



An Army at War

Change in the Midst of Conflict

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2005 Military History Symposium



John J. McGrath
General Editor



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***An Army at War:
Change in the Midst of Conflict***

John J. McGrath
General Editor

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Contents

Foreword	vii
Introduction	ix
Day 1, Session 1: Keynote Presentation	
<i>Change During War: Contemplating the Future While Fighting in the Present</i>	
by Major General (Ret) Scales	1
Question and Answer	21
Day 1, Session 2: Army Transformations Past and Present	
<i>Army Transformations Past and Present</i>	
by Brigadier General (Ret) Brown	27
<i>Army Organizational Changes—The New Modular Army</i>	
by Ned Bedessem	33
<i>The Evolution of the Stryker Brigade—From Doctrine to Battlefield Operations in Iraq</i>	
by Dr. Jeff A. Charlston	43
Question and Answer	55
Day 1, Session 3: Organizing the Maneuver Fight	
<i>Sinai 1973: Israeli Maneuver Organization and the Battle of the Chinese Farm</i>	
by John J. McGrath	63
<i>Asymmetric Warfare and Military Thought</i>	
by Professor Adam Lowther	111
<i>Adopting to Maneuver Warfare in a Civil War Campaign: Union Reactions to Sterling Price’s Missouri Expedition of 1864</i>	
by Dr. Kyle S. Sinisi	165
Question and Answer	185

Day 1, Session 4: Organizing for the Low-Intensity Fight

A Red Team Perspective in the Insurgency in Iraq
by Colonel Derek J. Harvey 191
Question and Answer 221

Day 2, Session 1: Incorporating Change in Asymmetrical Operations: Vietnam

Insurgent Logistics
by Lt. Colonel Marian E. Vlasak 229
*MACV's Dilemma: The United States and the Conduct of
the Ground War in Vietnam*
by John R. McQueney, Jr 247
Question and Answer 271

Day 2, Session 2: Special Topics on Wartime Transformation

*Use of Private Military Corporations (PMC) to
Supplement Traditional American Ground Forces*
by Dr. Thomas E. Hennefer 281
Facing Genocide: The US Army as an Agent of Rescue
by Dr. Keith Pomakoy 301
*Case for Using an Afghan Auxiliary Force to Support
Expeditionary Operations in Iraq* by Captain Roberto Bran 317
Question and Answer 327

Day 2, Session 3: Organizing for the Logistics Fight

Personal Observations of Logistics Operations in Kuwait and Iraq
by Dr. Robert Darius 333
Modular Logistics
by Major Guy M. Jones 345
Question and Answer 377

Day 2, Session 4: The Canadian Perspective

Transforming the Brigade Team on the Battlefield: Modest Lessons in Coalition Operations From the War Diary of the First Canadian Armoured Brigade (1 CAB) in the Italian Campaign, 1943-1945
by Major Michael Boire 389

Missile Defense: The Canadian Conundrum
by Mercedes Stephenson 395

Canadian Officer Education vs Training
by Pamela Stewart 449

Question and Answer 479

Day 3, Session 1: Organizing to Fight Insurgency: Lessons From Chechnya

Urban Operations, 1994-2005; Information Operations: Capturing the Media
by Timothy L. Thomas 487

Regional and Global Impact of the Chechen War: GWOT Theater or Russian Imperial Maintenance; Chechenization and the Balance Sheet
by Glen Howard 491

Evolving Nature of Chechen Resistance
by Ray C. Finch 501

Sustaining the Struggle: Interplay of Ethno-Nationalism and Religion
by Njdeh (Nick) Asisian 505

Impact of a Decade of War Upon Russian Armed Forces
by Major Matt Dimmick and Ray C. Finch 509

Question and Answer 513

Day 3, Session 2: Unit Manning and Training

The Organizational Evolution of the Cadet Command, 1990-2003
by Dr. Arthur T. Coumbe 515

Transformation and the Officer Corps: Analysis in the Historical Context of the US and Japan Between the Wars
by William D. O'Neil 553

Question and Answer 597

Day 3, Session 3: On the Ground in Iraq

<i>Looking in the Mirror: Applying the Scholarship on the Interpretation of US Army Performance in World War II to Current Operations</i> by Master Sergeant Peter Clemens, USAR	605
<i>US Army Post-Vietnam Doctrine</i> by Christina M. Fishback	619
Question and Answer	645
Appendix A: Conference Program	657
Appendix B: About the Presenters	663
Appendix C: Acronyms	673

Foreword

These proceedings are the third volume to be published in a series generated by the annual military history symposium sponsored by the US Army Training and Doctrine Command (TRADOC). Each year, these conferences bring together both military and civilian historians, as well as formal and informal students of military history, literally from around the world, for the purposes of presenting ideas and points of view on current military issues from a historical perspective. This year's symposium, hosted by the Combat Studies Institute, was held 2-4 August 2005 at Fort Leavenworth, Kansas.

The 2005 symposium's theme was An Army at War: Change in the Midst of Conflict. As this title indicates, presentations at this event focused on how an Army changes while concurrently fighting a war. Changing an Army in peacetime is difficult enough. Transformation can include changes to the personnel system, the turning in old and the fielding of new equipment, new training requirements, and at times, learning an entirely new way of viewing the enemy and the battle space in which operations will occur. Practical and cultural changes in an Army always cause tremendous turbulence and angst, both inside and outside of the Army. The United States Army and the nation are facing these challenges today, and they must make these changes not in a peacetime environment, but while fighting the Global War on Terrorism (GWOT). The panelists presented a series of topics addressing the current transformation challenge that ranged from maneuver warfare, to asymmetrical operations, to insurgencies, to logistics, to unit manning, to doctrine and many others.

This third collection of proceedings contains the papers and presentations of participating panelists. It also includes transcriptions of the question and answer periods following the panelists' presentations. These materials can also be found at <http://usacac.army.mil/cac/csi/conference05.asp>. The symposium program can be found at Appendix A of this volume.

These annual symposiums are proving to be a key annual event for those students and masters of military history who believe that the past has something useful to provide in the analysis of current military problems. The attendees have uniformly found them to be of great benefit. We intend for the readers of this and past volumes to find the experience equally useful. *The Past is Prologue.*

Timothy R. Reese
Colonel, Armor
Director, Combat Studies Institute



Introduction

The third annual military history symposium sponsored by the US Army Training and Doctrine Command and hosted by the Combined Arms Center's Combat Studies Institute was a successful gathering of some of the best thinkers on the subject of transforming armies during wartime. Scholars, Soldiers, and students of military history and the military arts met at Fort Leavenworth, Kansas, to analyze and discuss the symposium's theme, "An Army at War: Change in the Midst of Conflict." This theme was chosen because the United States Army is, in fact, undergoing the most significant transformation in decades, while simultaneously contributing substantially to the Global War on Terrorism.

This collection is the immediate result of the symposium. I encourage you to read and analyze each paper and the transcription of the follow-on question and answer periods. You will find them thought-provoking in many ways, especially for those who are actively engaged in the Army's on-going transformation process. Of course, the long-term results of the symposium will be determined by how the ideas and insights expressed by the participants are used to inform the overall transformation process. I believe that these insights will be of great value to those charged with the task of transforming our Army in wartime and I hope that you find them useful.

David H. Petraeus
Lieutenant General, US Army
Commanding



Change During War: Contemplating the Future While Fighting in the Present

Major General (Retired) Robert H. Scales

Thank you very much. I'm very uneasy on a podium, so if you don't mind, I'll stand out here in the middle of the crowd and talk. First of all, let me thank Tim. Thank you very much for allowing me to do this, for two reasons. It's a great opportunity to see old and dear friends, whom I've known for many, many years, fellow historians. It's also an opportunity to get a chance to talk to the SAMS (School of Advanced Military Studies) crowd, and when I was up here last time, you guys were on a trip; I didn't get a chance to chat with you.

But I think more importantly, this opportunity has forced me to slow down a little bit, and think about the subject. I was going to offer you great, sage advice about what this war means to the future—I've got a few words about that later—but I think more important for Training and Doctrine Command (TRADOC) is to look at how the experience of war affects the way soldiers think about war in the future. Not so much from an insider's perspective—I'll give you a little of that later. I want to talk to you about the track record of armies, in analyzing or synthesizing events in wartime, and how good or badly we've done it in the past. Then perhaps some insights—first of all, some cautionary tales about how ingesting the lessons of the war generally fail, and then some suggestions to you in this audience, since you'll be carrying on this particular baton as we move forward, into how you might not fall into the trap of making the mistakes that armies have made in the past.

Now, it's a very dangerous thing for me to do, for two reasons. Number one, it's the first time I've ever given this talk. I've spent a lot of time thinking about it, so what I'm going to give you is not a history lesson; I'm going to give you a synthesis. I'm going to give you some reflective thoughts—I'm going to sweep from World War I, all the way up to the present, and cast a bit into the future.

Look at the three-oval chart (**Figure 1**). It talks about the process of evolving thought, and how the whole thing plays out. On the left is today; on the right is tomorrow. It really breaks itself down into what we euphemistically call the three-oval chart. Really, the process begins on the right and moves to the left.

Change begins with ideas, and vision—it's an imaging process; it's an out-of-body experience. It requires a set of intellectual muscles different than you guys in the back of the room have been exercising all of your lives. It requires you to place yourself in a distant place—an altered state—and imagine what might be, rather than what just happened. It's the quintessential embodiment of the differ-

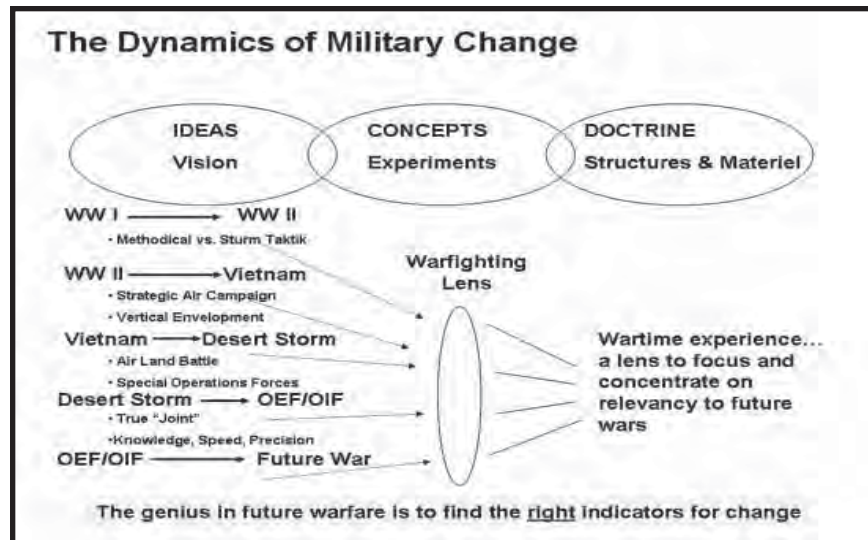


Figure 1

entiation between direct and indirect leadership. Those who are good at indirect leadership, and those who know how to think in time, and those who know how to imagine combat as it might be, or conditions on the battlefield as they probably will happen versus what just happened, is really the essence of graduating from being an amateur into a professional, a tactician into a strategist, and forward-gazing—or future-thinking—is only part of that.

The middle oval is probably the one that's the most difficult, and I would argue that's sort of where we are right now. This is the concepts and experiments phase, where you translate vision by ingesting specific bits of data, to be able to form a concept of how wars will be fought. When I say experiments, there are two pieces of input that are essential. Number one is history—what's happened in the past; and number two are experiments—or empirical events that you create artificially, that seek to replicate the future.

It's almost like that proverbial cone of uncertainty. You know, you look in the rearview mirror, and you see a series of way points and signposts, so you know generally where the road leads you into the future. Then you try to imagination a continuation of those signposts into the future, by looking at the evidence, principally through experimentations and war games, to make sure that the course that you've taken on the road will carry you into the future.

The embodiment of all that, of course, is doctrine and the idea of structures—what we do with what we have now. Since we're a doctrine-based army,

and since doctrine is the essence of what we do, then that's how we make today perfect—or how we make yesterday perfect, some would argue.

So the object of looking at the historical record is not to try to fight the next war like the last—that's what we're oftentimes accused of. But what I find interesting is that in virtually every war there are indicators, signposts, bits of evidence that, if you collect them together, and apply the process of reasoning, you can pick out those sinews, those signposts, those bits and pieces of evidence that will place you on the right path into the future. If you've done a good enough job, then experiments and war games merely seek to confirm what you've learned from your study of history.

The problem, of course, is that armies almost always get it wrong—we screw this up really badly. What I'm going to tell you is a bad news tale—or perhaps to be more optimistic, a cautionary tale—of how we get it wrong. I'm going to explain to you the indicators of getting it wrong, and then I'm going to try to offer you some suggestions, as you look to the future, about how to get it right. Michael Howard said, “The object of future-gazing is not to get it right, but to keep from getting it terribly wrong.” We'll never get it exactly right.

What happens in wartime is that the three ovals are compressed. You know, the old saying, “In peacetime, I had all the time in the world and no money; in wartime, I've got all the money in the world and no time.” Well, time is truly compressed in wartime, because soldiers are dying, the fate of the nation is often at stake, and so the entire society begins to reflect on what just happened. But there's a danger in that, and let me give you some historical evidence to point that out.

Of course, the one that everybody throws out is the post-World War I period. It's the classic story of the old tension between the Methodical Battle and Storm Tactic, or the beginnings of Blitzkrieg. I did my doctoral dissertation on this period of history, and what I find particularly interesting is the seductive effect of what just happened. As a young major, or a young captain when I wrote my dissertation, I found myself sort of seduced by the literature—it was very interesting.

I knew what the hell happened in World War II. But when you go back and look at the documents, when you read the primary materials, particularly from European armies, you're almost seduced into believing that the French had it right. The evidence is there. Then, when you template the French ideas of the Methodical Battle against American culture, what you come away with is not criticism of how the Army failed in the interwar years to adapt to mechanized warfare, but what's most profound, to me at least, is how we broke free of the clutch of the French, when French culture, and the conditions under which the French fought

in World War I were very much similar to ours, not only in terms of shared experience, but in terms of national policy and diplomacy, and the very culture of the two armies.

So, on the one hand, you have what just happened—the French understanding that we must fight the next war by reducing the casualties, by leveraging our inferior manpower, by using firepower as the substitute for manpower—any of this sound familiar to you? The Germans, on the other hand, having lost the war, used the Mihiel offensive in April-May 1918 to say, “Very interesting. I think if we can just restore mobility to the battlefield—bypass the enemy’s strong points, bypass his extremities, and strike at his brain, by exploiting two technologies, the internal combustion engine and the wireless radio, then perhaps we don’t need to worry about a methodical battle.”

But what I find interesting is a couple of things: Why did the French fail, and why did the Germans succeed? It all had to do with culture—the culture of the institution and the way the institution looked at what just happened. The French preconceptions won. Victory has a very seductive effect on armies; it reinforces the stereotype. Secondly, you had a French Army that came away from just one battlefield, and that was the Western Front.

So you had a sort of homogenist’s view of how a war should be fought, since virtually everyone in the French Army shared the same experience. Germans, on the other hand, lost. And in an extraordinary event, beginning in the spring of 1919, right in the middle of the Spartacist Revolt in Berlin, von Seeckt literally took about a third of the German Army out of the line, and had them write 900 papers on future warfare and the impact of war on how the Reichswehr might be reconstituted in the future. What was interesting is the Germans brought in two cultures—the Eastern Front and Western Front cultures. If you read the writings of those who come from the Western Front, almost without an exception, it’s an exact parallel with the French. But if you look at those who fought in other theaters, you see that they have an entirely different cultural context of looking at the future of war.

So the Germans had a catalyst and a leader; they had this dueling dualities of vision, if you will, that fought themselves out in a very rigorous, intellectual process. The Germans had time to think, because they didn’t have a mountain of metal that they had to deal with, and they had time to reflect, and by 1926, von Seeckt comes up with his concepts; in 1933, he comes up with the *Truppenführung Regulations*.

When you read the usual suspects—Bob Doughty’s piece on the French, Corum’s piece on the Germans, and Harold Winton’s piece on the British—what

you see is, that experiments of the interwar period tended to go back and reinforce all the prejudices of the immediate postwar period. I mean, the French at Soissons in the late '20s and early '30s went back and got Renault F1 tanks and drove them across the plains at 2 1/2 miles per hour.

The Germans, on the other hand, had no equipment, and they had to deal in the abstract. Their experiments in 1933, '34, were with newer armored machines, which gave them a completely different perspective.

There's a great book by Allan Millett, and my co-author, Williamson Murray, on reform in the interwar years. Both of them looked at that period and asked what were the transformational things that happened, and who was responsible for them? Wick concludes that this country produced only one: the evolution of large-deck carrier aviation, and the operational art that went into winning at sea.

Some would argue that Lieutenant Colonel Ellis' postulations about amphibious warfare fit in that, but really his contribution was mostly new and imaginative ways to conduct amphibious warfare. We went into World War II picking up behind the Germans and trying to apply the tenets of mechanized warfare we learned from them.

Back to transformation. It's incredibly interesting to read the series of seminars that Patton ran in June, July, and August of 1945—amazing that he got on it that fast. What you learn from what Patton said and what others have said in that immediate postwar is that our army, after World War II, began to bifurcate into two competing camps—for lack of a better term, we'll call them the "Europeanists" and the "Asiatics". Essentially, the Army today is still divided into those same two camps. Today the Europeanists are trying to find an enemy worthy of our weapons, and the Asiatics, who take a much more pragmatic view of the future.

Unfortunately, we march off to the Korean War, and the Europeanists win. Walton Walker probably leads the most inept campaign in the history of our Army. What came out of the Korean War, in many ways, was an operational concept that was before its time—that the Army almost backed into, because the Europeanists were desperate to play in the game. The game, of course, was the advent of nuclear weapons, the nuclear battlefield, the creation of the Strategic Air Command, the Navy's pursuit of nuclear weapons, the space race and the development of the Intercontinental Ballistic Missile.

There's a wonderful little book by Skip Bacevich about the Pentomic Army. I recommend it to any of you if you haven't read it, because it has more insight per word than any book I've read in many years. But what Skip says is the Army in the 1950s, in many ways, got it right for many of the wrong reasons. The Army

then was trying to find a way to fight in a nuclear battlefield, not thinking that it wasn't going to happen, and they came up with the Pentomic Division. The Pentomic Division actually stayed with us in the airborne, almost until the early '60s. It was the idea of autonomous battle groups, dispersed and able to fight on a distributed battlefield, enabled the Army to fight autonomously.

The irony is that many of the concepts that the Pentomic Division came up with were very much an Asiatic view of war. But they failed because the concepts were developed before the technology was available to support them, and also because the Europeanists reached out and wrenched the Army right back to where it belonged, and that was on the plains of Western Europe.

So you have a failed doctrine, you have a failed concept, you have technology that doesn't apply, the wrong lessons drawn from the Korean War. The irony is, of course, is that fast forward 30, 40 years later, those concepts fit very well when technology and conditions in the world catch up to it.

In many ways Vietnam was an amplification of the dueling dualities of the Army. Now we have a truly Asiatic Army, developing ways to fight against insurgents, and we have the leftover of the European Army that's trying to preserve the images of the past. This dueling duality then comes out in 1972 with the Europeanists winning again.

The catalyst that caused the Army to change wasn't Vietnam—it was the Yom Kippur War—again, a catalyst that induced reform in the American Army. It was an attempt by the American Army to restore respectability and walk away from the horrible images of Vietnam, where the Army essentially failed at the operational and strategic level. We left all of that baggage behind, hoping, then, to restore our respectability.

Eliot Cohen calls this the return of "Uptonian hunger"—the idea that, very much like the Germans in 1920, and very much similar mistakes of the Germans in 1920, we declared that we've had it with diplomacy, we've had it with politics, we've had it with war at the strategic level—we're going to become absolutely the world's most proficient Army at winning the operational fight. No one will be better than us. This is the Germans in 1920; this is us in the 1970s. That led, of course, to the Starry revolution in the late '70s.

An interesting sort of backwater, as far as you guys are concerned in this discussion, is probably the most successful transformational effort during Vietnam, during the war, was the Air Force. Very interesting. There have been several books written about the air war in Vietnam and the trauma of all that, but let me just

give that to you very quickly, because I think it's important to the general topic of how militaries change.

Recall that in World War II, the “exchange ratio” against the Germans and Japanese was eight to one, and thirteen to one against the North Koreans and the Chinese in the skies over Korea. By the summer of 1967, both the Air Force and the Navy were at parity; they had invested hundreds of billions of dollars, developing the F-4, the F-105, and they realized that the North Vietnamese were beating them in air-to-air combat.

It was all due to a failed doctrine. Fighter pilots were taught the lob/toss technique for delivering nuclear weapons, rather than how to do air-to-air combat. The F-4 was essentially a fleet interceptor which was not able to dog fight. Russian aircraft, the MiG-21, the MiG-19, even the MiG-17, was able to shoot down Air Force and Navy aircraft to an embarrassing degree, and actually reached parity—much of it, of course, coming from anti-aircraft fire.

So what happened was a stand-down in air services, where the Air Force and Navy stood back and said “we’ve got to fix this”. The problem was both technological and cultural. That led to the creation of Red Flag and Top Gun, and the development of a body of aircraft, the F-15 and 16 for the Air Force, and the F-18 and the F-14 for the Navy, essentially a high/low mix that was able, then, to cover the spectrum of air-to-air combat. The American Air Forces have never been challenged in the air since.

Today the exchange ratio for an F-15/16 in the hands of Israelis and Americans is something like 257 to 1. No better success story probably in the history of the development of American technology than our absolute dominance of the air at a cost of trillions.

But my point to you is that this was a magic moment for the air services, when they woke up one morning and they said, “We’ve got it wrong, and we’ve got to get it right.”

What about the Army? Well, our obsession to return to respectability in 1973 led us down the Europeanist course again. It taught us to walk away from appreciating warfare at the strategic level, and go straight to the operational and the tactical, and frankly, we’ve paid a price for it.

The bright light in all of this happened in this very command, and some of the guys in this room participated in the Starry era reforms. Not so much because Starry had the right answer—I happen to believe he did—but Starry invented the most successful method of forcing the institution to change, and that was the use of the collegial method of reform; the ability to build a very broad transforma-

tional tent, to get political and media and industry to buy into a concept, and then, as a final act, to buy the weapons.

By the time he finished with Gary Hart and Newt Gingrich and Bill Lind, and all the usual suspects, we had an entire nation that bought into the idea of a return to the operational level of war, and AirLand Battle. When we showed up with the “Big Five” and went to The Hill, people complained about the cost of AirLand Battle, we held up the moniker: “You believe in the concept, right? You’ve already agreed! The Israelis told you it was right. So now we must buy the material to fulfill the dream, rather than coming up with the material and try to build a dream after the material is fast on the way to being developed?”

Yet even then we had two armies. We had the Europeanists who were dominant, and we had the Asiatics who were following in trail. We see the dueling dualities for the next two wars that profoundly have shaped the way we think about war, and that is to compare two major wars—the visceral, the dramatic, the wars in the media—DESERT STORM, and IRAQI FREEDOM. Then we have two subordinate wars—one in Panama, and the other in Afghanistan.

Part of the interesting thing about this duality is, oftentimes, the more dramatic captures the imagination, while perhaps the less evident, and the more sublimated experience, might have more sinews, or more indicators of how future warfare may be fought. But in every case—in DESERT STORM, and in IRAQI FREEDOM—the Europeanists have prevailed again.

