task force commander, the airflow was delayed due to competing priorities between the IRTF, the 173rd ABN BDE, and Joint Special Operations Task Force North (JSOTFN).[93] In all, it took 29 C-17 sorties to deploy the Task Force.[94] It took three days just to get five M1A1 tanks on the ground. Had they been equipped with an armored gun system comparable to the AGS, fifteen vehicles alone could have air-landed on the five C-17s deploying the M1A1's, without altering the airflow or making load plan adjustments on the aircraft deploying the M2's.

Agility

An agile force is one that is mobile enough to accomplish the mission while maintaining the capability to transition both physically and mentally between different types of operations. However, limited availability of lift assets requires commanders to anticipate requirements and design flexible force structures that are sustainable and capable of these transitions.[95] All three airborne units encountered difficulties sustaining their attached units, and lessons learned indicate that physical transition was hampered by the ad hoc organizations as well.

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[92] Ibid.
[93] LTC Kenneth Riddle, p.8.
[94] CPT Joel Fischer. Email interview with MAJ Preston.
[95] FM 3-0 *Operations*, p. 3-3.

Availability of lift assets drove operational planning. Planning for OIF included at least two possible scenarios in which the 82nd would conduct a brigade-sized airborne operation. The most prominent option was to conduct an airfield seizure of Baghdad International in the event the Iraqi regime collapsed quickly and suddenly. Due to the air defense threat, C-17s would not be an option. The entire operation would have had to be conducted using C-130s. The inability to use C-17s meant that M1s and M2s could not be included in the package; there would not be any armor support.[96]

The intent of seizing the airport was to show U.S. presence and allow the rapid deployment of follow-on forces. The inability to bring in armor or mechanized forces, however, greatly limited the mobility that the assaulting force would have. In an attempt to mitigate the impact, several alternative options were considered, including augmentation from the 2nd Cavalry Regiment. The division commander, however, preferred to include elements from his Delta Company instead. While these options would have improved the mobility of the assaulting force, they would have done little to improve their protection.[97]

In this case, the IRC habitually associated would not have been available anyway (assuming the regime did not collapse prior to the 3rd Infantry Division crossing the line of departure). But even if it had, the C-17 restriction would have prevented its use. Fortunately, by the time the regime collapsed there were combat forces close enough to drive their way to the airport. But the planners did not know that this would be the case. A much more agile force was clearly required. An organic, C-130 droppable/transportable platform was just what the 82nd would have needed.

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[96] COL Kevin Benson ,CFLCC C-5 for OIF, interview with MAJ Preston, 18 Dec 03.
[97] Ibid.

Versatility

U.S. Army doctrine (FM 3-0) defines versatility as "Army force packages able to reorganize and adapt to changing missions."[98] While commanders strive to deploy multifunctional teams, they understand that forces brought together from multiple units do not function as efficiently as those that habitually train together. Perhaps most importantly, versatile forces possess the capability to adapt rapidly to a changing mission. Based on this insight from doctrine we would expect that armor augmentation from another unit would not be as versatile as a unit that had the necessary armor forces organic to that unit.

LTC Banach of 3-75 believes that "light forces needed more mobility, across the board. While units are flexible and train to task organize, receiving augmentation on the fly is not ideal."[99] The difference in night operation capability between the 1-75th Rangers and the 1st AD augmentation has already illustrated this point, but more proof exists.

According to Major Brian Maddox, then S-3 of the 1-63 AR Battalion, "A series of successful training exercises conducted at the Combat Maneuver Training Center, Hohenfels, Germany, and training deployments to Hungary and Poland in which various IRTF units trained with the 173rd Brigade, cemented a successful working relationship in a training environment."[100] Yet, his battalion commander, LTC Riddle, states that prior to deployment, "the best source of intelligence came from the G2, 1 ID (M) via the TF 1-63 AR S2 – intelligence was not coming from the 173 ABN BDE."[101] His battalion commander also states that, "at the time IRTF mission was assumed in February 2003, he did not know that the mission would involve supporting the 173rd ABN BDE."[102] In fact, the armor company selected was based primarily on training

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[98] FM 3-0 *Operations*, p 3-3.
[99] LTC Stefan Banach, interview with MAJ Andrew Preston, 18 DEC 03.
[100] Brian Maddox. "Checkmate on the Northern Front," p 7.
[101] LTC Kenneth Riddle, p.1.
[102] Ibid.

calendar; a company which had not trained with the 173rd.[103] The IRTF structure does not facilitate rapid reorganization either. "The austere configuration of the IRTF does not allow its structure to be reduced without severely degrading its capabilities. The task organization contains a limited amount of combat power, command and control assets, and logistics to function operationally. Any reduction in this configuration can cause the IRFT to be combat ineffective in a high-intensity conflict environment."[104]