I’ll tell you a quick war story on myself. I was a brand new brigadier general, and I wrote *Certain Victory*, which was the history of the Army in the Gulf War. I learned a couple of interesting lessons from having done that. Number one is, I swore that as long as I remained on active duty, I would never write another piece of contemporary history until all the actors were stone cold dead. I got a lot of “help” in this book. One of the great things that Scott Wallace did is pick a retired officer—Greg Fontenot—to do *On Point*, which is the chronicle of the kinetic phase of this war.

The second thing is Bob Scales’ corollary to rule number one, and that is, the performance of a division commander is inversely proportional to the amount of help he offers when you write the book. For those division commanders who were brilliant, it was simply, you know, “Write the story, Bob; tell me how it comes out.” For those who sort of screwed it up, about every three days, an eighteen-wheeler would back up to my headquarters, with mountains of material to show how their particular division actually performed a lot better than the press clippings indicated.

Another quick war story. This is about the failure of being too quick—too quick to come out of a war with wisdom. One of the things that I was told by all my artillery buddies after DESERT STORM was that, “Why did the artillery perform so poorly in DESERT STORM?” “Their answer was it couldn’t keep up,” and that became a mantra that I happened to write in Chapter 9 of my book: The artillery couldn’t keep up. Then when I came back to TRADOC in 1995, I realized I got it exactly wrong. It wasn’t that the artillery couldn’t keep up; it was that the artillery couldn’t keep up because it wasn’t precise. The artillery kept up fine in the kinetic phase of IRAQI FREEDOM. Why? Well, because commanders didn’t have much of it, and they realized that it was useful.

The conclusion I came to in this second order of thought, in the mid nineties, when I started AAN project, was that it wasn’t about the speed of the system; it was about the bullet. What maneuver commanders were realizing in this almost subliminal use of firepower was that if I have something that has one meter accuracy, why should I use an area-fire weapon that takes, on average, an hour and fifteen minutes to get it to put into play?

So, what did we do? We marched down the path of building the Crusader, didn’t we? We relied on information that was developed too soon, without an opportunity to age sufficiently, we applied it too quick to a program. When we realized three years later, it’s not about the platform; it’s about the bullet! Yet we wasted probably close to \$20 billion, chasing a ghost down a blind alley. Had I been a bit more reflective about it, I might have gotten it right.

So we continue with this process of dualities here. But there was some good news. The good news was that the Asiatics—in this case, my good friend and mentor, Huba Wass de Czege—woke up one morning and said to me, “Well, Bob, what if we could combine the speed of aerial maneuver with the advantages of protected firepower, and put it together in the same system, and lift an army away from the tyranny of terrain, and conduct the operation maneuver to long distances? Maybe we don’t need all this heft and bulk and miles-long logistics trains that clog the MSR.”

Sixty-six percent of an armored division in the Gulf War consisted of artillery, and all the stuff to haul it, protect it, and shoot it. In the famous GHQ (General Headquarters) exercises in ‘92, ‘93 Huba came up with the concept of aerial-mechanized maneuver. I picked it up in—geez, when was it, Jim?—’95, ‘96, ‘97, and ‘98, and the AAN (Army After Next) concept and the work I did in TRADOC, where we said, “Hmm, maybe there’s a way we truly can transform the Army, and get away from this passion on heavy metal, and talk about a true reform in how armies fight.”

Well, the person who drove us in this direction was the enemy. Clausewitz says war is a two-sided game, and both sides want to win—and in this case, almost thankfully, I guess, in a way, the enemy have changed the context of this whole debate. They've begun to push the Army away from its duality, from the Europeanist side, into more of the Asiatic view of war.

The first lesson is: let's not be too quick to judge the outcome of a war while you're fighting the war. Let's be reflective and empirical about it, and let's make sure that we don't allow our own experiential baggage to determine where the Army is going.

Which leads me to Bob Scales' 12 concepts about how transformation failed, based on what's happened over the last 50 years in our Army. Why do reforms fail?

Number one, "change driven by strategic and political preconceptions." That's what happened to the French in the 1920s; that's what happened to us in the 1970s. That's probably what's happening to us, to a large extent, today. We have a series of political and strategic perceptions that we believe to be right, often-times driven by factors unrelated to the realities of the battlefield or the promise of technologies or the influence that the enemy may have on where we go. These preconceptions will pull us or drive us, or drag us in the wrong direction. Sometimes those misconceptions, in the long term, can prove to be prophetic. I use the Pentomic example as a case in point. But that's more by accident than by any rigorous intellectual process.

Secondly, seeing what just happened, versus thinking about what might be. There is no action-reaction in future-gazing when looking at the future of war. Everything has to be passed through that war-fighting lens; everything has to be filtered. What just happened is not enough to tell you what's going to happen; otherwise, you find yourself in that pedantic treadmill, of leading you from the past into the future without any deviations caused by any of the traditional variables that cause armies to change how they fight.

Third, incremental versus leap-ahead. It takes about half a generation to change an army, and you can't do it any faster than that. The difference is that during wartime, the rate at which ideas pummel you come at a much faster pace and the price for mistakes are much higher. But ultimately, the only true manifestation of a transformed army is units that know how to fight in this new environment. Schools are important, doctrine is important, but the ultimate manifestation of success or failure is units in the field, and that takes a long time. The process of change is very, very straightforward. It takes 12 years to make a tank; 15 years to create a battalion commander. So the data point that you pick is at least 15 to 20

years ahead, because if you talk about change in 2010, that's already happened; you talk about 2015, we're there.

Very important: "grandstanding versus empirical analysis and reflection." Big problem. The bigger the experiment, the less relevant. What was that war game that Paul Van Riper got in so much trouble over?

Audience: MILLENNIUM CHALLENGE.

MILLENNIUM CHALLENGE. Absolutely the worst experiment our military has ever done in 50 years of trying to divine the future! If you spend \$250 million dollars on an experiment, guess what? It's going to succeed—even if it fails! It's like turning to Jonas Salk and saying, "Jonas, look, I've got good news and bad news. I know you want to cure polio, and I'm going to give you a billion dollars—that's the good news. The bad news is, I'm going to give you one egg. And, oh, by the way, the press is going to be there when you inject that egg with your virus, and you'd better get it right, stud, or you're out of here." That was the problem with MILLENNIUM CHALLENGE. We had aircraft carriers deployed, air wings all over the place, divisions running around in Twentynine Palms and NTC, and the answer was, "We're going to win!"

My good friend Paul Van Riper said, "I'll tell you what, let's just take a bunch of speedboats and run them up against aircraft carriers and sink a couple, because that's what the enemy will try to do. Paul had to get up and walk out. Why? Because the game was a grandstanding event. The key to change, of verifying historical experiences, experimentation, and war game: It has to be done in digestible increments. Like any empirical process, you begin with a hypothesis and move to analysis and synthesis, and you've got to do it over and over again, to create enough data points to ensure that you're on the right path. View change and experimentation as a series of stop-action pictures, if you will—taking vertical slices in time, where you are able to stack empiricisms, which over time allow you to form a mental matrix, or a view of what the future looks like. The more data points, the better; the degree of granularity and resolution almost doesn't matter. It's the repetition, it's the variety, it's the diversity of the inquiry that's important, not how many planes you put in the air, or how many ships you put at sea—that's grandstanding, not experimentation. The French did it in Soissons, and the Brits did it in Salisbury Plain. The media was there, and by God, that's how it's going to work, because that's how you sold it. You can't "lose", even if after a time you realize that you were wrong.

Too quick to the tactical. This is a minor disease in both the Army and the Marine Corps. You have to lift yourself away from the tactical. Why? Because if you get to the tactical, you get too much into detail, and it becomes all about TTP

(Tactics, Techniques and Procedures). When you focus on TTP, you're out of the realm of transformation; you're simply gilding the lily. Part of the key element of experimentation is to conduct tactical experiments, and to proliferate them. But the collective thought has to be at the operational and the strategic level.

Technologies dictating concepts—find an enemy and a method worthy of our weapons. This is a very serious problem with us. We have the technology—net-centric warfare—so let's come up with a military theory that supports it. What's good for IBM has got to be good for the Army—build me a network, and the enemy will collapse. Build me a net, and the enemy will come.

Well, we're learning about that, aren't we? The enemy adapts. He says, "You want a net? I'll build a net, and I'll build it with tribal affiliations, and execute with notes passed in the middle of the night, and through backyard deals. And you can build all the nets you want, but I'll beat you at your own game." I think the bill on netcentric warfare is something around a trillion dollars. I've been to the Office of Force Transformation. It's incredible that people are still living in a realm of fantasy. Try to talk to these guys about the enemy, and about war being a two-sided affair, and they look at you as if you have a tree root growing out of your head.

Do you know what they call tactical land warfare in OFT (Office of Force Transition)? They call it networking at the edges. [Laughter] Networking at the edges—as if to say the object of netcentric warfare is to tell every admiral exactly what he needs to know, and all the rest will fall into play. You got all these soldiers dying in Fallujah and Baghdad. Okay, well, that's the edges. So we'll network to those at the edges." That's the mind-set that we're in today, in many ways. Unfortunately, our service, much like the Pentomic Era is, trying to jump on the network bandwagon.

The issue, as Scott Wallace has said over and over and over again: "It's about battle command!" The networks facilitate the decision-making process; the decision-making process is not tailored to fit the networks. Now, fortunately, since he's the Commander of CAC (Combined Arms Center) and he's been beating this drum, and as I wrote in my book *The Iraq War*, he's kind of figured out how to craft the instrument to fit conditions instead of the other way around. Thus, the Army's making progress in this but we are minor players in this wonderful drama. Give me an enemy worthy of my weapons...please. Do you ever notice that we only decide to fight China during the Quadrennial Defense Review? Do you ever notice that? "Give me a peer! Who can make a carrier? China. Okay, they're the enemy." It's this whole idea of technology driving doctrine instead of doctrine driving technology.

“An imperfect view of future geostrategic environment.” There are three principal variables in change. One is domestic politics; two is technology; three is the geostrategic environment. The one we almost always get wrong is anticipating the geostrategic environment. Steve Metz works with me at the War College. He’s a very obstreperous gentleman; many of you know him. When I first came to the War College in 1997, he kicked in my door and came in with his furrowed brow, and says, “You need to understand something about the enemy.” “What, Steve?” He said, “It’s terrorism, by God. It’s 13-year-olds with the Kalashnikovs that are going to bring us down—they’re going to attack our country. There’s this guy named Osama bin Laden...” and of course, I immediately blew him off because I knew he was wrong, and I’ve been apologizing to him repeatedly for the last three or four years.

Why? Why did Steve get it right? Because Steve had a clear view of the course of geopolitics, and the conditions of the world. He knew that the Cold War may have been a Blue-driven period, but he knew that the post-Cold War period was Red-driven, and he was able to peel back the layers, and look at the enemy as he really was, and anticipate where this country was going. It all has to do with a realistic view in a geostrategic environment.

The next three are pretty straightforward: unanticipated breakthroughs, and overreacting to unanticipated breakthroughs. War is war; there is no era of war, there’s no such thing as fourth-generation warfare or third-generation warfare or second-generation warfare—there’s just warfare. Then, occasionally, breakthroughs will come along that may change some of the tactical conditions of warfare. Sometimes they can be catastrophic; sometimes they can be revolutionary. You could argue that World War I, it was chemistry; World War II, it was electronic science; you could argue that it was information in the Cold War. I believe, into the future, if there’s going to be a breakthrough, it’s going to be in the biological sciences—that’s where we have to look for the next Big Thing. You have to anticipate it, and do the best you can to figure out what it is.

Next is shape and change to conform to programmatic. This is probably our biggest problem now, in the sense that we’ve committed ourselves to programmatic, and to admit that some piece of the programmatic might be faulty, based on current events, will cause the whole program to collapse and fail. That’s the way our system works; that’s the way we acquire material. So, in many ways, material acquirers wind up driving the train once the concept moves into structures and material. We have to be very careful, as we drive into modularity—into Stryker and FCS (Future Combat System)—that we always have an off-ramp, or at least we’re able to do a branch or a sequel, to make sure that we don’t get too far being driven by programmatic rather than the realities of war.

So, what does all this mean? Let me tell you what I believe. I believe, to do this right, you have to have time for synthesis; you have to have time for reflection. That's hard to do during a war. Military change is sort of like creating a fine wine, or a great painting—it takes time, it takes reflection, it takes the ability to do second and third order of thought. I use the analogy of the Crusader, I think, as a perfect example of that. We're too quick to rush to conclusions in a war, because, first of all, we want to apply the immediate tactical lessons into something that we can apply for the future. But you can't do that—you're too close to the problem; you need to stand back and you need to reflect. To my mind, that's always been the genius of TRADOC. It's this institution that forces synthesis.

I said, "Never fight the war like the last," but you know, we're talking here about key variables. I'm going to offer you what I think are some sinews that are beginning to emerge from this war, but it's all hypothesis; there's nothing that I'm going to offer you that I believe in so firmly that I'm not willing to walk away from.

The porosity of ideas and concepts. It's interesting that visionaries often don't win. I mean, look, the Germans lost, and the great visionaries in the interwar period—at least those who applied it—were the Germans. The problem is that the passage of ideas is so porous today, that those who come up with the idea usually wind up not being able to apply it properly, for two reasons. It's the old problem of late lock versus early lock. The great visionaries want early lock. "Give me a four-engine bomber," in 1933, "and I'll make you pure." Unfortunately, the pace of time is sort of self-driven, and often times, it's the guy who does the late lock that ultimately winds up with the best fighting machine.

The power of first-hand experiences. I did my doctoral dissertation on the British Army in the late 19th century. I could see this train wreck coming at Mons and Le Cateau in 1914, and I kept thinking to myself, "Don't these guys get it?" Because, like any graduate student, I'm following it from 1858 to 1914, and I get to about the turn of the century and kept saying, "It's there! It's there! Can't you see it? You know, the small-bore rifle, the machine guns, mines, barbed wire, entrenchments. Look around! Why can't you figure this out?"

The British encountered the power and the seductive effect of first-hand experiences—the visceral that trumps the vicarious every time; the practical soldier will win over the theoretical soldier, particularly during wartime. Why? Well, practical soldiers are rewarded; theoretical soldiers are not. All armies do this. Almost without exception, the theoreticians are crushed, because they're willing to think about something that's not based directly on real war experience.

So you have to be very, very careful at some of the conclusions that are coming out of the lessons learned process. You cannot equate lessons learned with visioning for the future. Visioning for the future is second order, or third order thought; lessons learned is action-reaction. If you view an event, you gain a lesson; you apply a corrective. That is not change—that's reaction—and you've got to understand the difference between the two.

Proper institutions, I think, facilitate change, and this is the "Starry method." It goes like this: There are two ways to look at institutions that nurture change. The optimum is what I call islands of excellence guided by a continuous spirit. Genius comes from people in their twenties and thirties, not from guys in their fifties and sixties. The ability to see into the future is a young man or young woman's game, and generally, it comes from these intellectual petri dishes that dot islands of conservatism.

The German Army, the Prussian Army—there was no more conservative army on the planet. The American Navy in the '20s and '30s was incredibly conservative; if it hadn't been for Admirals Sims and Moffett and a small body of creative naval officers, transformation never would have occurred.

So you need to have in every army a body of malcontents; you need to have people willing to listen to people who have alternative ideas. The classic example of failure in that regard is the Israeli Army in 1973—the one we all used to worship. They were so successful after the Yom Kippur War, that the commander's intent about mechanized warfare was so deeply embedded into their school system and into their culture. It was a homogenous culture in the IDF of 1982, if you went to any second lieutenant, he would give you exactly the same view into future warfare as any two- or three-star general in the IDF. And they march into Lebanon, and the rest is history. Even today, the IDF is struggling to break out of that homogenous mind set to find new ways to deal with the Intifada. They have had to completely reorder their culture. You can be too doctrinaire—you have to be able to find ways to build into this institution islands of excellence. What's the worst condition? Strict hierarchies, dominated by practical soldiers, who know the truth. It's your job to reinforce what they already know—make slides, rather than think for yourself. What Starry did in 1979 was to create something called the "boathouse gang"—nine officers, and a body of peripheral islands of excellence. I was a guy on the artillery team at Fort Sill. Starry's technique was to throw something out, and let the lion's eat it. He had a gentleman named Don Morelli, a brigadier general, who literally died from the exercise. Starry spent a year and a half preparing the intellectual battlefield. He allowed foment and change; He allowed diversity of opinion. He brought politicians and the media in to get their views. FM-100-5, the transformational document, published in 1982,

didn't come about until Starry had done a year and a half of briefings around the world—never put anything to paper—111 briefings, I think, Jim, if I'm not wrong, or something like that. Not too long ago, he told me “What's wrong with JFCOM? They're too quick to write!” Because as soon as you put something on paper, it becomes a Talmudic exercise. It's all happy to glad; it's line in and line out—it's the old 2023 stuff that all of us dealt with when we were junior officers. You know, “Don't tell me my concept is wrong! It's in the document!” So you have the Pharisees setting up in the temple, grinding through these incredible turgid tomes to believe in it and to make it better. That's not change—that's intellectual and institutional ossification.

The problem with the one Big Idea—be careful with this, because pretty soon, the Big Idea becomes a litmus test for truth, and the idea, if you want to succeed, is to support the idea; if you want to fail, then you tilt against the windmill. And what if the Big Idea is wrong? Or what if it's irrelevant? Or what if it's peripheral to the problem—netcentric warfare? Or what if the enemy has the ability to develop a Big Idea faster than you can refine the one you have? You lose the war. Be careful of the moniker and the bumper sticker—be careful of net this and net that. I wrote a piece a few months ago called, “Culture-Centric Warfare.” I told my editor, “Look, if I don't put *centric* on something, you guys won't publish it.”

A national strategy that determines priorities. Political leadership usually gets it wrong, or they get it right for the wrong reasons. When you have doctrine that comes down from the oracle of Delphi, you must automatically assume that it's wrong, because it's driven by motives other than an enemy—it's driven by political motives, or motives that relate to the field of international diplomacy. No visionary can overcome wrong-headed strategy—this is the French example.

Reform is often impeded by Metal—one of the reasons the French failed to adapt is that they had billions invested in legacy material. So the temptation is to rearrange the deck chairs instead of starting over—simply because of the investments. At Camp Mihiel in 1932, the French were still using 75mm horse-drawn howitzers, and they were still using Renault F1 tanks. Why? Because they had so many of them! You take what you have and you make it better; you find ways to adapt, using what you have already, because you've already made this huge investment.

The mundane—most of what soldiers do is incredibly mundane, and routine. We are, at our heart and souls, bureaucrats, and most of our time is taken up with process—that's just who we are. Rarely do we have occasions like this, where we can step back and do second-order analysis and synthesis, and think about the future. Our OER (Officer Evaluation Report) is written about how we do practical

things—how we get chow, and ammunition to the guns. We ask: “How did you do at the National Training Center (NTC)?” not “Do we need NTC.”

The problem with process is that pretty soon, when you get to the right of my chart, doctrine looks like a huge sausage machine. When you’re in the process of doing process, all you’re doing is turning a crank and turning raw meat into hamburger. Step back a little, and think about what you’re doing. Are the assumptions that go into that sausage machine correct?

Inclusion—very dangerous in our military today. Remember the great story about von Manstein trying to build armored divisions, and all the Western Front veterans contended that every division needed an armored car? Let’s give tanks to every division. It took an enormous strength of will for von Manstein and others to say, “No, no, no, no. We’re going to put our armored formations at the tip of the spear, because that’s the essence of operational maneuver.

This problem is made particularly difficult today because of our obsession with jointness. Jointness is, by its very nature, a source of friction in forward thinking, because everybody has to have a piece of the action. Why do we put a “J” in front of all of our headquarters? Well, because we have to be joint. Actually, we don’t. There’s very little “joint” about IRAQI FREEDOM—it’s 95 percent Army and Marine Corps. It’s got everything to do with winning the war on the ground. The enemy has ceded us the global commons. We own space, the air, and the sea.

A great article, by the way, by Barry Posen in the *MIT Review* called, “The Command of the Commons.” Barry Posen gets it, that this obsession with jointness, the obsession with inclusion, this idea of all doctrine development must be collegial; everybody has to be brought along until everybody’s happy. That’s insidious.

So what do you need to succeed? I think, first of all, you have to begin with a realistic image of future war. Not what’s going to happen after IRAQI FREEDOM, but what’s war going to look like in 2020 or 2025? How are we going to view warfare in the future? This is this idea of leap-ahead, the left part of my chart.

Second, you need a catalyst for reform. Normally, it’s a person. You need a Donn Starry. You need someone who has the unique skills, not so much as a visionary—Donn Starry will tell you that he was not a visionary; what he was, was an individual who knew how to move an institution forward. He knew how to manipulate the elements of change in order to get the most from the process.

Third, as I said before, you’ve got to experiment. Experiment in minute increments. Experiment over, and over, and over again. You might have a grand event,

but it needs to be cheap, it needs to be repetitive, it needs to be distributed, and it needs to be run by captains and majors and maybe lieutenant colonels—not by generals and heads-of-state. That’s how change occurs.

You’ve got to create in this process, over time, a common cultural bias, and that’s the genius of Donn Starry. His idea was, through his collegial style of leadership, to buy consensus. You know, Starry once said “Doctrine isn’t doctrine

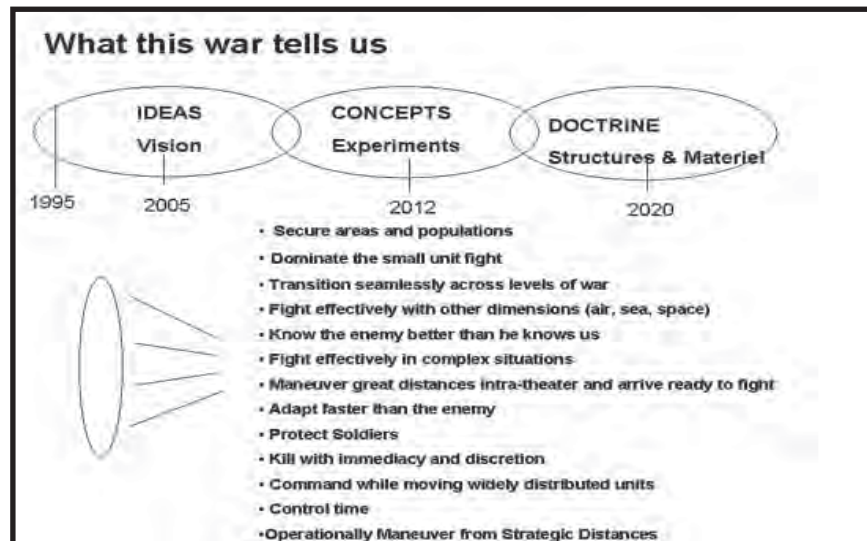


Figure 2

until 51 percent of the Army believes in it.” I would argue that doctrine isn’t doctrine until 51 percent of the American military believes in it.

Finally, and most importantly, we have to have uninterrupted support from the top, because if you get a break, as the British did between 1931 and 1935, when the Chief of the Imperial General Staff shut down experimentation and that the British Army was forced back to their colonial roots. It has to be uninterrupted and it has to be continuous; otherwise, you’ll fail.

Now everybody in the back of the room is saying, “Okay, smart ass. If you’re so wise on how to look at the future, what do you think about this war? Let me give you a list (**Figure 2**)

Obviously, secure areas of populations. I think one of the greatest transformational ah-ha’s that comes out of this war is the rediscovery of the value of the tactical fight. Remember I told you, don’t be too quick to the tactical? But there’s science that goes into the tactical fight, and the enemy has pulled us down to the

tactical level. You could almost argue that he has removed the operational level of war, and the tactical fight has become increasingly more important for determining strategic consequences. Shoot an Italian journalist at a checkpoint, and it changes the strategic context of the war.

I think you have to have a military force that can transition seamlessly across the levels of war. You cannot allow a vacuum to occur. Collapsing an enemy's will is always transitory—when he's down, you have to keep him down. You cannot allow a military vacuum to occur; if you do, it leads to a political vacuum, and it gives the enemy an opportunity.

Clearly, fight effectively in other dimensions. Know the enemy better than he knows us. It's not enough just to know the enemy; you must have an intellectual OODA Loop that's tightened, such that the process of knowing the enemy and adapting to the way he fights has got to be tied into the way the enemy adapts to us. It's all about intelligence, but it's intelligence of a different sort.

Fight in complex situations. I think this is the lesson of Panama and Afghanistan that is being subsumed by events in DESERT STORM and IRAQI FREEDOM. Operational maneuver from strategic distances, and the ability to not only maneuver great distances, but arrive ready to fight. One of the things that didn't seem to hit the public consciousness, at least in the media—was the march of the Stryker Brigade from Fallujah to Kut. I woke up one morning and “This is huge! This is enormous! Does anybody get it?” Everybody looked at me like, you know, “Well, that's very interesting; so we had a bunch of armored cars drive up the highway.” No, no, no, no. This is operational maneuver of a completely different sort, something that Huba and I have been talking about for almost 15 years. It was an enormous distance, 400 kilometers, they rehearsed on the move, and deployed once they arrived.

Adapt faster than the enemy, and protect soldiers. You know, that used to be number one. We're away from protecting soldiers as job one, but we still are an army whose vulnerable center of gravity is dead soldiers. 9/11 changed the context—it raised the bar—but people are still counting.

We must kill with immediacy and discretion. Immediacy—we're still too slow in how we kill, and we're still relatively indiscriminate. We need to be able to kill someone on the other side of the wall, rather than dropping a building in Fallujah, and we need to do it within seconds and not minutes. The Air Force is very proud of the fact that their reaction time for close air support has gone from an hour and 15 minutes in Korea, down to about 20 to 25 minutes now—that's still too long. It should be two minutes, not 20 to 25 minutes, in this type of war.

Command while moving widely distributed units. I get this from Scott Wallace—he's absolutely right. That's the genius of the American method of command and control. Wallace broke ground in his command of V corps in the kinetic phase of this war by being able to do that, and probably the first corps commander since Rommel able to make that happen.

Control time. It's all about time. Time is our enemy, and our enemy's friend. Ultimately, if we can't regain the control of the clock, we cannot regain the operational initiative. Right now, the operational initiative, I would argue, is in the hands of the enemy. Again, operational maneuver from strategic distance, going long distances. Why is it important? Because the enemy has chosen to take us on in the hidden places, in the far corners of America's regions of influence, and he is the one who determines where the battle is being fought, not us.

Let me just end with a quick thought. When we finally opened the Soviet archives, in the late '80s and early '90s, we suddenly realized, to our great amazement, that we were driving the train, which is why Star Wars was so successful. The Soviets had this enormous envy of us, and much of what they followed was a trail behind those innovations and changes that we made in the '80s and '90s, and we didn't even know it. An enormous amount of intellectual envy that went on. So the Cold War was, in many ways, a Blue-driven condition.

What happened after 9/11, I would argue, is that it shifted to the other way—we're now living in a world that's driven by Red. Osama bin Laden doesn't care about joint doctrine. He controls the clock, he's driving change, he's adapted very quickly, and he really doesn't care about any of our structures, about mimicking anything that we do whatsoever.

So what does that mean—for you? What it means, is the onus for adaptation—for increasing the pace of adaptation—is on you, not on him. Until we're able to do that, until we're able to cast forward and get away from the practical present and think of the theoretical future, we'll never be able to close that gap.

What are your questions?

Day 1, Session 1 Question and Answers

Audience Member:

Inaudible

MG Scales:

I think one of the equities that Mike Hagee has embraced is to actually start at the squad. This is something that Van Riper and Mattis and Hagee all have embraced—changing the nature—it’s almost as if we’re changing it from two different dimensions and moving towards the middle—and I don’t think that’s bad; I think that’s healthy.

So, does the Marine Corps think at the tactical level? Yes. Why? It’s their history. Is that important? Absolutely. But what’s missing, I think—I would offer to you humbly—is a lack of intellectual convergence between the three of us, and there are really three of us: Special Operating Forces (SOF), the Army, and the Marine Corps—this is the ground warfare family, what the Chief of Staff calls the “new Triad.” We don’t do a good job sharing to the degree that we should. We oftentimes operate in isolation at the higher levels, when we have to build a single view, if you will.

What we see here, at the tactical level, is a practical convergence between all three entities—Special Ops, the Marines and the Army, increasingly, on the ground look very much the same. It’s how they fight. The truth is, the enemy is pulling us and converging us together. This process of convergence is going on, on the battlefield right now. Look at Fallujah, and how it was fought—SOF, heavy Army- and Marine-dismounted infantry, for the most part, is what went down. But my fear is that we’ll come out of this war and we’ll snap back into our old ways, and we won’t continue this process of convergence.

It’s kind of like the air forces in the Gulf War, or better yet, the air forces in Vietnam. Remember they had two different route packages, because the Navy and the Air Force could never fly over the same air space? Well, that all changed during the Gulf War, and it sure as hell changed in IRAQI FREEDOM. I think it’s a similar place where we are right now between us. I believe—I passionately believe—that we are at about the DESERT STORM phase of getting it when it comes to converging land power forces, and making them homogenous.

Does that mean that we get rid of the Army or get rid of the Marine Corps? No, no, no. Culture counts. History counts. But it’s this similarity of method, driven by the enemy, that has to be embraced. So, as we look to the future, and as Jim Mattis begins to develop his new vision of war at the tactical level, we in the

Army have to embrace it. As we begin to change our concepts of operational maneuver from strategic distances, and strategic coup de main, and all of the things that we've been writing about for years, the Marines need to embrace it. And to some extent, I believe they are. Go ahead.

Audience Member:

Well, I would also suggest, looking at your list there, one of the things that certainly I would suggest that happened in the aftermath of Vietnam also, and in your talk, I think you were quite correct in describing the advent or AirLand Battle was that the Army dropped counterinsurgents like a hot rock.

MG Scales:

Exactly! Exactly! That's my point to you about convergence again. So, let's say we walk away from this war and two bad things happen: All the goodness that we've learned from training the Iraqi Army, much as we learned from training the Vietnamese Army, is forgotten and the lessons that the Marine Corps learned about intimate street fighting—not about blowing up cities, but about door-to-door fighting, all that's lost. As we somehow try to snap back into a different way of thinking of war at a higher level, that would be unfortunate. I would suggest that, you (the Marine Corps) are the keeper of the keys at that level.

To me, I think if there's one skill that we carry forward from both the Army and the Marine Corps, that becomes a supreme equity, not a disadvantage, as we look to the future.

Audience Member:

Well, but what you're really talking about is just the connect. I mean with counterinsurgents, there's so much more than that.

MG Scales:

Absolutely.

Audience Member:

I mean knowing about power grids, and trash disposal, and all this other stuff—

MG Scales:

That's all important. I absolutely got that. And I'm not just talking about kinetic, but you know, if you don't build a secure environment, you go out and try to collect the trash and somebody puts a bullet in your head. So it's not one or the other.

Audience Member:

No, but you know, one needs to—too often, though, we have ignored one at the expense of the other.

MG Scales:

You're absolutely right. No question about it. I absolutely agree with you. But I would suggest to you that as you march into the future, we cannot allow that divergence to occur, once this war is over, because the goodness needs to be preserved.

Audience Member:

How do we control time with an enemy that has no sense of time?

MG Scales:

Great question. The question is "How do we control time with an enemy that has no sense of time"? And the answer, I would argue, respectfully sir, is they do have a sense of time. The only difference is that counterinsurgency, if you're engaged in counterinsurgency, the time you measure is oftentimes in years, if not decades.

But you still have to control the clock. I mean, just because the clock ticks slower doesn't mean that you can't control it, or manage it, or manipulate it. You can do that in all three levels of war in a counterinsurgency. To sit back and do nothing, and to follow a trail with the actions of the enemy in a counterinsurgency, is counterproductive. The British learned that in Malaya. One of the reasons why the British managed to bring that to a successful conclusion is that they controlled events; they controlled time. They regained control of the time; they wrested it away from the enemy. Now, it took time, but instead of the insurgency lasting until today, they managed to suppress it in about a decade, which is lightning speed in terms of what goes on in insurgency. But it ultimately came down to that.

There's also a military dimension in terms of controlling time at the tactical level. Ultimately, counterinsurgency at the kinetic phase, to use the doctor's phrase over here, comes down to very small unit fights, conducted in very tight confines and done very quickly and very brutally. That's also an important aspect of controlling time, because killing the enemy is still important in a counterinsurgency, I will submit to you, and doing it efficiently—and doing it quickly—is an important element.

But, having said that, clearly, an insurgency is not like a kinetic war—it does take time. In fact, I would argue, controlling the clock in an insurgency is even more important, because in many ways, the only advantage the enemy has in an insur-

gency is time. The only major advantage. He doesn't have technology; he doesn't have much else. What he's got is patience, and a willingness to die. So that is something that needs to be controlled—it's still important. But you're right—patience. And we Americans tend to be very impatient.

Audience Member:

John Lynn, University of Illinois. Loved your talk very much. But it seems to me there is one big obstacle in this whole thing, and that is, to the extent that the military is conceiving as the ideas, the military is going to see itself as the answer, and we may be in a struggle in which the military is part of the answer, but maybe a much smaller part than the military's comfortable with. I'd like to have your reaction to that.

MG Scales:

Oh, you're absolutely right. I guess, John, the only excuse I can give to you is to consider the audience. [Laughter] That's not why I was brought here to talk about, but you're absolutely right. I mean, we all know that wars are —like Clausewitz, again—political events, and that war is a means to an end rather than an end in itself. Particularly in this war. This war's not going to end with a military victory; it's going to end with some sort of political solution. Absolutely right.

Audience Member:

Yes. Except, the thing is, it looks like violence—it is violence—and I'm only too happy to call it war. It's just that the way to deal with it most effectively is a spectrum of intelligence and uses of violence, in which you're almost admitting that something's gone horribly wrong if you're committing maneuver units to doing something like this.

MG Scales:

Oh, okay. On that one, I disagree with you about—because—this is Colin Gray again, one of my mentors. He once said to me, he said, “You need to understand, it's *all* about war. It's about war at different levels, and different intensities. It's all about war.” Because, you know, the default position in regions like Bosnia is conflict. Now, how you manage it, and the elements of power that you apply to managing it—one of which, of course, is the kinetic military side—it's the balance, and that's important. But it's all about conflict. I mean, Bosnia, even today, is a conflict that's just moving at a very, very, slow pace and it's almost as if the military becomes—to use the doctor's point over here—becomes a sort of rheostat, and a way to move the level of violence up or down, to allow other things to happen.

But one of the things to take away, as I get from all my wonderful media friends, who try to convince me that it's all about building schools, is, you know what? If you build a school and the guys go in and blow it to bits the next day and kill all the students, it's not about schools. It's about managing violence. It's about that rheostat that needs to be moved up and down. What bothers the Iraqis today? A lack of democracy, a lack of electricity, or a lack of security? Kind of all, but the one that's most important to them is security. So I hear what you're saying, and I understand that wars follow the spectrum, everything from low-lying insurgencies all the way up to thermonuclear war. And in the essence of transformation, we need to build a military that's able to move seamlessly back and forth across them, not only from war to war, but within wars. That's a lesson from Vietnam. But ultimately, I would respectfully submit to you, sir, that it's still about conflict, and it's still about security.

Well, ladies and gentlemen, thank you very much. I enjoyed talking to you. [Applause]

Army Transformations Past and Present

Brigadier General (Retired) John Brown - Center of Military History

I would like to talk about transformation, and maybe making a distinction in the terms change, modernization, and transformation.

I'm thoroughly in agreement with General Scales on at least one issue: Transformation has a lot more to do with than just technology. If you deal with the technology and advance the technology, well, then, of course, that's modernization.

But we have our transformation at points in time where not only do you have technological advance, but also you have some kind of an appreciable change in the strategic circumstances, and you have some kind of complementary socioeconomic change that changes both your organization and perhaps even the nature and reasons for the wars you fight.

I would argue that in the past hundred or so years, we have actually transformed only a discrete series of times. I think we have changed always; we have modernized often. But we've only transformed about seven times. What I want to do is briefly talk to you about each of those transformations, to underscore the point that technology alone did not drive the change.

From frontier to empire, it is true that around the turn of the century, we had such technological advances as smokeless powder and breech loading guns that were generally available. But what really had caused us to change was that the frontier had closed—America had become a seamless nation from one end of the continent to another, following about 1890. The future of our economic advance would not be by the virtue of further agricultural areas brought under cultivation; it would be by the virtue of commercial and industrial enterprises.

Our strategic setting dramatically changed in 1898 when, as an outgrowth of this change, we ended up owning colonies around the world and having commercial interests that we felt obligated to protect.

The Army that we developed was very different than the Frontier Army that had existed for a hundred years. It was an army for empire—it consisted of units and soldiers who rotated overseas for extended periods. It included garrisons in Panama and the Philippines that were different than anything we'd done before, and it included large infusions of native troops—colonial troops, if you will; the Philippine Constabulary being perhaps the most famous and most successful.

The next great change was from empire to expeditionary force when we intervened in World War I in Europe. Now, it was true that at that time, there was

technological change by the virtue of the general introduction of the machine gun, or artillery that was able to fire from distributed locations and mass fire on single points on the battlefield. But what really drove the change more than that was the strategic setting had changed. We were now forced to fight a world class adversary who was at least our peer, if not our superior with respect to the means of modern warfare, and so we had to commit ourselves to war on a mass scale that we had not seen, at least certainly, since our own Civil War.

The socioeconomic change that accompanied the period was the absorption at the time of huge waves of immigrants into our social fabric that had been over the last 20 years arriving by the virtue of the radically enhanced means of communication across the Atlantic, and the change in the ethnic nature of our population. Additionally in what some call the first phase of globalization—the construction of a global economy that brought us into the European war in the first place—we couldn't let Britain and France lose, because they owed us too much money.

The American Expeditionary Force that fought World War I was a very different army than we'd ever had before—it was mass and constricted, but it was also ethnically integrated; not yet racially integrated, but ethnically integrated. It was part of an expression of the changing culture of the times that caused every American citizen to have the obligation of service, and the Army to have the expectation that it would be drafting large numbers of men from diverse backgrounds, and pulling them all together into effective units.

Immediately after World War I, we transformed to hemispheric defense—that was a change in our strategic setting. We decided that it was a mistake to have intervened overseas. We did not appreciate or enjoy the experience of fighting in World War I with the trenches; we were disillusioned with the behavior of our allies, and we thought we would close ourselves within our hemisphere and protect it.

The technology that allowed us to be confident in doing that, were some very radical advances in post artillery, a Navy that was second to none, and an Air Force that was probably at least second or third with respect to effectiveness in the world, but considerably advanced. The Army, on the other hand, was very modest, very small, but with a large mobilization base.

The socioeconomic change of the time was one wherein the culture itself reinforced a notion of distance from the United States—the Roaring Twenties—you know, the flappers—the dismissing of the external cares of the world, and the desire to kind of make our own way on our own continent, and everybody else leave us alone.

Now, one thing I'd say that plays here is that it's often said that the United States Army was unprepared for war in the '20s and '30s, that we just kind of had lost our military capability and our military outlook. I would argue that that's just not true, that we were actually very well prepared for the war that we were anticipating, which is to say a war that involved hemispheric defense. I can't imagine a better configuration for us to defend the hemisphere than the one that we deployed, given the expense that we were willing to invest.

The problem was not that our great grandfathers were unprepared for war; it was that they were unprepared for the war that they were actually called upon to fight. They fought a different war than the one that they had been prepared to fight. That underscores yet another thing that General Scales was commenting on — making sure that your vision of the future hopefully corresponds to the future you actually experience.

The Army that we raised at the time was ideal for its purpose— mobilizing to defend its continent, and garrisoning a very few strategic points overseas that we considered a requirement to defend.

Now, of course, the war we got into was not the defense of the hemisphere. The war we got into was huge expeditions across the Atlantic and Pacific, in order to bring down an adversary who was, once again, certainly our peer, with respect to military capability.

Now, the technological advances that accompanied that march to war include the Blitzkrieg, that was so ably described by General Scales a little earlier, the wedding of the armored vehicle and the plain and the adaptation of the German techniques of battlefield performance on an even larger, more pervasive scale than the Germans had been capable of achieving.

But I would argue that those technological advances were not as important as the socioeconomic change that accompanied this new Army that was going into battle. The new Army that was going into battle was the product, in part, of the Great Depression, and, in part, of that huge collapse of the economic system within the United States that resulted in a huge intervention of the federal government into all aspects of national life.

Whatever the Civil War did to kind of set states' rights down a notch in the perception of the American people, the Great Depression and the New Deal wiped away the notion that the states were in any way competitive with the federal government as the way in which society would be organized and run, and that the big operations would continue.

So the New Deal, the Great Depression, the radical expansion of federal prerogatives caused the United States to be organized as a centralized government

capable of mobilizing national resources in a way that it never had been before. With these capabilities it went into this new strategic setting that was global war.

The Army that fought World War II very much reflected this massive industrial mobilization capability, wherein the whole society went to war—every industry, every factory, every resource, every man, every woman, every child. Of course, that was capitalized on with 12 million folks in uniforms, huge expenditures with respect to the financial background, and an unparalleled, almost breath-taking industrial performance.

Coming out of World War II, you had the first change out of all of them that I believe was driven by technology—the shift to an Army wherein which nuclear weapons were an expectation with respect to your strategic response. Because we had the nuclear weapon and nobody else did, it was very clear that land warfare was a thing of the past—we weren't going to have to worry about competition with peer adversaries in ground combat—and we adapted a constabulary posture overseas, because all the Army was going to be doing was policing up the fragments that would be left, if anybody else at some other time were so reckless as to compete with the United States of America, which was the world's sole nuclear power.

Collaterally, at that time, the socioeconomic change that was going on that we would see bear fruit later was that, in the aftermath of World War II, the rhetoric that we had mobilized with respect to human rights began to resonate within our own consciousness, as we began racial integration that would be the parallel to the ethnic integration that had already occurred in World War I.

The Army that existed for a very brief period of time in this golden moment of us being the sole nuclear power was a constabulary. It was very good at what it did, which was to say police Germany and Japan. It was incapable of responding to the Next Big Threat, which is to say, the attack of the North Koreans, daring us to nuke 'em, given the fact that the Russians had acquired the nuclear weapon (atomic bomb) about a year and a half before they attacked.

That carried us to a different paradigm—to the Cold War. Here, the strategic setting was appreciably different than anything we'd ever experienced before. We were now going to man the ramparts—we were going to contain communism, and we were going to do that by the virtue of a continuous commitment to large forces deployed overseas, up front, in the face of the enemy, prepared to compete at any level across the fullness of the strategic spectrum.

That strategic setting drove all else. With respect to technological advance, we introduce a helicopter and we upgraded and consistently remechanized our forces. But that equipment modernization, less the helicopter, involved improvements

to equipment that had already proven itself in our hands in combat in World War II and Korea.

The socioeconomic change that accompanied the course of the Cold War of course included gender integration and a deepening of what we call “The Many Colors of Benetton.” The notion that we were all a big family and that it was not only our own American character that was going to be tested in the course of our wars and our confrontations, but that you were going to have huge alliance structures that were going to involve virtually all of the world’s free peoples, and you were going to add more and more allies all the time, as more and more of our neighbors embraced democracy.

The Cold War Army was unique in our history. It was a continuous-standing, long-term force, that was continuously modernizing. The Army didn’t change, but the equipment changed that was in the Army’s hands, and you had one tank replace another tank which replaced another tank; you had one artillery piece replace another artillery piece replace another artillery piece. So it was this permanent mobilization and permanent modernization that was the character.

Now, General Scales did argue that there was transformation to and from the Pentomic Division, to and from the Army that fought the Vietnam War, with the introduction of the helicopter. I agree that those were changes; I’m inclined not to characterize them as transformational. I would say that the Army that marched out of Europe in the ‘90s was identifiably the same as the Army that marched into Europe in the ‘50s—about the same organization, about the same mind-set, about the same expectation of how it was supposed to perform in combat—a slight difference in the equipment that was available.

Now, obviously, we need to be thinking about what’s next. I would say that if you believe that we’re positioned for another transformation—and I believe that we are, and I believe the reason is not because technology has advanced, although it has—I think the reason we’re facing another transformation is because we have once again experienced simultaneously a change in our strategic setting, a change in our technology, and a socioeconomic change. The strategic setting, of course, is that we no longer have a single adversary, and as a matter of fact, all of the potential peer adversaries are happily buying into the global economic order that causes all of us to kind of behave by the same rule set.

So it’s a bit hard to envision fighting the Russians, or the Chinese, or the Indians if all of them adhere to the same rules you do, and are as interested as you are in globalization, global advance, getting their products sold. The dangers to our world, the dangers to our system, originate not in our new peers in the globalized economy; it’s from those folks in the regions that have not yet bought in, and remain turbulent, chaotic, and hostile.

Technological advance is obviously based on the microchip, whether it's in precision-guided munitions or in the control of information. There are two types of socioeconomic changes that I would say matters most to us. One is the globalization that I described, and by the way, some theorists would say we're in kind of a fourth phase of globalization, and this one is driven by the pervasive Internet technology that's kind of sweeping away so many of the national differences that previously existed. The other socioeconomic change is the brain of both our own country, our former allies, and our former adversaries—that you've got this huge population demographic where the population growth has slowed down almost to a standstill amongst folks who formerly were our rivals, and yet is running, as yet, unchecked in the Third World, wherein which so much of our trouble lies.

That concludes my presentation. In conclusion, I just wanted to give you a quick overview of, where our Army transformations have occurred in the past, to lay out some conceptual ideas, and some definitional terms we may be able to draw on later, as we ascertain whether the changes that we are speaking to represent change, or represent modernization, or whether they truly do represent transformation.

I'd also say that the issue of whether or not we should transform during wartime, there's no better time to transform, because it's during wartime that you have in fact the resources and the manpower and the public attention to accomplish the changes that you need to accomplish. That's not just me talking; that's General Schoomaker's personal philosophy, that there's no better time to transform the Army than now. It would be a bad idea to defer transformation until the fighting's over, with the expectation that Congress would continue to give you the money to transform at some later point in time, because it seems like a good idea.

Army Organizational Changes—The New Modular Army

Ned Bedessem—Center of Military History

I'm going to talk about the Army Modular Force, and how CMH has participated in the designation of its units. I'll start with a brief description of the Modular Force. Through modularity, the Army intends to create a force that is more powerful, more readily adaptable to any contingency and more readily deployable. Of course, well before 9/11, the Army recognized the need to restructure its forces, to achieve a better balance of firepower and deployability, and had already begun the process. The Global War on Terrorism has increased that urgency.