The 82nd Airborne Division experienced difficulties associated with limited mutual training as well. Listed among their lessons learned is, "Intermixing light and heavy forces produces recognition difficulties."[105] The division noted that many members of light forces have never seen a Bradley Fighting Vehicle at night, and many members of heavy forces have never seen a Gator.[106] If the 82nd had deployed with their IRC, they would have undoubtedly encountered similar difficulties as the 173rd did with their IRTF. While the IRC does deploy with its assigned equipment and would have undoubtedly been better informed of the current maintenance status, the ad hoc method of organization based on the training calendar is currently employed in the 3rd ID as well.[107] This makes it likely that the IRC would not have trained to support the unit with which it deployed, just as TF 1-63 AR had not trained with its supported unit.

Sustainability

A major concern for both the 173rd and the 1-75th Rangers was fuel. For the 173rd, the augmentation of the 1-63 AR required logistic support orders of magnitude greater than would

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[103] CPT Joel Fischer, email interview with MAJ Andrew Preston.
[104] Brian Maddox. "Checkmate on the Northern Front," p 10.
[105] Lessons Learned by the 82nd Airborne Division during Operation Iraqi Freedom, p. 6.
[106] Ibid.
[107] John W. Washburn, Integration of Armored Forces in the U.S. Army Infantry Division, p. 35.

have been necessary without them. Without a land route for resupply, providing the support by air alone posed a nearly insurmountable challenge. The fuel requirements alone approached 10,000 gallons per day.[108] The Ranger battalion experienced similar challenges. According to LTC Kershaw, fuel consumption was a major issue. In fact, he believes that they would have been better off with a mechanized team (four tanks vice ten) to reduce fuel consumption.[109] Had these organizations been equipped with an AGS-like system instead of M1A1 tanks, much of their fuel consumption problems would have been reduced, if not eliminated. A comparison of range and fuel consumption tables for the M1A1[110] and AGS[111] reveal that with similar range (480km vs. 483 km, respectively), the M1A1 consumes 3.58 times more fuel (2036 liters to 568 liters maximum fuel capacity).

The attachment of armor units to light infantry units may have other sustainment implications as well. The 82nd Airborne Division found that their Forward Support Battalion (FSB) was unable to provide timely class IX support to 1-41 IN (M). Although the unit provided additional firepower, its ability to perform was limited by a lack of high-failure repair parts on the ASL. While these parts may be drawn from the unit which normally supports the augmenting force, transportation assets are also required which are not organic to the light FSBs.[112]

Fuel and repair part requirements create logistical burdens for units that are not structured to support heavy units. In addition, lift requirements may drive force flows that are not flexible enough to adapt when the mission changes. The 82nd drew similar conclusions from OIF. According to their AGS Operational Needs Statement, "Due to shortages of airframes for lift seen

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[108] U.S. Department of the Army. "The U.S. Army in Operation Iraqi Freedom; 173rd Airborne Operations." Fort Leavenworth, KS: U.S. Army Command and General Staff College, 2003.

[109] LTC Kershaw email interview with MAJ Preston.

[110] Steven J. Zaloga, and James W. Loop. Modern American Armor. p. 28.

[111] "M8 Armored Gun System." On-line. Internet 30 July 2003. Available from Periscope at http://www.periscope.ucg.com/weapons/gcv/tanks/w0003670.html

[112] Lessons Learned by the 82nd Airborne Division during Operation Iraqi Freedom, p. 23.

during the Operation Iraqi Freedom campaign, it would be unreasonable to believe than an IRC would be able to support the 82nd given the weight… and the number of C17s required."[113] And this is, of course, assuming the 3rd ID (the parent unit of the IRC) was available, which it was not.[114]

The most compelling case for lack of sustainability, however, came after the 173rd's armored Task Force had partially arrived. In order to support the brigade's attack on Kirkuk, the 173rd ABN Brigade Commander ordered the Task Force to move from Bashur to Irbil. LTC Riddle, 1-63 AR Battalion Commander, recalls that after the road march several tanks had broken down and that there were insufficient maintenance assets in theater at the time to repair them. According to LTC Riddle, "Probably the hardest decision I ever had to make was… to not move with them (the 173rd) because we were unable to sustain ourselves."[115]

As mentioned in the discussion of responsiveness, the TF 1-63 AR of the 173rd Airborne Brigade faced significant sustainment problems. The Task Force commander's deployment plan was to deploy a tank platoon first with a small command and control element in order to get a unit capable of conducting combat operations on the ground quickly.[116] Initially, the plan was for CPT Fischer's (Commander, C/1-63 AR during OIF) mission to be airfield security at Bashur Airfield. After he arrived, however, he was told that he would not be part of the airfield security. In fact, his first mission was to conduct a tactical road march to a Forward Operating Base in Irbil and prepare to move with the 173rd Brigade to Kirkuk.[117] Maintenance problems arose, however,

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[113] U.S. Department of the Army. Operational Needs Statement for the four operational prototype Armored Gun System (AGS) vehicles. Fort Bragg, NC: Headquarters, 82nd Airborne Division, 11 September 2003, p.2.