The Army of the past, designed around the division as the principal fighting command, was routinely broken up into Brigade Combat Teams for deployments. Modularity recognizes this and seeks to formalize and optimize the Brigade Combat Team as the Army's new primary building block. The new BCTs are smaller, allowing a greater number to be organized without a major increase in end-strength. The modular redesign will also increase the number of regular Army brigades from 33 to at least 43. This will reduce the deployment tempo of each brigade, and increase available training time.

Prior to modularity, the Army consisted of a wide variety of very diverse units. Even divisions had evolved so that each had a nearly unique organization. This hindered the ability to quickly organize a force package tailored to the needs of the combatant commander. As the name implies, the Army Modular Force consists of standardized units that can be readily exchanged with each other as required. They're self-contained and organized to provide the full range of mission capabilities. This will allow the Army to rapidly create and deploy a force custom-designed for any contingency, using uniform building blocks with clearly recognized capabilities.

Another key to modularity is that the traditional functions of the Army Service Component Command—corps, division, and brigade—are reallocated among the new modular commands. There will no longer be a fixed hierarchy among command echelons. They will be organized more along functional lines, with some overlap in their abilities.

Only those echelons required by the specific contingency will be used, and other echelons can be easily skipped when they aren't needed. So the combatant commander will get exactly the structure he needs for the mission at hand.

During the period that the new designs were being developed, a new set of terms was created to help separate unit functions from the unit designations that traditionally perform those functions, as Dr. Stewart pointed out. It was this at-

tempt to break the old mind-set that gave us the terms Unit of Employment (UE) and Unit of Action (UA). The fact that new terminology was needed to help make this conceptual break demonstrates the power of unit designations, and shows that names really do mean something.

Although the terms UE and UA are helpful for their purpose, they've always been intended as temporary aids to thought and discussion. They were never intended to be permanent names for units. The Army staff has been clear in its intent to replace these terms with real, recognizable unit designations in the final designation plan, and in fact, their replacement has already begun, as I'll discuss later.

There are two main types of Units of Employment—the UEx and the UEy. The UEy functions as a theater-level command; it's geographically focused in a line with the regional combatant command. It combines the traditional administrative functions formerly associated with armies and corps.

In addition, the UEy has embedded joint capabilities, so it can operate as a Joint Force Land Component Command, or JFLCC headquarters, or with the Joint Task Force Headquarters itself. The UEx is the principal Army Forces Operational Headquarters in the Modular Force. The UEx can also function as a JTF (Joint Task Force) or JFLCC headquarters, with minor augmentation.

It conducts operations through command of subordinate maneuver and support brigades, combining many of the operational functions of the old corps and division.

In garrison, the UEx also has training and readiness responsibilities for maneuver and support brigades. However, the brigades are not organic elements of the UEx. It'll deploy with whatever brigades are ready in the force generation cycle, regardless of the patch or the home stations of those brigades.

There are two types of UEx—the operational UEx with the three-star commander, and the tactical UEx with the two-star commander. They're organized and employed very similarly, but the operational UEx can be more quickly applied in certain joint and multinational contingencies, where a three-star command is called for.

Now the Units of Action. There are a variety of Units of Action which are brigade-sized units and are the basic building blocks of the Army Modular Force. Some are maneuver UAs, or Brigade Combat Teams (BCTs). There are three types—infantry, heavy, and Stryker BCTs. Others are support brigades. I'll describe the BCTs first.

The Brigade Combat Teams are designed to incorporate as organic elements the assets that used to be controlled and distributed by the division. By formally organizing the BCTs with the structure and assets they'll fight with, they're also trained and resourced according to that structure.

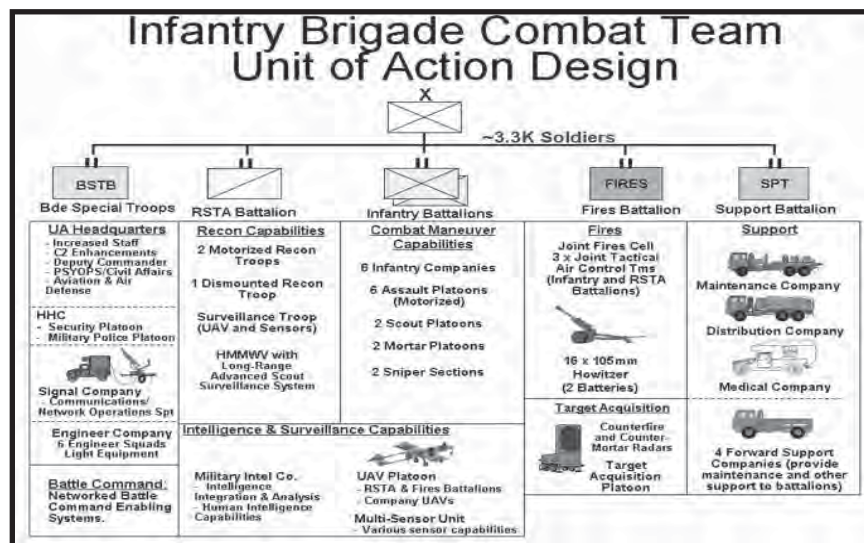


Figure 1

The infantry BCT (**Figure 1**) consists of two infantry battalions, each with three rifle companies and a weapons company, a reconnaissance, surveillance and target acquisition, or RSTA squadron, with two motorized recon troops and one dismounted recon troop; a fires battalion with a target acquisition platoon and two firing batteries of towed 105mm guns; a support battalion with distribution, maintenance, and medical companies and four forward support companies, one for each infantry, RSTA, and Field Artillery (FA) battalion; and a special troops battalion, which includes the brigade headquarters company and many of the assets previously controlled at the division level, including engineer, signal and military intelligence companies, and military police and chemical platoons.

So you can see how a BCT is a permanently structured, self-contained, combined arms team. We used to have to task-organize to get all these functions together in a Brigade Combat Team; now, it'll be permanently organized that way.

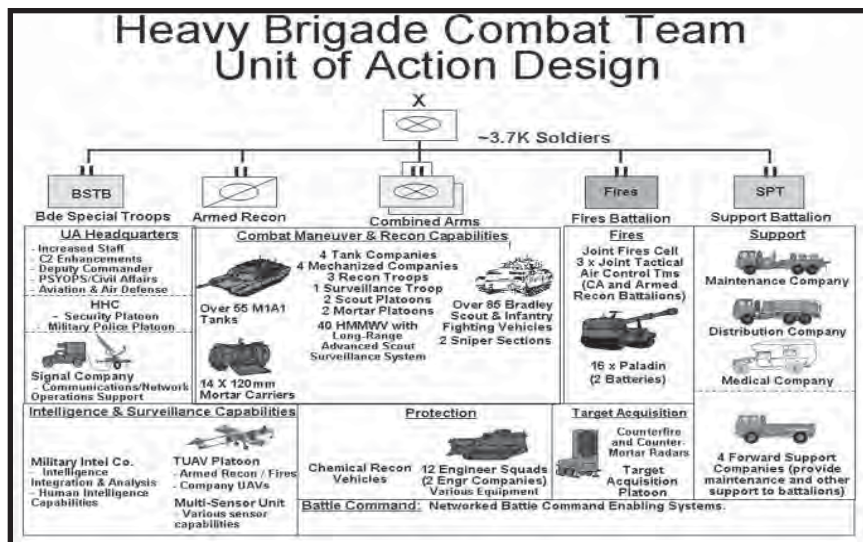


Figure 2

The heavy BCT (**Figure 2**) consists of two combined arms maneuver battalions, each with two mechanized infantry companies, two tank companies, and an engineer company; an armed reconnaissance squadron with three mounted recon troops; a fires battalion with a target acquisition platoon and two batteries of self-propelled 155mm guns; a support battalion with maintenance, distribution, and medical companies, and four forward support companies for the combined arms, ARS and FA battalions; and a special troops battalion with the brigade headquarters company, the signal company, and military intelligence company.

The third type of maneuver brigade is the Stryker Brigade; it's included as a Modular Force BCT, but it's really a holdover from the initiative begun prior to modularity, and it's organized very differently from the heavy and the infantry brigades. Dr. Charlston will be addressing the Strykers in his presentation, and I'm going to leave that to him.

There are also five types of support brigade Units of Action (**Figure 3**). Multi-functional aviation brigades provide tactical aviation, including reconnaissance, attack, assault and lift, and MedEvac. Fires brigades provide artillery and other fire support. Battlefield surveillance brigades provide reconnaissance surveillance, target acquisition, and intelligence operations. Sustaining brigades control support and sustainment operations. And maneuver enhancement brigades are designed to provide protection for the force and preserve its freedom of action.

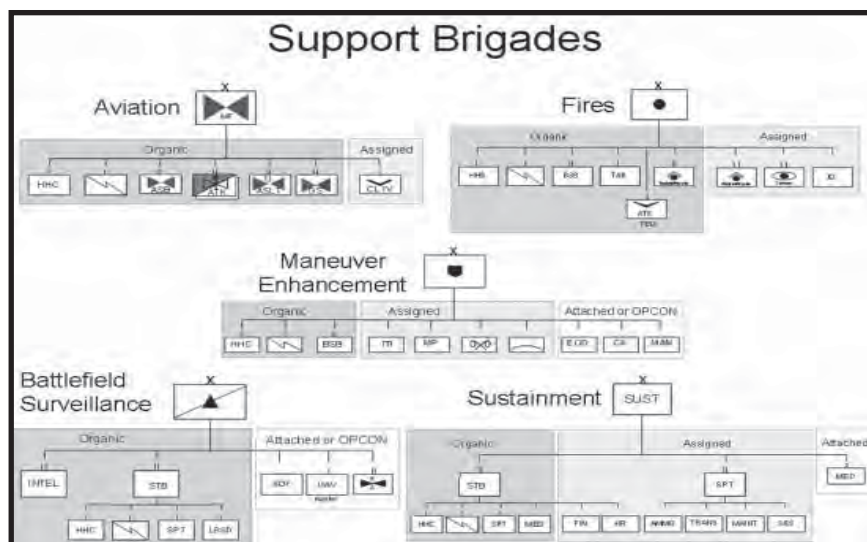


Figure 3

Of these support brigades, only the aviation brigade has a fixed structure. The other types are designed as fixed headquarters, to which subordinate elements are assigned or attached as needed, from an Army-wide pool of available units.

Upon deployment, the composition of these brigades is determined by the mission requirements. You can see how the support brigades are organized here.

I can't detail them all, but I would like to point out the maneuver enhancement brigade's assets, because it's particularly interesting. It combines the fixed headquarters, signal company, and support battalion, with assigned and attached engineers, military police, chemical, air defense, ordinance disposal, and civil affairs. It can also provide operational control of maneuver elements when required, but its focus is on the protection of the force's ability to maneuver. This is the first time the army has formally structured an organization to focus on this mix of functions, and this kind of functional alignment is one of the hallmarks of modularity.

In addition to these support brigades, there will be a variety of additional support units at the UEy level, to provide and augment the pools that these brigades draw their units from.

Now I'd like to discuss the Center of Military History's (CMH) involvement in designating the Modular Force Units. Because unit designations create a link between current force structure and the lineage and honors of historic units, it's

the responsibility of CMH, and the Center's Force Structure and Unit History Branch in particular, to provide unit designations throughout the Army.

In February 2004, TRADOC's Task Force Modularity contacted the CMH to say they had reached a point in their work where it was appropriate to look at how the units would be officially designated, and they asked us to design some options. From the huge array of possibilities, CMH developed some courses of action that we felt would represent various directions that the Army staff might choose to go, and that also were fully feasible to implement.

There were three primary goals, as we looked at these options: Preserve historic units, limit turbulence, and reflect the new modular structure through the unit designations. But if you think about it, you can't really maximize all three of those goals at the same time; to maximize in one area, you've got to be willing to compromise in another. So the courses of action that we looked at tended toward the various mixes of those three goals. In addition, we decided that the current methods for designating units at the battalion level and below could still be applied to the modular forces, regardless of the designations used at brigade level and above.

So in order to preserve regimental lineages, in each option, combat arms units would continue to use the US Army regimental system designations, and non-combat arms units would continue to use their traditional designation types. It doesn't mean that the units at the battalion level and below would retain their current designations and specific designations; just that they would use the same kinds of designations. For example, fires battalions would be designed as field artillery; RSTA and ARS (Armed Reconnaissance Squadron) squadrons would be designated as cavalry. The combined arms battalions and the heavy BCTs would get one infantry and one armor, in order to preserve both infantry and armor regiments.

Now I'll describe some of the options CMH came up with for designating the Modular Force. For example, if the primary goal was to limit the changes made to the current designation structure, we could adapt the same designation patterns the Army's used essentially for the past 50 years, with minimal changes.

In such a course of action, the UEys could be designated as armies or corps, the UExs as divisions, and the maneuver BCTs as divisional brigades—1st Brigade or 1st Infantry Division; that's essentially what we do now. The benefits of adapting this system to the Modular Force are that it's the least disruptive to implement, and would be easily recognized, due to its familiarity. The downside is it doesn't really communicate the depth of change taking place in the Army. In fact, this minimum change option is the designation plan CMH was already implementing as the 1st Divisions underwent the modular redesign. Because the

Army was converting these divisions before the overall designation plan was approved, we had to come up with some interim solutions to designate the units as they were redesigned. We'd already been working with G3 on the 3d Infantry Division redesign since December of 2003, so during 2004, we were designating the converting divisions with interim designations, according to this minimum change option, and at the same time, we were working toward a decision on the Army staff's desired long-term solution to modular designations

Another possible designation plan we looked at would be to return regimental headquarters to the force, and designate the UAs as regiments rather than brigades. In this course of action, the UEys could be armies or corps, and the UExs divisions. We characterized the UAs as hybrid regiments, because rather than designate every organic element as part of the same regiment, only the two maneuver battalions and the special troops battalion would share the regimental designation. This was done to preserve the lineages of cavalry, field artillery, and support units, that would otherwise be inactivated and subsumed under the regimental designation. So the UAs end up looking more like regimental combat teams than fixed regiments, under this option. The benefits of this option are that it gives the UAs their own identity, and helps clarify the new relationships in which the division does not own the subordinate echelons. At the same time, it retains the current division lineages. One major disadvantage of this course of action is the number of regiments that would have to be removed from the force, since both maneuver battalions in each regiment would be from the same regiment. In a brigade, you can perpetuate a different regiment with each battalion. So approximately 25 percent of the current infantry and armor regiments would be dropped from the force, in this regimental option. Other drawbacks are the amount of reflagging required at the brigade level and below, and the degree to which it focuses the UA designations on combat arms, despite the significant number of CSS soldiers in the organization.

Yet another option we looked at was almost the opposite of the minimum change option. It uses changes in designations as a way of underscoring the structural changes of modularity. In this course of action, the UEys could be armies, the UExs designated as corps, and the maneuver UAs as brigades that perpetuate either divisional headquarters or separate brigade lineages. For example, you'd have the 1st Infantry Brigade wearing the big red one, or the 82d Airborne Brigade wearing the All-American. The division echelon would drop from the force in this option. Obviously, this is a radical option, but it strongly emphasizes the new functional distinctions between the UEx and the UA, and clearly signals that a major change has taken place in the Army. Also, because the currently active divisions would only flag 10 of the 43 brigades, this option would allow the return to the force of many division and separate brigade lineages that are currently

inactive, but are historically significant. The downside of this course of action is the huge number of reflaggings involved, especially if you want to flag the battalions under the UAs with designations that relate historically to the brigade that they're assigned to. You'd almost have to reflag the entire Army to make this work, but when you were done, the designations would definitely match the modular structure.

So those are the kinds of options that CMH was looking at. In the spring and summer of 2004, General Brown briefed possible designation plans to a variety of decision makers and interested parties on the Army staff and elsewhere. Interest was routinely high and we got a lot of valuable input. In September 2004, an initial brief was presented to General Schoomaker, who directed CMH to work up charts with specific designations for all units down to the battalion level. He also directed that a blue-ribbon panel of senior retired general officers be established to review the options and provide him their thoughts.

The blue-ribbon panel was convened and briefed, and in January 2005, provided its recommendations to General Schoomaker. The panel recognized that various options were feasible, but they strongly recommended following the course of minimum change. They felt that the conditional designation methods carried too much value, tradition, and meaning that would be lost under the other options, and that changing the basic way Army units are designed is not necessary to communicate the changes of modularity. They felt that since divisional brigades are already being task-force organized, and serving under the command of division headquarters other than their own, that the Army would quickly adapt traditional designation methods to the new modular force. They also believed that there were enough changes and stresses on an Army transforming during wartime that a dramatic change in unit designations would be counterproductive and distracting.

The Army staff ultimately agreed with these arguments. Based on the recommendation of the panel and the direction of the Vice Chief of Staff, CMH presented a new series of briefings to General Schoomaker and the Army staff, with variations on that minimum change option. The variations reflected input from the staff principals. This recently resulted in a set of decisions by the Chief of Staff regarding designations in the Army modular force. Not all the decisions have been made and not all the decisions that have been made are ready to be announced, but last week, the announcement was released regarding the regular Army UExs and maneuver BCTs. I have a few copies of the transcript of that announcement that I can set out for anybody who'd like to read them, and it's also available, you can link to it from the Army home page.

In the approved plan, the operational UEXs will be designated as corps, the tactical UEXs will keep division headquarters designations, and most maneuver BCTs will be designated as divisional brigades. There will be four brigades wearing the patch of each division, plus four nondivisional brigade-size elements in the regular Army. These designation decisions were linked to stationing decisions, as you can see on the map. The chief decided to co-locate the brigades with the division headquarters that they share patches with, to the extent possible. This is to provide a cohesive focus for training, readiness, and force generation cycles, and to give the brigades a sense of home base (**Figure 4**).



Figure 4

You can see on the map that the 2d Infantry Division in Korea and Fort Lewis and the 25th Infantry Division in Alaska and Hawaii have a Pacific orientation, with the current 172d Infantry Brigade in Alaska replaced by a brigade of the 25th. Other divisions are concentrated as follows: The 1st Armored Division of Fort Bliss, 1st Cavalry Division of Fort Hood, the 1st Infantry Division of Fort Riley, with a brigade at Fort Knox, the 3d ID at Fort Stewart, with a brigade at Fort Benning, 4th ID at Fort Carson, the 10th Mountain Division at Fort Drum, with a brigade at Fort Polk, 82d Airborne at Fort Bragg, and the 101st at Fort Campbell.

The four nondivisional brigade-level units are the 173d Airborne Brigade in Italy, the 2nd Cavalry Regiment in Germany, the 3d ACR at Fort Hood, and the 11th ACR at Fort Irwin, which is really a brigade minus.

CMH is currently working with G3 action officers to establish a time line for the unit reflaggings necessary to implement the Chief of Staff's plan. We're also working with National Guard to align their designation with the Chief of Staff's decisions.

This is essentially where things stand today. Thank you.

The Evolution of the Stryker Brigade—from Doctrine to Battlefield Operations in Iraq

Dr. Jeff Charlston - Center of Military History

As Dr. Stewart mentioned, this is actually a summary of a pamphlet that is currently under preparation at CMH, by myself and Lieutenant Colonel Mark Reardon. That pairing was deliberate, to pair an academic background with a combat arms officer. Actually, I am here giving the brief, focusing largely on combat arms action with the Stryker.

The SBCT, the Stryker Brigade Combat Team, is the hallmark of General Shinseki's Transformation effort—capital T—and an interesting stage in the development of the future force as the interim force—linking the Army of a few years ago with the Army we hope to field in the increasingly near future.

We have already heard from General Scales about doctrine driving technology. We can see that quite clearly in the Stryker Brigade, as it was developed initially with off-the-shelf technology, and what I'm going to do is walk you through very quickly the history of the Stryker Brigade as it took the field, specifically, the first Stryker Brigade, not the subsequent units.

Now, of course, being a historian, trying to draw the actual starting point for any concept or idea is a challenge. We took a few points that are fairly substantial in the development of the Stryker (**Figure 1**).



Figure 1

The current Army transformation can really be traced back to Chief of Staff Sullivan, with his efforts to adapt the post-Cold War Army to the emerging 21st century, and the problems the Army experienced with Desert Shield. Specifically, ground forces began arriving to execute Desert Shield very, very quickly. But it took some months before the Army could actually assemble enough weight of arms material, men in theater, to conduct Desert Storm.

Looking at this situation, General Sullivan launched the General Headquarters Maneuvers, or the Modern Louisiana Maneuvers, to try to get the Army to begin developing experimental concepts, doctrine, new ideas, new ways of approaching the future. Very shortly thereafter, Secretary of Defense Les Aspin launched, of course, the Bottom-Up Review, which called for a complete review of US military strategy

These ideas really merged in the Army as Force XXI. It was to be, of course, the Army of the near-term future to be fielded circa 2010, integrating advanced information technology into current systems—upgrades of existing hardware.

Essentially, Force XXI digitized the existing or legacy force into an interim force, and the Stryker Brigade has become the first unit of that interim force.

When General Reimer replaced General Sullivan, he took the next logical step, looking beyond the Force XXI structure to the Army circa 2025, integrating not only updated information technology, new business practices, new ways of managing the Army, but new systems entirely. General Shinseki came into office as Chief of Staff with this background in mind, took a good look at all these ideas, which had been circulating in the Army for almost a decade at that point, and decided it was time to move.

Now, the first speech of any new Chief of Staff at the AUSA Conference is always worth hearing. General Shinseki's speech in October 1999 was particularly interesting in that he decided the Army was going to start moving and start moving now. He established a number of clear-cut goals and directives. One of the most challenging was that the Army would stand up a prototype unit of the interim force, using off-the-shelf technology, and have it in place at Fort Lewis, Washington, for the end of that year. To say that creating an entirely new brigade within a year is a challenge is putting it somewhat conservatively.

General Shinseki also identified some specific features of this new brigade. It would be medium weight. It would be able to bridge the light and heavy capabilities gap, which had been a problem for Desert Storm/Desert Shield. It would be based on off-the-shelf technology entirely, perhaps using a medium-weight wheeled vehicle. The entire brigade would be developed with an eye to reducing its logistical needs, to reducing its overall tooth-to-tail ratio, and to producing a

full spectrum force, capable of executing any mission the Army might be required to perform.

The Army launched a very ambitious schedule to implement this directive. Having established its plan to do so in slightly less than 60 days, the transformation would begin with a then-Bradley-equipped infantry brigade—3d Brigade, 2d Infantry Division at Fort Lewis. The time line is up there, and was almost impossible to meet (**Figure 2**).

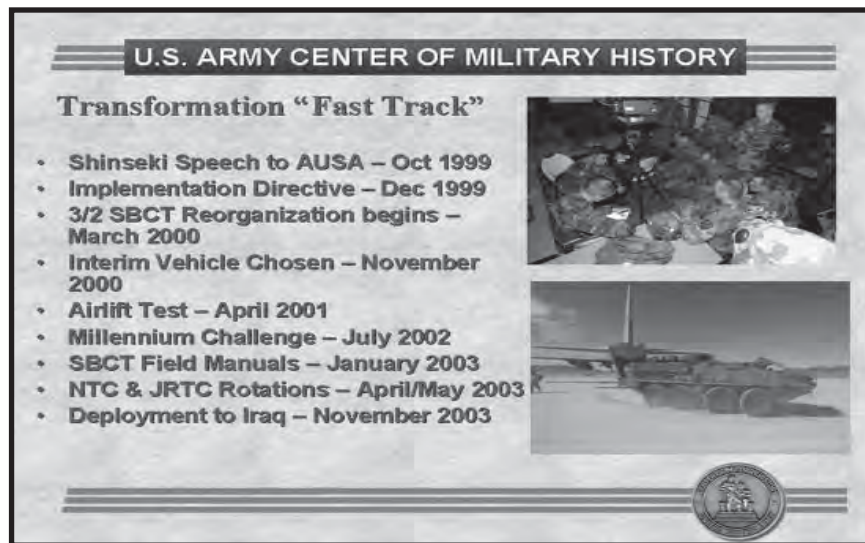


Figure 2

This entire process saw doctrine and training and equipment developing hand in hand, and occasionally getting ahead of itself in the process. For example, the signature vehicle of the Stryker Brigade did not exist when the brigade officially transformed—took on its new shape. It used surrogate vehicles, and not only surrogate vehicles, but it hadn't identified a single surrogate vehicle. At the same time that some 35 contenders for the honor of becoming the unit's new mount were being assessed, the unit was employing a good number of those surrogate vehicles in actual training—developing them, testing the doctrine.

To summarize this process quite rapidly, well, you can see, going here, March 2000, the reorganization officially begins, before the doctrine exists. Vehicles are turned in; surrogate vehicles are adopted. The interim vehicle is not chosen until near the end of that year—beyond the end of the fiscal year. The Stryker Brigade Combat Team met General Shinseki's deadline; it did exist by the end of the fiscal year he initially launched it in, but it did not have any of the vehicles,

it did not have any of the doctrine, it did not have any of the established training that would eventually extinguish that brigade. Despite that, the brigade made extremely rapid progress.

The first airlift test, April 2001, began to certify one of its important abilities—being able to deploy with C-130 airlift, tactically. MILLENNIUM CHALLENGE, referred to earlier, was really the debut of the Stryker in a large-scale test. It performed surprisingly well. One of the decisions that might have been, in retrospect, a mistake for the Army happened in 2002. The vehicle had been selected, and by 27 February '02, that vehicle did have a name: Stryker. The brigade had become synonymous with the vehicle; the hardware was defining the brigade, in many minds, and by 1 July '02, the brigade was officially labeled the Stryker Brigade—after its signature vehicle. It's important to note—and always remember—when discussing one of these brigades, that the brigade is not the vehicle.

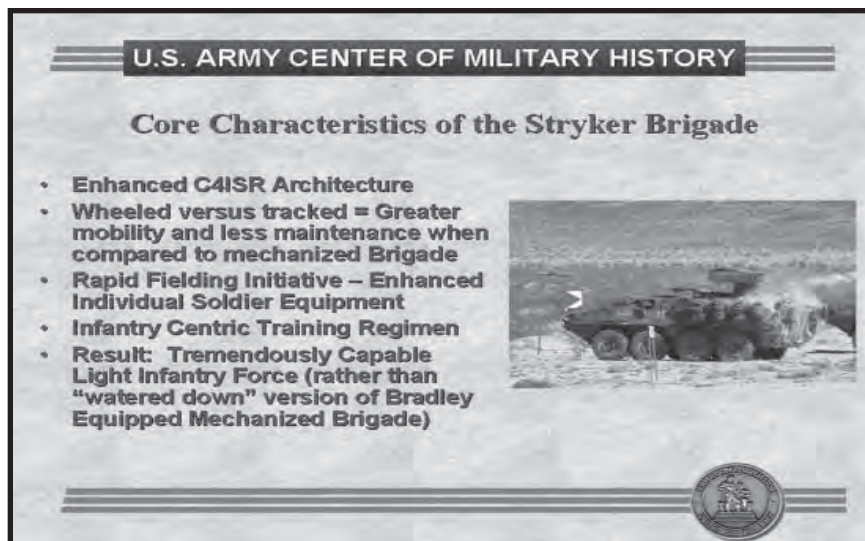


Figure 3

What are the core characteristics of the Stryker Brigade Combat Team (SBCT) (**Figure 3**)? Well, number one—reminding yourself that the Stryker vehicle is not the brigade—the soldiers of the first Stryker Brigade refer to this combat vehicle as their truck. This is an important mind-set: The Stryker vehicle is not a combat vehicle; it is not Bradley-Light.

This also had some advantages for the first SBCT. When they went to the National Training Center (NTC) for the first time, both the opposing forces (OPFOR) and the controllers were not quite familiar with this distinction between the

vehicle and the brigade bearing its name—they expected the first SBCT to maneuver like any other Bradley unit. Exploiting this advantage over the OPFOR, the brigade stationed itself, in traditional Bradley fashion, lured the OPFOR into attacking the Bradleys, and falling into the path of a nice, prearranged ambush, using Javelin missiles. OPFOR was defeated in the SBCT's first field at NTC. It is important to remember that this is not a Bradley unit.

The advantages of the Stryker unit developed not only from the vehicle but from the other aspects of the unit. Its enhanced C4ISR (Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance) architecture connects not only the Strykers, but the support vehicles—everything associated with the unit. It allows the commander to have an unparalleled picture of the battlefield. FBCB2 is throughout this brigade.

The wheeled vehicle allowed this unit to be extremely mobile—agile; it can go places where tracked vehicles simply cannot—it is quiet on the ground, allowing the commander to exploit this as a tactical advantage. Due to the rapid fielding initiative, the Stryker unit was able to obtain advance technologies, technologies that had not been used in a line unit before. It adopted a lot of special operations material, techniques, and training. Special operations training can be found written right into its doctrine as well. This is an unusual unit.

Although formed out of a mechanized infantry brigade, it became very much a foot infantry-centric training regiment. The vehicle is used as the brigade's truck—it delivers the troops to combat; they fight on foot. The result, overall, is a tremendously capable flight infantry unit, with every soldier in that unit, courtesy of the FBCB2 (Force XXI Battle Command, Brigade and Below) and enhanced electronics, to serve as a potential shooter able to call fire.

The Stryker vehicle was only one of 570 lines of new equipment to be incorporated into the brigade. And of course the Stryker Brigade became the first of the new UAs to really take the field, in its structure (**Figure 4**), laid out there, based on three infantry battalions, a RSTA squadron, which also, of course, is mounted on the Stryker, with fewer dismounts—this becomes significant in operations later—enhanced military intelligence, awareness. All the attributes we're looking at in the modular Army are there in Stryker brigades.

Now, when General Shinseki set the Army on the course of fielding this new type of unit, the Army was at peace; we had a window of opportunity where the Army could concentrate on such things as fielding new units. But, by the time the Stryker unit began to approach operational readiness, we have an Army at war.

The Stryker Brigade also faced a unique challenge. Immediately before deploying, almost every senior officer in the brigade was rotated out—within

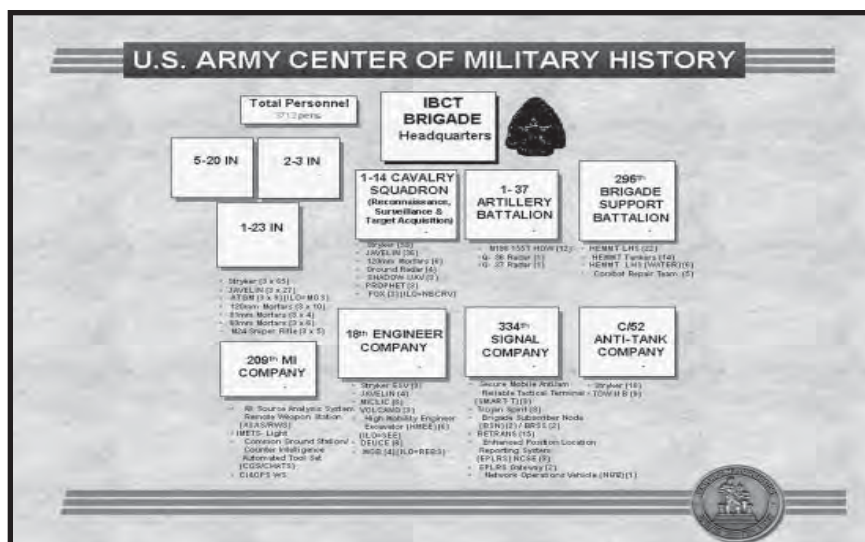


Figure 4

60 days of its departure. Despite that handicap, the brigade managed to deploy without significant incident.

To give you an idea of the speed this whole thing happened with, it had been decided, or determined that the Stryker vehicle had a vulnerability to Rocket Propelled Grenade (RPG) fire—you-all heard of the bolt-on armor problems, I'm sure. Slat armor was rapidly developed as an alternative. It proved very effective, but it could not be manufactured in time to equip the unit before it deployed; it actually had to be mounted in theater.

The Stryker Brigade deployed directly from Seattle on two LMSRs (large, medium-speed, roll-on/roll-off ship) in October; troops followed by airlift. It was initially intended to replace the 101st Airborne Division in the vicinity of Mosul—one brigade to replace a division. That's not entirely true, however, and I'll get onto that in a few minutes (**Figure 5**).

When it arrived, it conducted the routine procedures, added the bolt-on armor—excuse me, the slat armor—and proceeded to cross into Iraq. The brigade did not replace the 101st Division itself, but getting into the modularity concept, it formed the core of what would called Task Force Olympia—a total force of some 8,000 troops replacing the 24,000 personnel of the 101st, in control of a city of some 1.8 million people.

This was done by using an SBCT battalion to replace the each 101st brigades, except inside the city, where two battalions were used to replace the 101st 2d Brigade. The sheer size of Mosul meant that two of the three infantry battalions

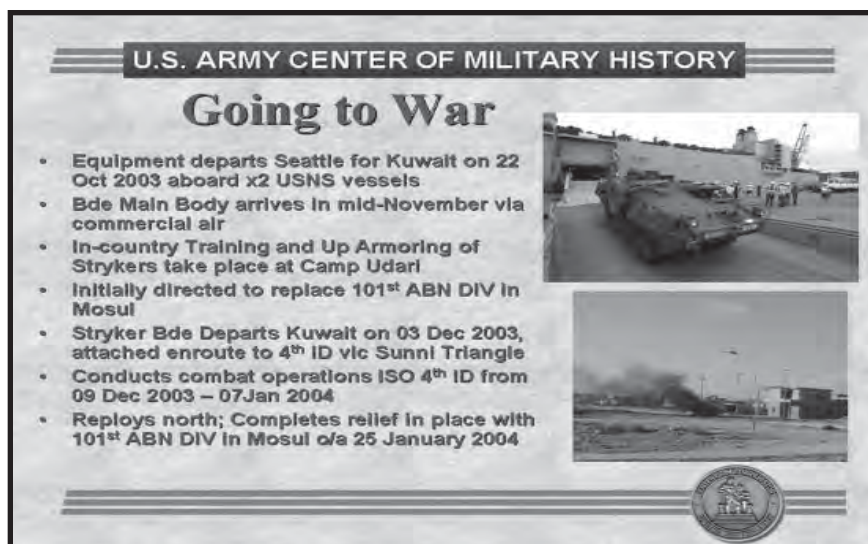


Figure 5

were positioned there permanently—the 1-23d and 2-3d. This arrangement—and probably for no other reason—meant that the 5-20th became the action battalion for the brigade—it got a lot of the emergency calls and wound up chasing hither and yon across Iraq.

In addition to its security duties, of course, the brigade also formed security locally, executed the rebuilding missions, the public relations, public affairs—all of the important functions that are going on behind the scenes that don't draw the attention that combat does, including training the Iraqi National Guard. The brigade performed this mission magnificently, but I'm not going to address it in this forum. Realize that that's going on, and while all this is happening—this single brigade is replacing a division, and executing this mission.

Very early upon its arrival in the theater, the Stryker Brigade earned a reputation for its ability to move fast, to adapt, to respond to changing conditions. It became, in the course of its one-year deployment, Combined Joint Task Force 7 (CJTF-7)—well, the term used here is fire brigade—the unit of choice whenever anything changed within theater: “Where is the Stryker unit? What does it have available?” (Figure 6)

For instance, immediately upon crossing into Iraq, rather than joining the 101st, it was attached to the 4th Infantry Division (ID) in Samarra. This was required by, of course, the problems that the 4th ID was encountering in Samarra at the time. After that situation was—certainly not rectified, but reduced in significance, the initial idea, initial tasking prevailed; the first SBCT went off to Mosul,

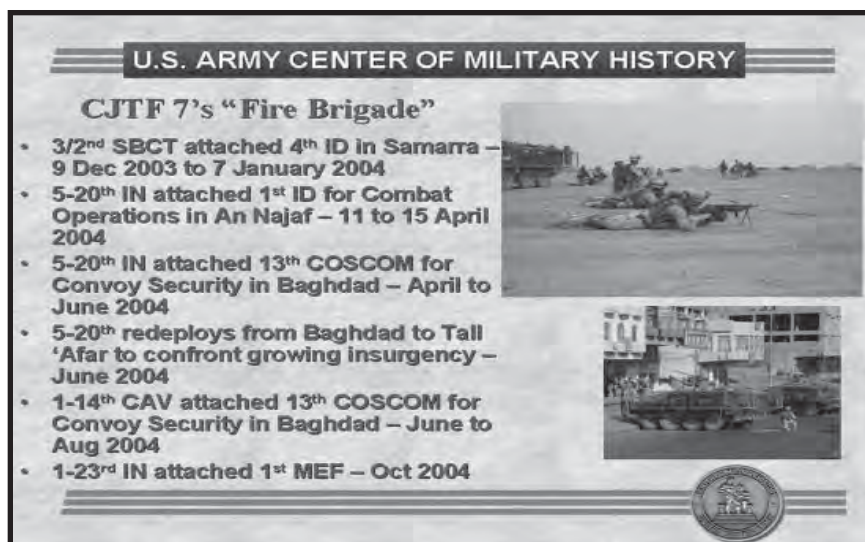


Figure 6

replaced the 101st, as planned, and remained there as a brigade throughout most of its deployment, while the 5-20th Battalion, because of the deployment outside the city while the 1-23d Infantry and 2-3d Infantry were within Mosul itself, was the unit most readily detached for other assignments.

The 5-20th received a number of such assignments as CJTF-7 came to appreciate the capabilities of Stryker units. While the rest of the brigade conducted stability and support operations and trained Iraqi units around Mosul, the 5-20th saw action elsewhere. Its first assignment was 11-15 April, joining the 1st Brigade, 1st Infantry Division's strike into An Najaf. To accomplish this the battalion reconfigured as Task Force Arrow on 10 April, now containing three Stryker companies - one of its own, one from the 1-23d, and one from the 2-3d. The re-configured battalion immediately deployed on a 400km, 15 hour drive to Forward Operating Base (FOB) Warhorse, north of Baghdad.

This mission really demonstrated the speed and flexibility of the SBCT's components. At 0001 on 12 April, now attached to the 1st ID, the battalion set out on a 36 hour, 500km road march to An Najaf.

While it was conducting that march, it escorted some 103 vehicles that it had picked up on the fly and integrated into its own formation, using FBCB2-equipped Strykers on either ends of, you know, chains of the 103 vehicles from the 201st FSB (Forward Support Battalion). En route, in addition to the counter-mobility efforts which included destruction of bridges, mining attempts, improvised explosive devices (IEDs), two actual ambushes were encountered, and

the only losses in this march were one soldier from the 1st ID killed, and two wounded. The Stryker Brigade proved a very efficient transit security force, and it was detached and reassigned on a few occasions, to actually divide [sic, provide] route security, including a longstanding mission for the 5-20th in that role (Figure 7).

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What Does Transformation Bring to the Battlefield?

- 5-20th IN alerted on 09 April 2004 to move to An Najaf ISO 1st ID Operations
- Reconfigured on 10 April as TF Arrow with Stryker Co. apiece from 5-20, 1-23, and 2-3rd IN Deploys 400 kms in 15 hours to FOB Warhorse (N. of Baghdad)
- Departs FOB Warhorse at 0001 on 12 April and conducts 36 hour/500 km roadmarch to An Najaf in face of coordinated insurgent counter-mobility effort
- Three days later ordered to redeploy from An Najaf 240 kms to CSC Scania (S. of Baghdad) within 12 hours: Mission Accomplished
- Secures 200 Km Coalition MSR for three months with no losses and 96% OR rate

Figure 7

The SBCT proved extremely rapid, agile, lethal, survivable, and above all, sustainable in these missions. One of the nice things about this brigade is that the Stryker uses the same engine as in the FMTV (Family of Medium Tactical Vehicles) family—again, reducing logistical needs. A careful eye to such logistical concerns in its construction resulted not only in a reduction of its physical logistical needs, but its personnel needs, sustainment needs—across the board, this is a lighter, faster organization.

In combating agents itself, the first notable one occurred on 13 December '04, when an IED made the first Stryker combat kill, lifting the front of the vehicle entirely off the ground. The vehicle burned, and the only casualty was the driver, in the most exposed position, immediately adjacent to the detonation, who suffered a fractured leg. The vehicle consistently proved remarkably resilient. The slat armor, although developed in only less than 90 days, proved very efficient and effective against RPG fire. The only other Stryker kill suffered by this brigade in the course of its deployment was by RPG, and that was simply because the RPG managed to set fire to some externally stored stores—the vehicle was lost through a secondary fire.

On 15 December, the insurgents encountered the same problem that the OPFOR at the NTC did, when they mistook Stryker for Bradley. The insurgents initially attacked B Company 1-23d, and the quick reaction force (QRF) from Company A of the 5-20th, responded to encounter its own preplanned ambush. The problem is, the insurgents had become very, very used to the 4th ID's Bradleys; they decided to stick around, in strength of about 15 to 20 insurgents, to combat Company A. Company A carried more than two times the total dismount strengths the insurgents were expecting—sufficient to secure the vehicles, use them as a firebase, flank the enemy—you can predict the outcome of that one.

Also during this engagement—again, underscoring the fact that this is not a Bradley—it is force ... B Company 1-23rd, one of the platoons involved became heavily engaged in built-up terrain, and a single member of that platoon made 7 of the 11 confirmed kills that day, using an M-4 rifle and all-purpose optics. I mention this because that man was a sniper. The brigade makes extremely heavy use of snipers and highly skilled marksmen. There is a sniper section in each battalion and a sniper team in each company, usually dispersed out to the squad level, for operations.

The snipers proved throughout the engagement and throughout the tour of duty to be an ideal precision weapon for use in mount terrain—again, General Scales' idea of being able to kill immediately, and with high precision—you can't ask for more precision or more immediate response than snipers, and snipers are throughout the brigade, a more heavy augmentation of a traditional capability,

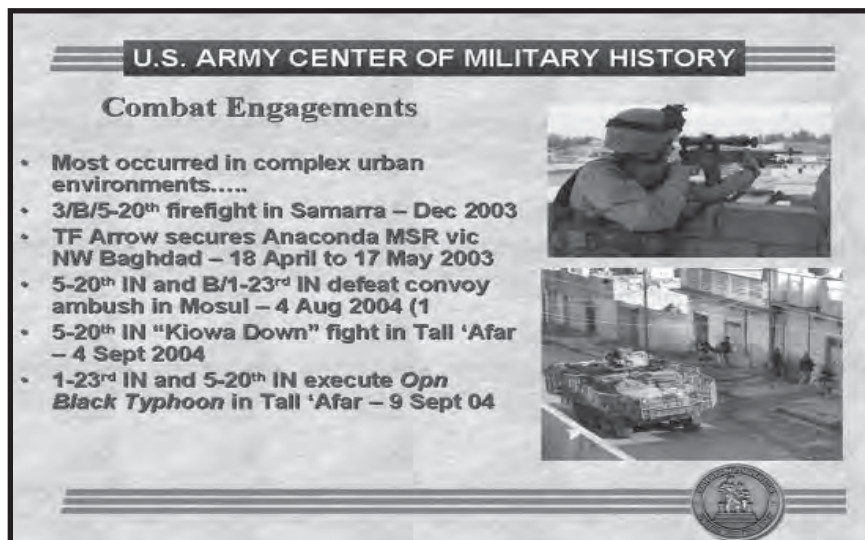


Figure 8

but again, addressing historical problems by using proven solutions, reducing the wait, reducing the lethality of this unit (**Figure 8**).

On 4 August, a mobile gun system platoon of Charlie Company 5-20th was ambushed in escort. Company B of the 1-23rd responded, and in a six-hour fight, the brigade received 12 US casualties, for an estimated 200 enemy KIA (killed in action).

One of the more interesting engagements of the entire tour occurred on 4 September, and in looking at this engagement, you have to cast your eyes back to the Mogadishu experience of 1993. In this incident, on 4 September, an OH-58 was down by RPG fire in urban terrain, in the midst of an enemy-held area, and of course, enemy insurgent forces began to gather around the downed OH-58. But, the brigade had a preplanned drill for exactly this event, and it was aided by the fact that FBCB2 survived on the Kiowa, provided an exact location. All units converged on the location. A running fight that lasted several hours engaged, but in the course of this fight, in a distinct contrast to the Mogadishu experience, not only were the two pilots recovered, Medevaced rapidly, but with the assistance of some casts and a several-hour engagement, the helicopter itself was withdrawn, no further significant US casualties were encountered, and the insurgents suffered heavy losses.

Again, 9 September, another significant event. The brigade itself executes a preplanned mission in urban terrain, driving enemy from the southwest corner of the city of Tal Afar. That proved the last significant combat action of their employment.

Again, we're going through this rather rapidly. The pamphlet, which will be forthcoming shortly from CMH, will go into this in significantly greater detail, if you're interested in the details of these operations. It's worth looking at. This is a taste of things to come for the Army, not only for the Stryker Brigades, which are following the first SBCT, but for the Units of Action themselves, which are modeling their operations and their doctrine on some of the lessons from the interim force, composed of Stryker units.

While engaged, as I've said earlier, the brigade managed to reform itself into various task organizations several times, reassembling companies, reassembling battalions, reforming itself to meet the mission on—indicating modularity in an echelon below the brigade. For example here, task force sites, for instance, where there was a residual force left behind when the 5-20th conducted convoy security operations in April through June 2004, consisting of one company from the 5-20th, a cavalry troop, a brigade antitank company, and several engineer platoons, but it functioned as an infantry force—a fairly common operational procedure for the brigade.

Total losses for the brigade throughout its deployment were 175 wounded, 13 KIA, another 125 soldiers injured and 13 killed as a result of nonhostile incidents, with a total estimated insurgent losses in the neighborhood of 600 KIA. Again, the loss of only two combat vehicles proved that the Stryker vehicle, despite the warnings of early critics, was an effective combat vehicle, when used as intended by doctrine and training, and when not used as a Bradley surrogate (Figure 9).