[114] The IRC comes from 3rd Infantry Division, which was fully engaged in combat operations at this time.

[115] Ibid, p.3. It should be noted here that the IRTF deploys with equipment that is maintained by Lockheed Martin, not their habitually assigned equipment.

[116] Brian Maddox. "Checkmate on the Northern Front," p. 7.

[117] CPT Joel Fischer interview with LTC Manning, p. 2.

and with the sustainment package not scheduled to arrive for 24-36 hours, they were unable to accomplish their mission.[118] Had the task force known what their initial mission would be, they could have adjusted the airflow to provide some sustainment capability earlier in the deployment sequence.[119]

When asked what the top three lessons learned were from his Task Force's mission with the 173rd Airborne Brigade, LTC Riddle responded that airflow should be integrated with the supported unit, the IRTF should be deployed in a relatively small window of time, and heavy and light forces should be integrated into a single, capable combat force. Augmenting light infantry with a heavy unit does not constitute a strategically responsive force. The large requirement for lift assets coupled with the high sustainment requirements create demands on the unit that may even reduce the responsiveness of the supported unit. Recent operations suggest that the current method of augmenting light infantry with armored forces is not responsive, deployable, agile, versatile, or sustainable. These ad hoc organizations had difficulty deploying the right force at the right time, encountered airlift and sustainment problems, and did not function together as efficiently as units who had trained together.

Perhaps LTC Riddle's most important observation is his third one. If the supporting armored force of the 173rd Airborne Brigade had been organic, would the airflow have been integrated from the start? Would the need for deployment in a relatively small window of time have been identified during the planning process? FM 7-0, *Training the Force*, states "Teams can only achieve combined arms proficiency and cohesiveness when they train together. Similarly, peacetime relationships must mirror wartime task organization to the greatest extent possible."[120]

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[118] Brian Maddox. "Checkmate on the Northern Front," p. 9.
[119] CPT Joel Fischer. Email interview with MAJ Preston.
[120] FM 7-0 *Training the Force*, p. 2-9.

Had LTC Riddle's suggestion been followed, would the deployed force have been more strategically responsive? This study demonstrates that the answer is yes.

CHAPTER SIX

Summary and Recommendations

"The introduction of armor changed the battlefield. With the addition of just a few tanks, we were able to close with and destroy the enemy. Air power was a great contributor, but it did not remove the need for ground-based firepower, mobility, and protection."

LTC Stefan Banach, Commander of 3rd Ranger Battalion during OEF and OIF.[121]

The issue of armor-infantry integration is well traveled. Many authors have written articles in the last ten years identifying the problem and issuing recommendations. While these recommendations varied, the authors generally agreed that U.S. forces were not optimally designed to conduct combat operations in the current and future environments. The Armored Gun System was designed to help address the identified shortfalls of the 82nd Airborne Division when conducting forcible entry operations. Had it been fielded, the division would undoubtedly be more prepared to accomplish its mission today.

Since the 1996 decision to remove armor from the 82nd Airborne Division was made, the U.S. Army has deployed in two major combat operations. While both operations were successful, the blueprint for each one was vastly different. During Operation Enduring Freedom in Afghanistan, first Special Forces then conventional forces successfully defeated the Taliban and Al Qaeda forces without armor support. Assistance from indigenous forces and U.S. airpower provided adequate firepower to eliminate enemy resistance and remove the Taliban regime from

[121] LTC Stefan Banach, interview with MAJ Andrew Preston, 18 DEC 03.

power. During Operation Iraqi Freedom, U.S. and Allied forces also successfully removed a regime. These forces defeated the Iraqi army and supporting organizations, resulting in the end of Saddam Hussein's reign. This operation, however, was quite different. Light forces in Iraq often required armor augmentation to accomplish their mission. Why was this operation different? Which operation best represents future warfare? Which operation's lessons learned should be used to structure the force?

Even though the objectives for each operation were similar, military operations in Afghanistan and Iraq were indeed quite different. Any number of pages could be written to prove this point. The mountainous terrain of Afghanistan leads to quite different requirements than the deserts of Iraq. And without a seaport to bring in heavy equipment, deploying the force that was employed in Iraq to Afghanistan would have been quite challenging, if indeed it was even possible. The enemy was different as well. The Iraqi army was equipped with tanks, artillery, and heavy air defense equipment. The Taliban fighters' equipment was much lighter. There are more differences, but the question remains. Which operation is indicative of future warfare?