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Conclusions

- Debate on Stryker Vehicle obscured what transformation was accomplishing – the creation of a significantly enhanced and operationally relevant light infantry force
- Combat operations proved that SBCT was capable of rapid tactical and operational mobility – to the point where it became the “unit of choice” for CJTF 7
- Modularity validated both internally (TF Arrow/TF Sykes) and externally (4th ID, 1st ID, 13th COSCOM, and I MEF)
- Stryker validated as combat platform (two total losses during deployment) that also proved capable of performing missions that BFV equipped Mech units could not accomplish (TF Arrow)





Figure 9

Day 1, Session 2 Question and Answers

Moderated by
Dr. Richard Stewart - Center of Military History

Dr Stewart

As we see the Army evolve and create its future combat systems, whatever shape that may have over the next 10 to 15 years, I'm fairly confident that we'll look back on this experience and other experiences of the Stryker vehicle, as they begin to look at the lessons learned, the procedures, the doctrine that's being developed and growing over time. It's not by any means the final word on the Stryker; it's an evolving system. The tactics—it's almost like a playwright who's having to give the pieces of the play to the players as they're up there on the stage, acting it out; it's not entirely coherent, but the result is an interesting, developing, and organic process.

So now that we've looked at three aspects, at transformations past, in sort of a global sense; modularity, getting down to the specifics of how the Army is trying to implement this new modular force; and one instance of a sort of an early experimental modular Stryker Brigade, we are open to your questions. Sir?

Audience Member

Real quick. You said something really profound. You said that the Army really didn't transform between 1950 and the time it left Europe. But what I find interesting is the Army thought it did, and it sold to everyone else the fact that it did. So I think that's a remarkable statement, and I think I agree with you in part. But AirLand Battle, what you're saying is—I agree with this—really, in many ways, was as much a marketing ploy to make—it's the old wine in new bottles argument that is what you're saying; right?

BG (Ret) Brown

Well, if you take a look at the performance of the 4th Infantry Division in France in World War II, you're hard-put not to see that as AirLand Battle, and I think that AirLand Battle drew most of its vocabulary from historical examples based in World War II and the fighting in France. And I would say that each new Chief of Staff, for, you know, understandable reasons, has to pitch his particular initiative as all new, unvarnished, definitive loop-ahead change for the purposes of making sure that Congress stays sufficiently interested in the funding.

Audience Member

My name is Lieutenant Ronald Jackson. I work in the Army Reserve right now, but I also work in the Center for Army Lessons Learned. One of the key con-

cepts, is going to be the relationship between the military and the civilian. With that in mind, and when we go to modulization, when 60 to 90 percent of some of your logistic bases are in Reserve and Guard, what is going to be the face of the new Army with that mixture? Because that gets into the political aspects of the civilian-military interface real dramatically when you talk about reserving Guard forces as part of the total Army force. So modularity is not just strictly active duty, but also Reserve and Guard, and what is the role of those forces in this evolution in military concept

BG (Ret) Brown

Well, actually, the modularity describes the organization with respect to the wiring diagrams and how it looks, and the organizations that you saw depicted are not just active components; there's a very sizeable number of Reserve component and National Guard formations as well. But there's also, parallel to the modularity initiative, another one that's called rebalancing, and that is intended to reset the balance between the reserve component and the active component with respect to the respective mixes, so that you achieve an end state where an active component soldier could reasonably anticipate a tour every two years or so, and a Reserve component soldier could reasonably anticipate a tour every six years or so overseas. By the virtue of that rebalancing, obviously, those high-demand MOS's are going to migrate more into the active component than they heretofore have been. Yes, sir?

Audience Member

Robert Noshier, a doctoral student from the Union Institute. One of the things I've observed, too, sitting in Washington and watching the discussions on The Hill, there was a panel last week, I believe, that was discussing Guard and Reserve, but I think what they were really talking about was base realignment and closure (BRAC), under the cover of what happens to my Guard and Reserve units back in my home state when you start scrambling my bases? So that's going to complicate the socioeconomic and political aspects of this transformation process, because they're drawing connections, where perhaps they're not drawing them inside the Pentagon.

BG (Ret) Brown

No, no, I think the Pentagon is acutely aware of the emotional implications of every BRAC decision. It's just, you have to start somewhere with your wish list. I do know that the National Guard Bureau has been very energetically engaged with each state, with respect to identifying those facilities within the states that are a National Guard purview, that they're recommending for closure, and

actually the Army National Guard is not getting much flak for the choices with respect to BRAC.

Audience Member

I think that's right; I think they are aware of it. I'm not sure that they're yet sufficiently aware of it inside the Pentagon—I think the hearing was a wake-up call about the level. It's a little higher, I think, than even they were anticipating, especially, I think, in an environment where you have Guard and Reserve units returning home from combat on a regular basis in Northern Virginia, and we just had the 116th come back to a welcome that I don't think they got even during the end of World War II. It's a very emotional issue at the local level, and I've been to their armory, and if you went down there and suggested that armory was closing because of BRAC, it would be an interesting political fight.

BG (Ret) Brown

Yes.

Audience Member

I'm an administrator. I live in Carlisle, Pennsylvania. I had a comment and a question for General Brown. My comment is, General Scales, of course, laid this out as well. It's got the technological change, the sociological, economic change, and strategic change. But it seems to me that when you say strategic change, really, the thing you're talking about that causes the Army to change its doctrine, and the way it does business, is really a change in the perception of who the enemy is—either real or perceived. Each of those waypoints that you mentioned there, the change was occasioned by a change in the enemy—the loss of the Indian threat on the frontier, the Spanish-American War, Philippine Insurrection Period, the threat of domination of Europe by Germany, World War II, it's a global threat, the Cold War, the Soviet global threat. So it's the same, the strategic—what I wanted to point out is the strategic change is really perceived in terms of the change of the enemy that you have. My question was a simple one. You showed a slide there that had the zones of conflict. Was there a part two to that? I did not see the Western Hemisphere on that chart.

BG (Ret) Brown

For the sake of brevity, we designed the slide with the Eastern Hemisphere in mind. If you'd had a counterpart for the Western Hemisphere, your problem area would have been Central America—that's what would have showed up. Perhaps Columbia, and the rest of Latin American would have been blue.

Dr. Stewart

Your point about external circumstances changing, when the enemy changes, necessarily, transformation is going to occur or be accelerated, you can see, with General Sullivan and Reimer, and even the early years of Shinseki, that each of them was trying to jumpstart change in their own way. They had a vision of how they wanted to implement change, and they were pushing it forward, and yet, when did the really significant fast-paced developments occur? Only when the circumstances changed so dramatically that it was obvious, even to Congress, that change needed to be made, and that money needed to be attached to that change. So I think that's an important point.

Audience Member

Yeah, to go back to the Guard issue, I was associated with the National Guard for about five years. The units that I was in had tremendous numbers of police and firemen. And given the emphasis on first responders these days, is anyone kind of looking at and studying demographics of the Guard and Reserve, and how mobilizing those units would impact on let's say the first response capability for those communities?

Dr. Stewart

I think we see state governors and local politicians screaming about that right now, as a matter of fact, because they see half their police force, half their fire department mobilizing, and yet, what are the alternatives? As they look around, they'll say, we're going to discourage these people from joining the Guard and Reserves? They can't do that. To get other people to sign up? Good. Who? At the moment, there is a bit of a crisis in enlistment in both of those things. I mean, people who will put their hand up to be a fireman or a policeman seem to want to put it up again, because they are dedicated public servants. Where's the rest of Americans? Excellent question. Sir?

BG (Ret) Brown

No, I think we have studied it kind of after the fact. I think we were a bit surprised by the extent of that you would have that effect on local communities, because we haven't mobilized on this scale since World War II, and we have never mobilized the National Guard on a continuous basis over an extended period of time, like we're doing right now. I mean, what we're doing now is unprecedented. So I do think that we will evolve into a slightly different demographic as to who constitutes the National Guard. You have two areas where you generate significant problems. One is when you disproportionately draw out folks like those that you're describing; you know, another favorite is teachers. The second

phenomena, of course, is that you have a lot of folks who are in businesses that can't permit them to leave as frequently as National Guardsmen are leaving now.

Audience Member

Sir, given your description of the zones receiving conflict, and given the way you've portrayed the world in terms of future Yugoslavias and Somalias, is the next grand transformation of the United States Army from global conflict back to constabulary?

BG (Ret) Brown

I hope not. What we—and this is a separate debate, but one we were called upon to participate in—was the nature of the force and the extent to which it would be sensible to stand up a full-time, deployable constabulary. We opined that you're better off to have a full-spectrum in force, and to have each of your units capable of multitasking, rather than to have some that are narrowly specialized into either a homeland defense role or a constabulary role. The reason is that no matter how good you are, you never really get it right. You can't anticipate where you're going to need to deploy these folks, and so you wouldn't have the right constabulary force even if you chose, because the one you design for the Balkans is not going to work in Senegal; you know, they're different.

So what you need to do is you need to have each of your forces, each of your battalions, capable of fighting at either end of the spectrum, and the best model for that is probably the British and what they've done over generations, with respect to manning their constabulary in Northern Ireland, and what they do is they rotate standing units into that constabulary and out, and they're confident that a well-trained unit can adapt to different circumstances with a little bit of retraining.

Dr. Stewart

But perhaps a negative example of that would be the British Army of the '20s and '30s, which was so focused on its colonial policing duties that it turned its back on the need to prepare for a larger conflict, so it was as unprepared as we were, and with greater stakes, perhaps.

Audience Member

If I may come back to that, much of the British secret, and the beauty of a constabulary is, as it was pointed out, killing immediately and discreetly.

Dr. Stewart

And getting the Indians to kill for you too—that helps.

Audience Member

Yes. And in a large organization like yours, which is a demonstratively devolving front, if I may use that—not judgmentally—from the operations and the tactical, from the large, muscular metallic unit to the small, agile unit, it just seems to me that the entire organization—its heavy elements aside—seems to be devolving into something other than an organization [inaudible].

BG (RET) Brown

Yes, but also remember that when you're talking about constabularies, your most important single imperative for an army like our own is divestiture, and as soon as you can stand up native troops who in fact speak the language and know the culture, and have them carry the constabulary responsibilities, the better off you are. Of course, the Philippine Constabulary was our case in point—it was enormously successful. It took a while to stand it up, but we got out of the business. That's what you want to do wherever you end up in the world is you want to get out of that business as quickly as you can.

Dr. Stewart

Of course, I think that means we need at least twice the size Army we have today.

Audience Member

Lieutenant Colonel Farkwolf, Command and General Staff College (CGSC) Instructor, and grad student at Kansas State University (KSU). A question for Dr. Charlston, a technical question. You said that you thought in one case, [inaudible] the Stryker was superior to the Bradley. What was the delta? What was the difference, and what evidence do you have to support that?

Dr. Charlston

This is where I wish Lieutenant Colonel Reardon was here, because he's the real operational expert. But some of the differences pertain specifically to the vehicle and its capabilities. The Stryker Brigade is deployed primarily in urban terrain. The vehicle proved not only able to get into places quietly and quickly, where a Bradley, of course, is going to make more noise and not be able to maneuver as well in the urban environment. There's also the network ability of the Stryker unit itself, which allowed the unit to maximize its inherent flexibility and speed advantages, to produce a very devastating effect. It's a synergistic effect.

Dr. Stewart

Also, I would say, I don't think we're arguing that the Stryker is a better vehicle than the Bradley; what we're arguing is the Stryker was more appropriate for the role it was being used in than the Bradley would be.

Audience Member

That was my question—what’s the difference between the systems—and you said it.

Dr. Stewart

Yeah.

Audience Member

It’s quicker. Let’s say it’s more agile. It’s slightly more stealthy, but it carries more infantry.

Dr. Stewart

Yeah. It also has a much lower maintenance overhead for covering distances. You know, when you beat up the track on a Bradley, on hard miles, I mean, you were retracking every 1,000 miles; it’s terrible. But when you talk about Stryker, you can go 1,000 miles in a pop and not even notice it.

Mr. Bedessem

I think that’s something I should point out. For instance, when the 5-20th was doing convoy escort—it was a four-month period—they managed to stay at a 96 percent operational readiness rate.

Audience Member

We carefully followed that—they also consumed a lot of tires, because we put the cage on it and the cage makes it larger, wider than an M-1, things of that nature.

Mr. Bedessem

Right.

Audience Member

Understood. There’s trade-offs, but I wanted to see what your evidence was. Thank you.

Dr. Stewart

And in fact, there was one instance where one of the initial commanders didn’t want to put the slats on his Stryker—he said he didn’t need those things; it made it hard to maneuver, hard to go down through the city streets. He put them on reluctantly; he got hit by RPGs the next day, and he said, “I’m glad I have this stuff; I’m glad you’ve made me do this. I’m not going to take it off for any reason whatsoever.”

Mr. Bedessem

An RPG hit is God's way of telling you you're in combat. [Laughter]

Sinai 1973: Israeli Maneuver Organization and the Battle of the Chinese Farm

John J. McGrath

“In the Armored Corps we take our orders on the move”

- Colonel Arieh Karen, Commander, Israeli 217th Armored Brigade, 1973¹

This paper analyzes an Israeli mobile operation from the 1973 war in terms of maneuver organization. The operation is the 15-17 October Battle of the Chinese Farm, which, though ultimately an Israeli victory, proved to be very challenging from a command and control and maneuver organizational perspective.

Background

In many ways the Israeli Defense Force (IDF) is the latter-day successor to the German World War II practitioners of mobile armored warfare. After fielding a primarily infantry army in their wars with the various Arab states in 1948-9 and 1956, the success enjoyed in the latter war by the relatively small armored portion of the IDF saw an army overhaul in the years between 1956 and 1967. The result was a force structure giving a more prominent role to the classic blitzkrieg combination of massed armor forces and close air support fighter-bombers. The swift victory in the June 1967 war was won by this combination. The IDF that fought the 1973 war was even more so organized in this fashion at the start of the war, with emphasis on main battle tanks and jet fighter-bombers. Combined arms coordination only went this far. Self-propelled artillery and mechanized infantry were given far lesser roles and emphasis.

Adoption of a combined arms doctrine based on tanks and tactical air support coupled with other factors to give the IDF a far greater combat effectiveness than those armies field by its Arab enemies. These factors included excellent training programs and excellent leadership at the tactical and operational levels. Leaders were well trained and operated under a relatively high leader-to-led ration. For example, of eleven tanks found in a typical tank company, five would have officers as their tank commanders. IDF officers all had to serve first in the ranks and as noncommissioned officers before reaching commissioned rank. The command climate in the IDF stressed initiative, flexibility and leading from the front. Additionally the Israelis trained and fought with a sense of urgency at all times that was usually not found in the armies of their enemies. The Israelis truly believed that their nation's preservation was directly tied to the competence of its military forces.

The Egyptians were well aware of their combat effectiveness deficiencies when faced with fighting the Israelis. Their own forces were far less flexible and had uneven leadership at the tactical and operational levels. Therefore the Egyptians sought to equalize things by indirect means. First they negated the role of close air support by fielding a protective umbrella of massed surface to air missiles (SAMs). IDF main battle tank effectiveness was also negated by the use of massed Sagger anti-tank guided missile systems and RPG-7 short-range anti-tank rockets carried by light infantry. Without its own infantry to push away the ambushing Egyptian infantry, the Israeli tanks would be left to fight off volleys of wire-guided missiles and rockets.

However, the Egyptians planned and prepared their canal-crossing operation in great detail and rehearsed and trained on these details. Upon execution, the Egyptian army was able to follow their plan with a high level of effectiveness. These Egyptian tactical improvements were, however, thinly applied. After the initial canal crossing, the Egyptians would only be able to defend with their Saggars and RPGs under their SAM shield. Offensive operations with their own armored forces proved to display the same organizational weaknesses seen in past wars.

Operational initiative had always been an imperative of IDF operations. But a combination of factors from Israel's political leadership would give the Egyptians the initiative. There was an unwillingness to execute a preemptive strike as in 1967 in order to ensure that the world would clearly see that the Arab states were the aggressor. Additionally, frequent false alarm mobilizations in the period before the actual commencement of hostilities caused pause before ordering another mobilization. As the IDF was composed of about 70 percent reservists from all areas of society and the economy, frequent, unnecessary mobilizations had a disruptive effect making it seem prudent to only call for a mobilization as a last resort. Since the Israelis in general did not believe the Arabs were capable of conducting a massive offensive, the initiative in October 1973 passed over to the Egyptians.

In addition to Egyptian preparations and political decisions providing a leveling effect on Israeli combat effectiveness, the IDF would also display unique internal command and organizational problems in the Sinai in 1973. As commander of the IDF Southern Command, Major General Shmuel Gonen was the corps-equivalent theater commander for the Sinai front in early October 1973. But Gonen was technically junior in grade to his two principal divisional commanders, Major General Avraham "Bren" Adan, and Major General Ariel "Arik" Sharon. As commanders of reserve divisions, before mobilization Adan held an administrative post and Sharon was recently retired, having commencing a political career that would ultimately lead him to the prime ministership. Gonen had in

fact served under Sharon, whose last post had been that of Southern Commander head. Partially because of these quirky command arrangements, and partially because of his hands-off leadership style, a rarity among IDF leaders, Gonen would prove to be a weak theater commander and would be superseded by a more senior officer by the time of the Chinese Farm operation.²

Sharon too would prove to be problematic. After having played a key role in both the 1956 and 1967 Sinai campaigns, he was not prepared by temperament to play a subordinate role in 1973. And he would take the traditional Israeli initiative to the point of virtual insubordination in the Chinese Farm operation, using the isolation of his forward forces as an excuse to execute his own agenda rather than the plans of his superiors.³

In 1973 IDF maneuver organization was based on brigades. Except for the one regular army division stationed in the Sinai, the division echelon, although envisioned in mobilization plans, in many ways was ad hoc organization. Since 1967 the Israeli armored corps had grown to two and a half times its pre-1967 size. In 1967 the armored division, or *ugda* in modern Hebrew, had operated more as a task force than a permanent unit. This mindset still held in the IDF in 1973 where, with the much larger size of the armored corps, meant a lot more *ugd*as would be needed to control the increased number of armored and mechanized brigades.⁴ In the Sinai in 1973, the divisions of Adan and Sharon were reserve organizations.

Israeli armored brigades were theoretically organized as combined arms teams with two tank battalions and a mechanized infantry battalion plus a recon company equipped with tanks and armored personnel carriers (APCs). A battalion of 120mm self propelled guns or 160mm mortars provided fire support. Service support consisted primarily of a medical and a maintenance company. In practice, however, the Israelis usually reorganized their brigades into three tank heavy battalions. Recon and infantry elements, particularly in 1973, were often siphoned off to provide local security, while tank elements tended to be grouped together in massed units.

Similarly the division task forces by design had a mechanized infantry brigade and a recon battalion. But these were often lost to other missions. For example, Adan's division lost its mechanized infantry brigade early in the war when it was detached to fight Egyptian commandos and guard the northern flank of the Sinai front. Before he lost his infantry, however, Adan made sure he took the tanks assigned to the infantry and reassigned them elsewhere.⁵ Adan also similarly lost his recon battalion.⁶

The Israeli military was built upon the concept of a small force of regulars and conscripts and a large force of reservists who would be mobilized for national

emergencies. In operational employment, there was virtually no distinction in the use of units of regulars and reservists. In terms of quality recruits and attention devoted to them, mechanized infantry got the short end of the stick. The best recruits were first given the opportunity to volunteer for service in the Air Force, followed by the paratroopers, Israel's elite light infantry force, then the armored corps, meaning tank crewmen. Mechanized infantry, the few non-paratrooper light infantry units and the rest of the combat support and service support arms were a distant last in recruitment priorities.⁷

The topography of the Suez Canal front would effect operations along the 155 mile length of the canal. The Israeli defensive concept was based on this topography and Israeli improvements to it. The defense was designed to defeat local crossings of the canal, not a full-scale crossing along its whole length, an operation the Israelis did not think the Egyptians to be capable of executing. Accordingly, the IDF created and manned 17 strongpoints along the canal, the Bar Lev Line, spaced between six and 18 miles apart. These fortifications were manned with small units of infantry and designed to resist the Egyptians until reinforcements in the form of local reserves in each sector of the front, usually a tank battalion, could come forward to counterattack. Above the local sectors was the Sinai armored division, in 1973 the 252d Armored Division commanded by Major General Avraham Mandler, with three armored brigades and supporting arms and services. In October 1973 Mandler had one brigade forward and two in reserve in the center of the canal front.⁸

Behind the Bar Lev Line, the Israelis had built a series of roads designed to enable them to move and maneuver armored forces around rapidly. These roads were essential because the geography near the canal did not favor the use of armored forces off roads. From the canal to the first high ground, a north-south running ridgeline 6-7 miles to the east, the terrain was flat and generally open, but the sand dunes were deep and treacherous for travel by armored vehicles. Along the canal connecting the Bar Lev fortifications ran the Lexicon road in the south and the Asher Road in the north, the latter being in actuality merely a causeway running between the canal and the swampy marshland of Lake Tinah.

Just behind the first ridgeline 7 miles east of the canal, the Israelis built their north-south running Artillery Road. A farther 18 miles to the east ran the Lateral Road, built upon the second, higher ridgeline east of the canal. Between the ridges and extending eastward from the canal 40 miles into the mountains of central Sinai were deep sand dunes. Additionally near the ruins of the town of Qantara could be found swamp marshes covered by a thin layer of sand. Both the dunes and the marshes could restrict the trafficability of not just wheeled but even armored vehicles. In addition to their three parallel north-south highways,

the Israelis had built or improved numerous roads running generally east-west between these parallel roads down to the canal.⁹

The War before the Chinese Farm Operation

At 2 pm on 6 October 1973, with the western sun in their enemy's eyes, the infantry forces of the corps-sized Egyptian Second and Third Armies conducted an assault crossing of the Suez Canal along its whole length. The Egyptian plan was to cross and occupy a narrow strip of the east bank out of about 3 miles, covered by the SAM umbrella. For the most part, Israeli defensive fortifications (the Bar Lev Line) would be bypassed to provide bait for the Israeli armor to counterattack. In perhaps the most successful river-crossing operation in military history, elements of five Egyptian infantry divisions crossed the canal on 6 October and secured the desired bridgeheads.

Under Israeli mobilization plans, two reserve armored divisions were earmarked for the Sinai. As these forces arrived, they would take over sectors of the front from Mandler. Major General Avraham Adan took over the northern sector with his 162d Armored Division on the morning of the 7th even as his own brigades of freshly mobilized reservists were still arriving, Adan assumed command of Mandler's forces in the north, while his own forces concentrated in an assembly area near Baluza on the coastal road about 12 miles from the Suez Canal.¹⁰ Similarly, in the Central Sector, the 143d Armored Division under retired Major General Ariel Sharon arrived and took over.

On the 6th and early part of the 7th, while the Israelis waited for these reserve armored forces to mobilize and move to the Sinai, Mandler defended the Sinai on his own. His forward brigade was in action immediately with three tank battalions supporting the Bar Lev fortification defenders.¹¹ After feeding some of their tank battalions separately into the battle, he then deployed his two other brigades to the north and south respectively.¹²

On 8 October 1973, a planned coordinated attack by two IDF armored division (those of Adan and Sharon) against the Egyptian bridgehead at El Firdan, led by experienced, battle-hardened commanders, resulted in two separate uncoordinated attacks by single tank battalions. Each battalion was virtually destroyed within minutes by Egyptian antitank missile and rocket fire.

The Battle of El Firdan, the first theater-wide Israeli counterattack, failed primarily because of command failures. Gonen was unable to effectively control his forces, leaving his division commanders to operate independently and without coordination. Gonen never left his headquarters in the rear and had a poor appreciation for battlefield realities. The orders he gave were constantly changing and conflicting. Confusion, lack of understanding of the enemy situation, and a brief

loss of control caused by subordinate initiative in Adan's division resulted in two divisional attacks being reduced to two separate tank battalion attacks in which each battalion was quickly annihilated. Sharon's division marched around in a big circle during the day and failed to support Adan when help was most needed.

Israeli command and control on 8 October 1973 was poor, and complete disaster was only staved off by the high quality of individual soldiers, tank crews, junior officers, and commanders. Throughout the day radio communications were terrible and unreliable, primarily due to Egyptian jamming efforts.¹³ But when communications failed, commanders often did not compensate for it by moving forward to the critical point.

In an epic turnaround a week after the failure at El Firdan, many of the same commanders and units would successfully execute a far more ambitious mobile operation against the same tough Egyptian defenders. Why such a drastic change? There were many factors involved, but the most telling was the placement of retired Lieutenant General Haim Bar Lev as unofficial theater commander over Gonen, who became Bar Lev's de facto chief of staff late on the 9th. Chief of Staff Lieutenant General David Elazar was disappointed both with Gonen's performance on the 8th and with his inability to control Sharon. On the 9th, Sharon had disobeyed orders to stay on the defensive and moved his tanks forward. Bar Lev replaced organizational chaos with a more orderly and effective control over the subordinate divisions. And, unlike Gonen, he made frequent trips to the command posts of his division commanders to get a feel for the situation on the ground.¹⁴

One of Bar Lev's first decisions was to halt the uncoordinated, piecemeal offensive actions that had marked Israeli operations in the Sinai before his arrival. After the defeat on 8 October, the Israelis licked their wounds and reorganized, learning from their defeat and adjusting to the new Egyptian tactics. Mandler still held the southern sector, Sharon the center and Adan the north. On the extreme north a new division, the 146th Composite under Brigadier General Kalman Magen, was organized from the task force that controlled a variety of brigades sent or retained in the north to secure that vital flank. On the 9th the front had remained relatively quiet except for vain Egyptian attempts to push out on both the northern and southern ends of the line. Now Bar Lev planned to continue the containment operations while gathering strength for an eventual counter-crossing of the canal.¹⁵

Except for the Quay position (Masrek) in the extreme south and Budapest in the extreme north, only three Israeli garrisons still held out in Bar Lev Line forts: Hizayon opposite El Firdan, Purkin opposite Ismailia and Matzmed opposite Deversoir where the canal flowed into the Great Bitter Lake. The garrison of

Hizayon was captured late on 8 October as the survivors attempted to exfiltrate out. The 35-man garrison of Matzmed held off a large infantry assault on the 8th, but a shortage of ammunition resulted in the fort's surrender on the morning of the 9th. The garrison at Purkin exfiltrated during the night of 8/9 October. They linked up with troops from Sharon's division on the morning of the 9th.¹⁶

Bar Lev decided, after a meeting with his staff and key subordinates, that the command would remain on the defensive. This pause would allow the build up of strength with personnel replacements and repaired tanks, the gathering of intelligence and the preparation of detailed plans to resume the offensive. Offensive action would only be resumed when the situation was right. Additionally, as the Egyptians continued to attack while attempting to expand their bridgeheads, Bar Lev hoped to wear down their strength.¹⁷

During this period the Israelis reorganized their forces to adjust to the new Egyptian tactics, placing armored infantry with tank units and bring up supporting artillery. For example, Adan ensured each of his tank battalions had a small armored infantry unit attached to it, with the infantry mounted in the modern M113 armored personnel carriers (APCs) which could keep up with the tanks rather than antiquated World War II era half-tracks. Bar Lev attached a parachute infantry battalion to both Sharon's and Adan's divisions, primarily for use to conduct nighttime security operations, but also to shore up the infantry element in those primarily tank organizations. An additional mechanized infantry battalion was also assigned to Adan's division from the replacement pool.¹⁸

However the primary source of infantry for the upcoming action would be additional paratrooper battalions attached to the divisions. Paratroopers were the elite of the IDF's infantry troops. Unfortunately such troops, despite their status, had limited experience working as armored infantry and would be made into ad hoc mechanized infantry units by attaching half tracks or M113 armored personnel carriers (APCs) to their units.¹⁹

The Egyptians continued to move tanks over to the east bank of the canal, with over 800 across by the end of the 9th, and 1000 by the 13th. On that day Mandler was killed by artillery fire while sitting in his command vehicle talking on the radio after visiting one of his brigades.²⁰ Magen, who had originally been earmarked as his successor, took over the division with Brigadier General Sassoon Yzhaki taking over Magen's command in the north.

While Egyptian plans originally did not call for a large-scale offensive action into the Sinai, a combination of new confidence from the successes of 6-8 October, and a need to apply pressure to support a faltering Syria, changed this. The

Egyptians now planned a massive attack for the 14th, building up and deploying their forces for three days in advance.²¹

The Israelis did not want to try to cross the canal until after the Egyptians attacked. But even with the noticeable preparations, they were not sure if an attack was in the offing. Therefore, Bar Lev determined that the crossing operation would begin on the evening of 15 October if the Egyptians did not attack or right after their attack was defeated otherwise. Time consuming preparations, such as the pulling of Adan's division out of the line, therefore, took place starting on the 13th.²²

The Egyptians attacked with a force of about 1000 tanks on five main axes: in the north from Qantara towards Baluza; in front of El Firdan (the 8 October battlefield); against the ridgeline called Missouri by the Israelis between Ismailia and the Great Bitter Lake; towards the Giddi Pass; and a double pincer attack at the south end of the Israeli lines. The five thrusts were all repulsed with about Egyptian 260 tank losses to 40 Israeli (of which only two were not repairable).²³

Adan's division had been pulled out of the line to be in reserve for the follow-on canal crossing operation and Adan had to reinsert a brigade into the line before El Firdan to repulse the attack of an Egyptian armored brigade.²⁴ The stage was now set for the second Israeli offensive in the Sinai: the creation of a bridgehead on the opposite side of the Suez Canal at Matzmed-Deversoir.

The Battle of the Chinese Farm/ Suez Crossing

Planning for the crossing operation had commenced almost as soon as Bar Lev took command.²⁵ On the evening of the 9th, Sharon's divisional recon battalion (the 87th), commanded by Major Yoav Brom, had discovered a gap between the two Egyptian bridgeheads, that of the Second Army in the north and the Third Army in the south.²⁶ The right flank of the former was located at the intersection of the north-south Lexicon Road and the east west Tirtur Road about two miles east of the canal, and a mile north of where it flowed into the Great Bitter Lake near the now abandoned Matzmed fortification. The Third Army's bridgehead began 25 miles to the south below the lake. This left a gap along the lake itself and an unguarded gap of a mile along the bank of the canal itself. In an instance of military serendipity, this gap was centered on the Matzmed area, where the Israelis had built a preplanned crossing site.²⁷ The Tirtur Road itself, which led right down to Matzmed, had been built and graded to specifically allow the passage to the canal of a unique roller bridge designed to allow tanks to cross to the far bank. Once this gap was discovered, Israeli canal crossing planners worked to exploit it, hoping to get a large body of troops to and across the canal without a serious fight.

During the preparation phase, the IDF had to assemble the necessary river crossing equipment. There were available four types of specialized bridging equipment. The first were inflatable, man-portable rafts capable of ferrying across light infantry. Elite paratrooper infantry and engineers would initially cross the canal using 60 of these and secure the far side.²⁸ The second piece of equipment was a unique modular ferryboat called Gilowa, capable, when three were linked together, of carrying tanks. The Gilowas, basically glorified rafts, could travel on their own wheels, but the rubber belts that made them float were vulnerable to artillery fire. In addition to the rafts, the IDF also fielded two bridges, a pontoon bridge and a steel roller bridge. The pontoon bridge, like the Gilowas, was modular and once assembled, could support tanks and span the canal. This bridge was a lot more durable than the Gilowas, but each section required a tank to tow it to the canal.²⁹

The roller bridge was a unique piece of equipment designed by the IDF's senior engineer to provide a sturdy, ready to use assault bridge that could support tanks. The bridge consisted of 100 sections of floatable rollers with a bridge frame on top, which, when put together extended 200 yards. Once assembled, a task that took three days, the bridge was bulky and with its weight of 400 tons, needed 12 tanks to tow it and four to act as brakes.³⁰

Such an unwieldy structure also required a gently graded road with few curves in it. In this respect, the discovery of the gap in the Egyptian lines played right into the hands of the Israelis. They had modified the natural geography of this sector in the period before the war to facilitate a potential crossing operation. In particular during the prewar period Israeli engineers had built two east-west roads leading down to the canal from the Artillery Road, to a pre-planned crossing site next to the Bar Lev Line fortification Matzmed. On the south, the paved Akavish Road led down to the coast of the Great Bitter Lake at the evacuated fortification of Lakekan and the canal east shore route, Lexicon Road. About a mile north of Akavish Road and parallel to it was the improved dirt Tirtur Road that was built specifically to allow passage of the roller bridge down to the crossing point at Matzmed. Branching off from Tirtur and running down to the canal roughly parallel and several miles north of it was another key lateral road- the Shick Road.

The Matzmed crossing site was located just north of where the canal flowed into the Great Bitter Lake, providing natural flank protection from the south. Across the canal was the old World War II era airbase complex of Deversoir. A small body of water, the Sweetwater Canal, paralleled the Suez Canal and produced a narrow belt of fertile land west of the canal. Beyond this was a chain of Egyptian SAM sites. The destruction of the SAM sites was an Israeli priority, so that their air support could then operate unhindered. To the east of the crossing

site, astride the junctions of the Akavish, Tirtur and Lexicon Roads, was a complex of easily fortifiable irrigation ditches known in IDF parlance as the Chinese Farm. Control of the Chinese Farm would be essential to any Israeli canal crossing operation as its possession by the enemy would block the key arteries into the crossing site both for the bridging equipment, and for the units moving to cross the canal.

For the crossing operation, Bar Lev intending to mass his armored forces, used one division (Sharon's) to force the crossing and secure the crossing site, then cross over two divisions (Adan's and Magen's) to exploit and expand the bridge-

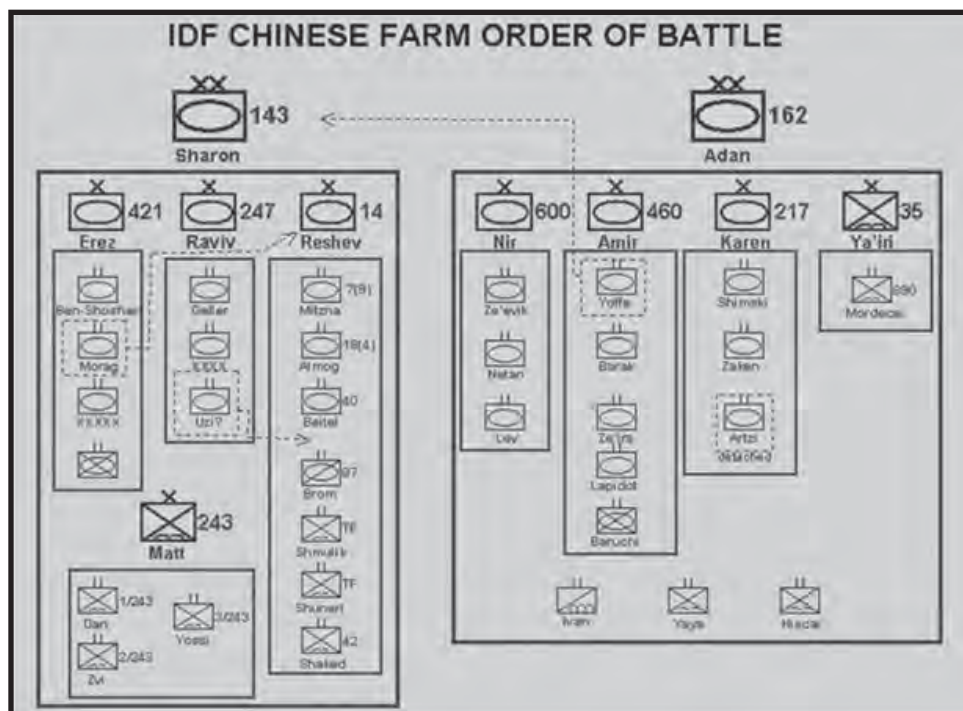


Figure 1. IDF Chinese Farm Order of Battle

head. Surprise and exploiting the gap between the two Egyptian armies were key. While one of his armored brigades attacked the Egyptian defenders frontally, Sharon would send another armored brigade, reinforced with additional tanks, recon troops, engineers, and paratroopers mounted in half tracks through the gap to secure the crossing site and push any Egyptian defenders away from it. The tanks would also push up Akavish and Tirtur from the back to clear those routes for the bridging equipment and remove the crossing site from Egyptian

artillery range. With those routes cleared, an attached reserve parachute brigade, the 243d commanded by Colonel Danny Matt, would immediately move to the

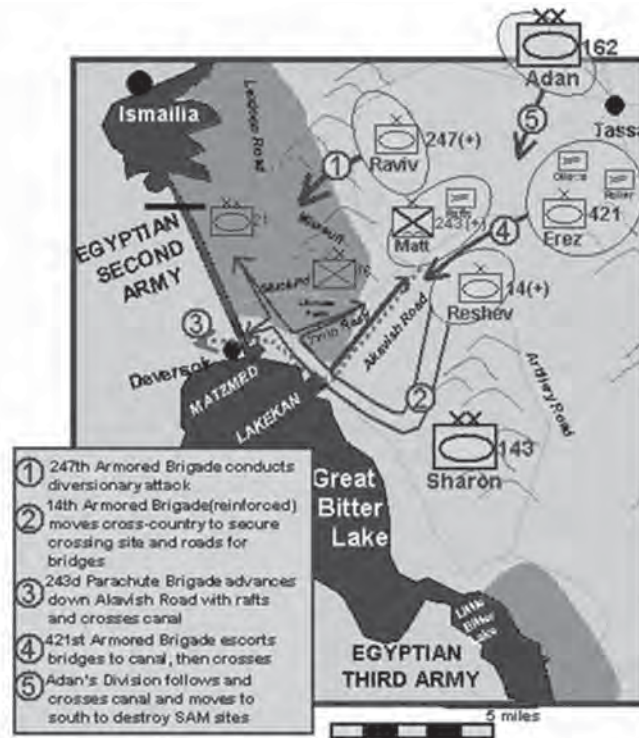


Figure 2. Israeli plan to cross the Suez Canal

crossing site and cross on the rafts. The Gilwas and part of Sharon's remaining armored brigade, the 421st commanded by Colonel Haim Erez, would move down and cross next. The rest of the 421st would follow bringing the pontoon bridge down the Akavish Road and the roller bridges down the Tirtur Road. Once these bridges were set up, the rest of the 421st would cross followed by Adan's reinforced division and then Magen's (formerly Mandler's) division.

The crossing operation began at 5 pm on 15 October with Israeli artillery firing a front-long barrage onto the Egyptian positions. The two battalions of Colonel Tuvia Raviv's 247th Armored Brigade from Sharon's division then began the diversionary attack frontally against the Egyptian 21st Armored and 16th Infantry Divisions, holding positions along the Missouri ridgeline. An hour later, Sharon's spearhead, the 14th Armored Brigade, commanded by Colonel Amnon Reshev, reinforced with recon and parachute troops, commenced its advance to the left of Raviv, cross-country south of the Akavish Road towards the Great Bitter Lake³¹.

As this area was the heart of the previously discovered gap in the Egyptian positions, Reshev advanced against no opposition soon reaching the shore of the lake. By 9 pm, he had swung north and reached the canal at Matzmed. Leaving the recon and some parachute troops there, Reshev sent his tanks north and west to secure the flank of the projected crossing site and clear the Akavish and Tirtur Roads from behind for the follow-on bridging equipment.

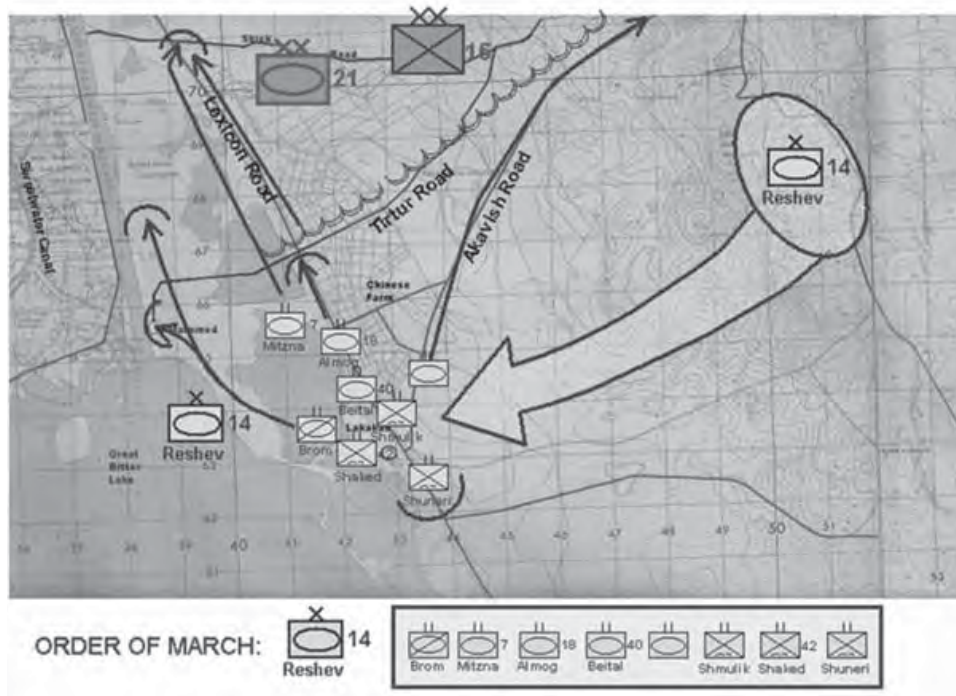


Figure 3. Chinese Farm Initial Operations, 15 October 1973

In the midst of this deployment, Egyptians suddenly opened fire from nearby dug-in positions. The 7th Tank Battalion commanded by Lieutenant Colonel Amran Mitzna, which had been sent northward from the crossing site along the left (western) side of the Lexicon Road to try to capture intact an Egyptian bridge near Ismailia, encountered heavy resistance from tanks of the Egyptian 21st Armored Division at the Shick-Lexicon road junction. After inconclusive fighting, the 16 surviving tanks formed a line along the Shick Road. To the south, however, in Mitzna's rear, another unit, the 18th Tank Battalion led by Lieutenant Colonel Avraham Almog, which had sent to secure the right (eastern) flank of the Lexicon road in support of Mitna, lost ten tanks at the Tirtur-Lexicon road junction and was forced to pull back northward along the Lexicon Road, joining up

with Mitzna's remnants. Apparently the Egyptians were so surprised to see Israeli tanks in their midst that they had let Mitzna's battalion and half of Almog's pass the Tirtur-Lexicon intersection unfired upon minutes before, but had regained their composure in time to fire upon the bulk of Almog's force. Major Shaya Beitel's 40th Tank Battalion which was following the other two battalions up Lexicon with the mission of securing the Tirtur Road for the roller bridge's passage was also stopped in its tracks near the crossroads.³²

Meanwhile a company from a tank battalion attached to the 14th Brigade from Raviv's brigade, commanded by Lieutenant Colonel Uzi, had advanced eastward up Akavish Road without encountering Egyptian resistance, except for some fire from the north.³³ Egyptian forces were not physically occupying Akavish, but were capable of firing on it from their positions on Tirtur Road. But Akavish was open for the parachute brigade carrying the inflatable rafts.³⁴

Starting at 11:30 pm, therefore, Matt's 243d Parachute Brigade began moving south with the rafts along the road in halftracks, led by an attached tank company from Erez's brigade.³⁵ As Matt did not have enough half-tracks for his whole brigade, only one battalion would go forward at first, followed by the second when the half-tracks could come back for them. Upon reaching the end of the road, the brigade detoured around the fighting now taking place along Lexicon Road by following the coast of the Great Bitter Lake. Despite the nearby firefight, the paratroopers reached the canal virtually unscathed. The first parachute troops, from Lieutenant Colonel Dan's battalion and a company of engineers, begin crossing the canal in the rubber rafts at 1:25 am on the 16th, about five and a half hours behind schedule.³⁶

By 3 am, Dan's entire battalion and Matt's 243d Brigade headquarters, 750 troops in total, were across the canal and had established a bridgehead two miles northward from the Great Bitter Lake. Matt's second battalion, commanded by Lieutenant Colonel Dan Zvi, however, was unable to immediately come forward as the Egyptians would block the Akavish Road by the time the half-tracks were bringing the battalion forward.³⁷

Upon arrival at the canal, at about 12:20 am, Matt had dispatched the parachute brigade's attached tank company up the Lexicon Road to secure the brigade's flank while it was crossing the canal. The freshly arrived unit, unfamiliar with the situation, advanced between the remnants of two of Reshev's tank battalions and Egyptian infantry and tanks dug-in near the Tirtur-Lexicon crossroads promptly destroyed every tank in the company.³⁸

The Israeli attackers had run into the right flank defenders of the Egyptian 16th Infantry Division, its 16th Infantry Brigade, apparently anchored on the Tirtur Road and running eastward almost to its intersection with the Artillery Road.