The answer is, we do not know. Future operations will undoubtedly look a little like each operation, and a great deal like something we cannot foresee. So how should the U.S. Army design its forces? We can begin answering this question with an examination of our current doctrine. Army forces must be strategically responsive. Strategic documents from the National Security Strategy to the Transformation Planning Guidance demand it. Joint and Army doctrine at the operational level require it as well. We must design our forces to be responsive, deployable, agile, versatile, lethal, survivable, and sustainable. We cannot predict the environment in which we will be called to operate. Our forces must be structured to operate anywhere. Including armor assets within the force structure of light formations would increase their strategic responsiveness by improving their ability to operate anywhere.

The Chief of Staff of the Army has directed the Army to "develop more modular, strategically responsive organizations… Modular, capabilities-based forces will better support

Combatant Commanders requirements by more effectively enabling the delivery of the right Army capabilities at the right place and time."[122] But we cannot be truly modular if our light forces are not capable of conducting operations without changing their task organization. Recent operations have given the U.S. Army a great deal of experience that can be used to re-look our force structure, and we should begin by examining the structure of light forces. Light forces of the type employed in Afghanistan could not have accomplished their mission in Iraq. But the reverse is not true. Commanders deploying to Afghanistan would still have had the flexibility to tailor their force, just as they did when they made the decision to leave their artillery at home.[123] Organic armor would have rendered light forces more strategically responsive in OIF, without preventing the type of forces from being employed that we saw in OEF.

The Armored Gun System is likely not the long-term answer. The system was developed years ago with technology extant at the time. Technology has since advanced, and this has changed the way we see the battlefield. But in the short term, the AGS should be used to start us on the path to redesigning our light forces. Four Armored Gun Systems currently exist, mothballed after the program was cancelled in 1996. The 82nd Airborne Division has requested these systems, in an effort to address their immediate force structure concerns. The first step in redesigning the U.S. Army's light forces is to approve the request. Not only would the addition of these systems provide an immediate increase to the division's firepower and forcible entry capability, but would help inform the development process of the appropriate armored system to be fielded.

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[122] The Way Ahead. On-line. Internet 23 Feb 04. Available from https://www.army.mil/thewayahead.html.

[123] This decision received some criticism following Operation Anaconda due to the force's lack of ground based fire support.

The second step, as just alluded to, is to begin the development of an air-droppable Future Combat System (FCS) for inclusion in the airborne brigades of the future force. Forcible Entry remains a valid requirement for the U.S. Army, and the 82nd Airborne remains the nation's only division capable of airborne forcible entry. Providing the division with organic armor assets would increase its capability to perform this mission, but that is not all. Recent operations in Iraq have demonstrated that light units require armor assets in combat operations other than forcible entry, as well as the stabilization operations which follow. Organic armor would help solve the problem by giving the commander the ability to tailor his force based on the needs of the operation.

But the issue is much bigger than the 82nd's ability to conduct forcible entry operations. Of the operations described during OIF, only the 173rd's could be described as forcible entry. Yet armor augmentation to light forces was determined to be a requirement again and again. And although these light forces happened to be airborne units, the armor augmentation was required not because they were airborne, but because light forces in general are not adequately equipped for the missions they were assigned.

The third step, and long-term solution is to include armor forces in the redesigned force structure of all of our conventional light forces. Recent operations have clearly demonstrated that the environment we currently operate in will require all of our forces to be strategically responsive, not just select units. In fact, the concept of modularity demands that all of our light units of action be capable of conducting similar operations. The elements of the 82nd Airborne Division which fought with armor support in As Samawah and Ad Diwaniyah in Iraq could have just as easily been from the 25th Infantry Division or 10th Mountain Division. They would have needed the armor support as well. Trips to the training centers (such as light-heavy rotations) and mutual training agreements (such as the 82nd's IRC and the 173rd's IRTF) are no substitute for the synergistic effect of habitual relationships developed within an organization, and do not satisfy the requirement for modularity.

Operations Enduring Freedom and Iraqi Freedom have demonstrated the need to integrate armor into our light forces. Armor assets give light forces increased lethality at the point of attack, provides increased protection while in contact, and the mobility to exploit success. The current ad hoc method of employment, however, is inadequate. In order to design a force that is truly modular and strategically responsive, an armor capability must be integrated into the force structure of all of the Army's light formations, at the unit of action level. General Schoomaker's directive has provided us with just the opportunity.

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