Several miles north of Tirtur, along the Shick Road were the rear installations of the 16th Division as well as several units of the Egyptian 21st Armored Division, which were in reserve, some after being bloodied in the Egyptian offensive onto the 14th. Reshev's brigade had ridden into this hornet's nest.³⁹

Mitzna, though isolated, found himself in the logistics hub of two Egyptian divisions and took advantage of the situation until the Egyptians recovered from their surprise. Soon Mitzna's tank crewmen were fighting for their lives. To the south, but still north of the intersection, Almog found himself, with the remnants of his battalion, in a similar situation. Brigade commander Reshev, with his forward command post consisting of his command tank and two half tracks, was in the midst of the action at the crossroads from the start. On Reshev's shoulders, however, rode the success of the entire operation. He could not give up while the enemy controlled key terrain.⁴⁰

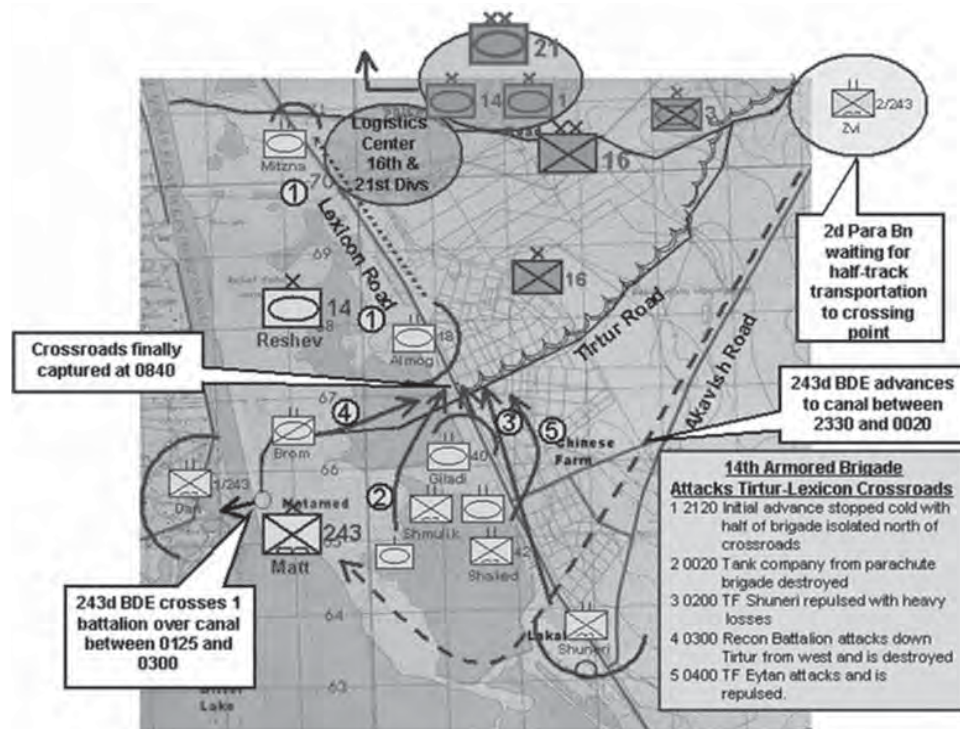


Figure 4. Israeli Assaults on the Tirtur-Lexicon Crossroads, Night of 15/16 October 1973

Therefore at 2 am the 14th Armored Brigade mounted another attack against the Egyptians holding the Tirtur-Lexicon crossroads. Reshev called on his reserve force, a battalion task force of two parachute infantry companies of recalled veterans mounted in half-tracks under the command of Major Natan Shuneri. To this

force he also attached the company-sized remnants of Beitel's 40th Tank Battalion, now under the command of Captain Gideon Giladi. As Reshev watched from nearby, the badly coordinated attack was repulsed with most of the tanks being knocked out and Giladi killed, though the Egyptians took heavy tank losses as well.⁴¹

An hour later, at 3 am, the brigade tried again, this time attacking with two companies of the recon battalion, which had initially secured the crossing site. Attacking from west to east along Tirtur, the attackers were again repulsed with heavy losses, with the battalion commander, Major Yoav Brom, being killed when a volley of RPGs blew up his tank within 30 yards of the crossroads.⁴²

In another hour, Reshev, believing that the Egyptians were withdrawing, tried again with his half-track infantry and the remnants of the 40th Battalion, now under the command of the deputy brigade commander, Lieutenant Colonel Ze'ev Eytan. An antiarmor ambush destroyed all but two of the vehicles as the crossroads remained firmly in Egyptian hands. After another failed attempt, the brigade had through the night suffered about 120 soldiers killed in action out of a total of over 190 casualties, most of them tank crewmen, and lost over 60 tanks.⁴³

Behind the Israeli lines, poor planning and geography had resulted in a massive traffic jam surrounded the heavy bridging equipment.⁴⁴ A conference at Israeli Southern Command headquarters decided to move the Gilowa wheeled ferry vehicles out of the jam to get them to the crossing site before dawn so that tanks could cross the canal as soon as possible. After moving cross-country, the Gilowa ferries reached the crossing site by 4 am, escorted by the battalion from Colonel Natke Nir's 600th Armored Brigade of Adan's division commanded by Giora Lev. Soon the boats were operational. At 6:30 am the Gilowas ferried the first ten tanks (from Lev's battalion) across the canal to join the paratroopers.⁴⁵

Sharon had moved out with his forward command post (five APCs) with the Gilowas down to the crossing site from his previous location near the upper portion of the Akavish Road. Sharon crossed over to the bridgehead and then returned to the Matzmed crossing site from where he directed operations of his division, concentrating on the crossing aspects of his mission at the expense of the road clearing aspects.⁴⁶

Meanwhile on the Akavish Road, in the traffic jam, the roller bridge broke a connection, jeopardizing the crossing operation. The tank battalion from Sharon's reserve, the 421st Armored Brigade (-), commanded by Colonel Haim Erez, which was towing the bridge, was released from the mission and sent to join Reshev at the canal. En route the battalion, led by Lieutenant Colonel Yitzhak Ben-Shoshan, escorted Zvi's battalion of Matt's parachute brigade, which was mounted on half-tracks. Sagger fire from positions astride the nearby Tirtur

road forced the vulnerable half-tracks back. But the tanks continued, bypassing the roadblock by moving cross-country south of the road, reaching the crossing site at mid-morning. Erez, with his forward brigade command post and Ben-Shoshan's 21 tanks and seven APCs, was promptly ferried across the canal, joining Lev's 14 tanks and a company of APC-mounted infantry. The additional tanks were immediately dispatched to attack SAM sites throughout the rest of the morning of the 16th.⁴⁷

With the Tirtur Road, essential to moving the heavy bridge to the crossing site, still blocked, Sharon committed his reserve, Erez's remaining battalion, commanded by Lieutenant Colonel Ami Morag, placed under control of Reshev's brigade, to clear that road from the east. Part of Uzi's battalion, which had earlier cleared Akavish for Matt's brigade, supported the attack by fire. Though Morag managed to penetrate almost all the way to the Lexicon intersection, infantry dug-in near the Chinese Farm repulsed his attack with antitank missiles fired in salvos. Through clever maneuvering of his tanks and constant suppressive fires, Morag managed to not suffer any fatal casualties. Before he retreated, he managed to also rescue survivors from Shuneri's abortive attack.⁴⁸

To the west Reshev assembled a scratch force, to once again attempt to clear the Lexicon-Tirtur crossroads, this time in daylight. After making initial headway, the attack was once more repulsed. The troops had become exhausted. Nevertheless, Reshev sent them in for another try. This time 22 tanks attacked from the north and east. They were forced back by Egyptian armor after losing three tanks. Several minutes later, Reshev scraped together 13 tanks from the 40th Battalion led by Captain Gabriel Vardi, infantry and recon troops for one more try. The Egyptian fire began to slacken as they too had also taken heavy losses. Under the pressure of Israeli tank fire, the Egyptians fell back, some offering up white flags. By 9 am the critical Tirtur-Lexicon junction was finally in Israeli hands.⁴⁹

On the morning of the 16th, Adan sent a tank battalion from Colonel Gavriel "Gabi" Amir's 460th Brigade to relieve Reshev, who was down to a strength of 27 tanks. The battalion, led by Lieutenant Colonel Amir Yoffe, had originally been earmarked to cross the canal, but Reshev's desperate situation forced it into action on the east bank instead. Yoffe took over the Shick line while Reshev moved his depleted battalions back to the vicinity of Lakekan to reorganize. Yoffe fought off Egyptian counterattacks from the 1st and 14th Armored Brigades and the 18th Mechanized Brigade of the Egyptian 21st Armored Division all day.⁵⁰

While the Tirtur-Lexicon crossroads was now in Israeli hands, both the Tirtur and Akavish Roads remained blocked. After Ben-Shoshan's battalion joined Lev's on the far bank, Bar Lev refused to allow any more troops to cross the

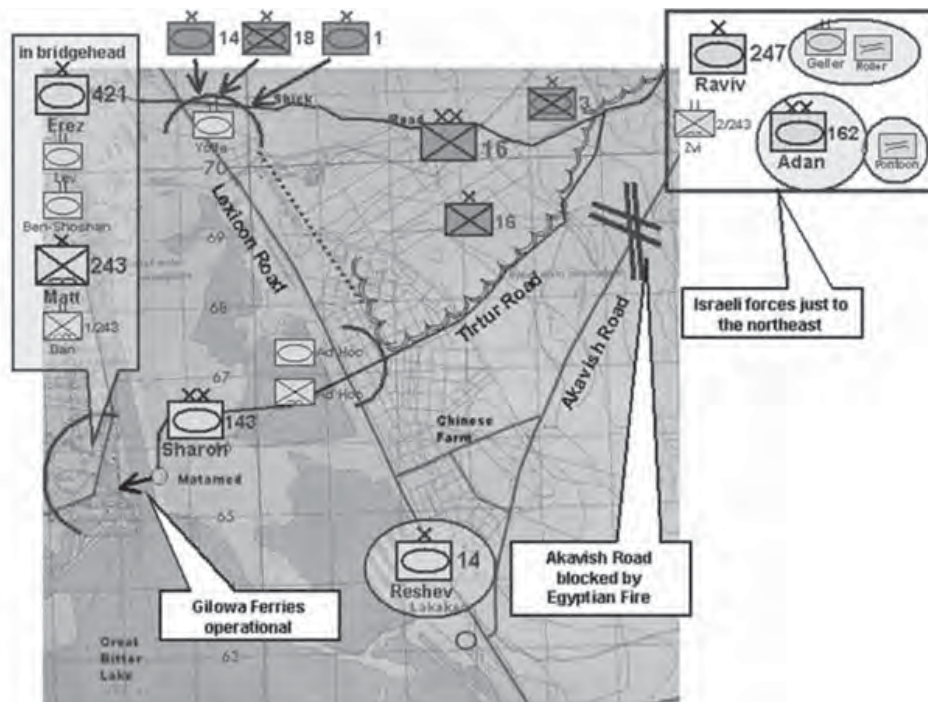


Figure 5. General Situation, Midday 16 October 1973

canal on the Gilowas or rafts until the roads were cleared and more permanent bridges could be brought down. Despite the fact that his division was barely holding open the line of communications to the far bank, and now would have to rely on Adan to finish the job, the decision outraged Sharon.⁵¹

At noon Southern Command ordered Sharon to take the Chinese Farm from the west, while Adan's division would now enter the fight clearing the Akavish and Tirtur Roads and bring up the pontoon bridges.⁵² But Adan's attack, executed by two battalions from Nir's bigade, was quickly brought to a halt. Nir then assumed defensive positions when dust clouds in the distance indicated the approach of a large Egyptian armored force. But the force turned back before Nir could engage it. Several other armored forces approached through the afternoon but were engaged only by artillery. Adan guessed that the Egyptians were trying to bait him into sending his tanks forward so the Egyptian infantry could destroy them with Saggars. He did not take the bait and instead spent the rest of daylight waiting for infantry support promised him in the guise of a parachute battalion. The battalion arrived via planes and bus.⁵³

At 2 am on the 17th, Lieutenant Colonel Yitzhak Mordecai's 890th Parachute Battalion, supported by the headquarters and support elements of its parent 35th Parachute Brigade, attacked the Chinese Farm from the east, along the six-mile trace of the Tirtur Road. Mordecai's parent brigade, the 35th Parachute under Colonel Uzi Ya'iri, controlled the operation. Ya'iri deployed three infantry companies forward under Mordecai and followed with an infantry company and the battalion's heavy weapons company under his personal command. One company would advance north of Tirtur, one between Tirtur and Akavish and one south of Akavish. Once enemy locations would be found, the battalion would consolidate. A battalion of tanks from Amir's 460th Brigade (Adan's division), commanded by Lieutenant Colonel Ehud Barak, would support, though it would not join the advance. The paratroopers were soon pinned down and artillery fire, because of fratricidal concerns, was ineffective. The operation soon became a rescue mission for the wounded. At first light, Barak's tanks were sent in to help the paratroopers resume their attack. The now familiar Saggars, however, quickly knocked out five tanks, ending the effort.⁵⁴

During the night the fighting at the Chinese Farm distracted Egyptian attention from the Akavish area. Adan sent the recon company from Amir's brigade down Akavish in its APCs. These scouts discovered the road was clear and the division commander promptly sent out the pontoons with escorts under his deputy. The pontoon bridges were able to reach the crossing site. By 8 am they were being put together, though the bridge would not be operational until 4 pm.⁵⁵

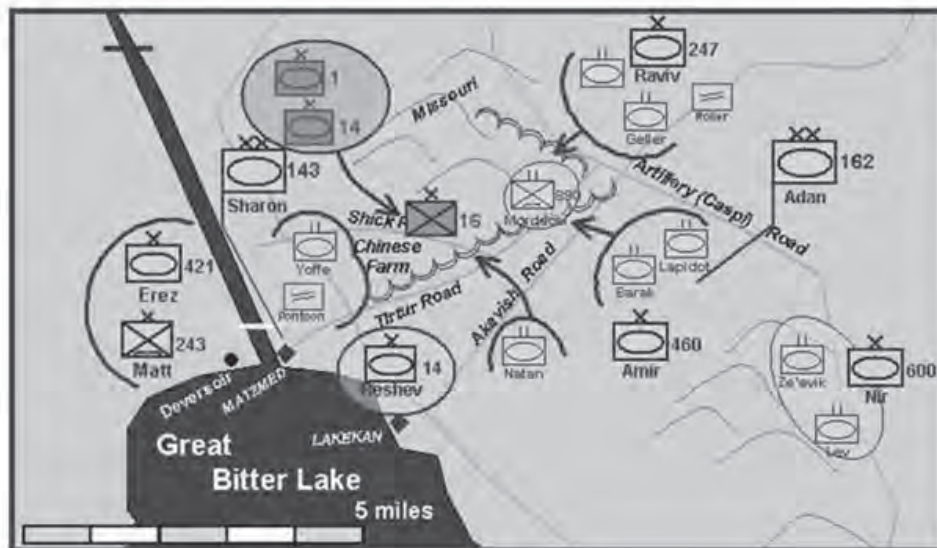


Figure 6. 17 October 1973, Coordinated Attack on the Chinese Farm

At dawn on the 17th Adan prepared to throw every available tank at the Chinese Farm. Finally the IDF had massed enough battalions to make an irresistible, coordinated attack. Lieutenant Colonel Natan's battalion from Nir's 600th Brigade had followed the pontoons and was now in position to advance on the Egyptian Tirtur positions from the southwest. Amir's 460th Brigade would attack from the east with Barak's battalion reinforced with another battalion (commanded by Lieutenant Colonel Lapidot). Nir's brigade (minus Natan's battalion) was held in reserve to the southeast. Colonel Arie Karen's 217th Brigade had been detached to Southern Command reserve but Raviv's 247th Brigade was now attached from Sharon's command. Raviv, with two battalions, would move in from the northwest.⁵⁶

The attack turned into a meeting engagement as the Egyptian 1st and 14th Armored Brigades were simultaneously advancing south to attempt to reblock the Akavish Road. West of this attack zone on the Shick Road holding Sharon's northern flank, Yoffe's battalion had successfully repulsed numerous Egyptian armored and infantry attacks with no losses to his own force. Additionally, Reshev had reorganized his brigade's remnants and was preparing to reinforce Yoffe. Yoffe had observed Egyptian infantry withdrawing from the Chinese Farm area to his east. But while the infantry retreated, armored forces were advancing to face off with Adan's arrayed tank battalions, resulting in a massive tank battle. After a fierce five-hour seesaw battle, Adan secured a line along the Tirtur Road, capturing the southern third of the Chinese Farm and permanently secured the Akavish Road. The tide had turned clearly to the Israelis as, while the IDF had lost between 80 and 100 tanks in the battles, tank losses now favored them with the Egyptians losing at least 160, over two-thirds of their available tanks near the crossing site.⁵⁷

In the morning of the 17th, even while the tank battle around the Chinese Farm raged, a conference was held at Adan's forward command post, including Adan, Sharon, Gonen, Bar Lev and IDF Chief of Staff Elazar. On the spot decisions were made concerning future operations. While the crossing site was being shelled by Egyptian artillery, and Egyptians had defended tenuously at the Chinese Farm, it was obvious that that defense was weakening and, with the arrival of the pontoon bridge, the tide had turned and offensive operations could continue with Sharon holding the bridgehead open while Adan would then cross and exploit on the west bank.⁵⁸ First, however, Adan would have to take care of a new threat.

In the afternoon, even as the battle of the Chinese Farm still went on, Adan was forced to redeploy his forces to stop the advance of the Egyptian 25th Armored Brigade. This brigade was moving in column from the south up the Lexicon



Figure 7. 17 October 1973, Adan Destroys the Egyptian 25th Armored Brigade.

Road along the shore of the Great Bitter Lake out of the bridgehead of the Egyptian Third Army. This movement was supposed to be in coordination with the attacks of the two armored brigades from the north and could, if not stopped, take the units fighting at the Chinese Farm in the rear. Instead, Adan moved his forces to create a large anti-armor ambush. Southern Command released back to Adan Karen's two-battalion brigade, which he immediately moved down the Lateral Road south of Tasa. Then Karen swung to the west to attack the rear of the Egyptian column. Nir, already located along the Artillery (Caspi) Road with two battalions, moved west to attack the center of the column. Amir with Natan's battalion and Reshev from Sharon's division would block the front of the column and attack it from the north. With the ambush set, Adan let the Egyptians fall into it, holding artillery and tank fire until the entire 10-mile long column was within range of Israeli weapons. When the Egyptian vanguard fired on Reshev near Lakekan, Adan sprung his trap. While Karen sealed the southern escape route, Nir attacked the flank of the column. The ambush was a complete success. By late afternoon the Israelis had completed the annihilation of the Egyptian force, destroying between 60 and 86 vehicles while losing only four tanks, two to

mines. Only a handful of Egyptian vehicles, including that of the brigade commander, survived by fleeing into the abandoned Bar Lev fort of Botzer.⁵⁹

At 9 pm, with the pontoon bridge in place, Adan's Division started crossing the canal. Sharon took over the portion of the Tirtur front held by Adan's units and the next morning (18 October), pushed the Egyptians completely out of the Chinese Farm.⁶⁰ This allowed the deployment of the roller bridge. It was operational the next day.



Figure 8. Post-Crossing Operations

Once across, Adan, followed by Magen's division, advanced south along the west side of the Great Bitter Lake to isolate the Egyptian Third Army around Suez city between the 19th and 23d. Through hard fighting, Adan and Magen managed to cut off the Egyptians, though Suez city itself was not captured. Several ceasefires and an eventual peace treaty followed.

Conclusions

Despite the ultimate success of the operation, the Chinese Farm battle was an arduous one for the IDF in which casualties were relatively heavy intelligence was weak, and maneuver organization was inadequate until fixed on the fly.

An example of the course of the battle can be seen in the fate of the 87th Armored Reconnaissance Battalion. This reserve unit raised only five months earlier saw its first and only combat action in the 1973 campaign. The battalion was organized with three companies with a mix of M60A1 tanks and M113 armored personnel carriers and a company of jeeps.

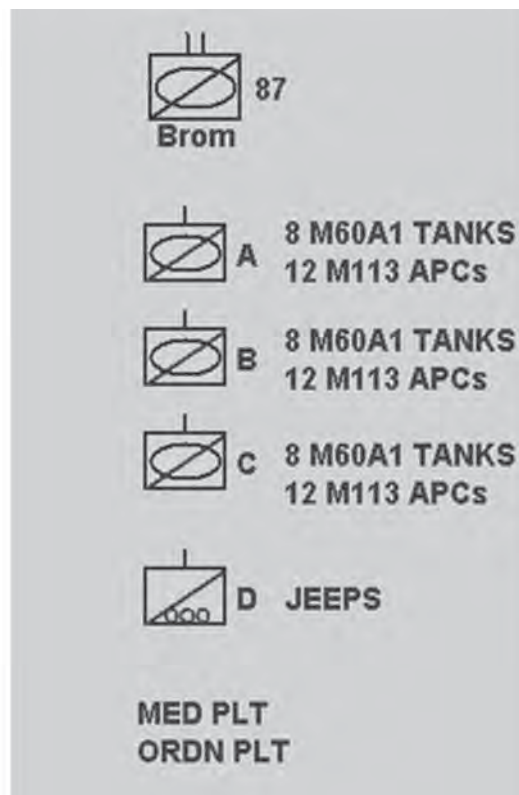


Figure 9. Organization of the 87th Armored Recon Battalion

By design the 87th was the recon unit of Sharon's 143d Armored Division. But for most of the campaign, Sharon subordinated the battalion to his 14th Armored Brigade. While under the 14th, the battalion discovered the gap in the Egyptian lines south of the Chinese Farm on 9 October. Although the battalion was only in limited action before the Chinese Farm operation, it had lost its battalion com-

mander killed by Egyptian artillery, and two company commanders wounded and replaced as well. In the Chinese Farm operation, the battalion led the advance to the canal of the 14th Brigade and then secured the crossing site and its immediate environs. Tasked to help salvage the deteriorating situation at the Tirtur-Lexicon crossroads, the battalion suffered heavy losses including the death of its new battalion commander Yoav Brom. At the Chinese Farm the battalion would suffer the loss of 32 soldiers killed in action, numerous more wounded including two company commanders and the loss of most of its tanks and armored personnel carriers. The battalion remnants were formed into an ad hoc tank company under the remaining company commander and reassigned to one of the 14th Brigade's tank battalions.⁶¹

The operations of the Israeli Defense Forces in the Battle of the Chinese Farm are a classic example of the employment of a plug and play modular army whose maneuver structure was based on the brigade. At all levels, the Israelis were able to mix and match units of similar types into different organizations based on the tactical situation with virtually no loss of effectiveness. The IDF even employed one tank battalion composed of reservists who had been living in the United States when the war started. This battalion, commanded by reservist Lieutenant Colonel Ehud Barak, who, like Sharon, later became Israeli prime minister, served in Adan's 460th Brigade and supported the attack of the paratroopers down the Tirtur Road on 17 October and later crossed the canal and fought on the west bank.⁶²

In many ways the IDF had institutionalized improvisation. Commanders at all levels showed great flexibility and initiative. The shift of Adan's division from the Chinese Farm area to the east side of the Great Bitter Lake to destroy the Egyptian 25th Armored Brigade showed this great flexibility in action.

Into this modular mix, the Israelis executed their operations with an intense sense of urgency. Despite grave setbacks at the Chinese Farm and Tirtur-Lexicon crossroads, which threatened the success of the entire operation, failure was not an option. Believing firmly that their national existence depended on the competency of the military, the IDF officers and soldiers refused to give up and through a combination of persistence and reorganization, ultimately succeeded.

The Battle of the Chinese Farm showed Israeli mobile operations and battle command at its best and at its worst. While the Israelis had no complete picture of the enemy situation, their intelligence was far superior than it had been in the earlier Sinai battles. Planning and coordination, while clearly superior to that of the El Firdan attack, still showed flaws. The IDF often replaced good staff work with good, though possibly unnecessary improvisation. The traffic jams, span of control problems, and task organization difficulties could all have been resolved

up front with good planning and staff work. It took two days of failed, piecemeal, uncoordinated attacks on the Chinese Farm position before a massed, coordinated attack was finally employed. While modern armored battle requires an inherent flexibility and capability to improvise, good planning and staff work can greatly minimize the requirement for such for improvisation.

Nevertheless overall control of the maneuver forces in the Chinese Farm operation was greatly improved from the early days of the war. The theater level command team of Bar Lev and Gonen made frequent visits to their subordinates and, despite Sharon's claims to the contrary, actually had pretty good situational awareness. At all times commanders knew their higher's intentions and plans were changed based on the enemy situation, not on whimsy or unbridled optimism or pessimism. For matters important enough, Bar Lev was even capable of talking directly to battalion commanders, as he did with one of the first units across the canal, to which he personally gave the mission of destroying Egyptian surface-to-air missile sites under instructions from the Air Force.⁶³

The Israeli divisional and brigade commanders led from the saddle, using forward command posts and usually collocating with either their lead subordinate unit or their reserve element. Radio communications allowed a span of control over units that were separated by enemy forces or great distances. While this allowed great situational awareness and responsiveness, this up-front style of leadership was a double-edged sword. Commanders so far forward often ended up in close combat that hindered their ability to control their unit. This happened to Reshev on the evening of 15 October, and to Sharon while at the crossing site when he personally tried to shoot down an Egyptian aircraft.⁶⁴

Additionally, while the IDF was very flexible in organizing its forces, some of that flexibility was missing from the organization in this operation. Span of control and ease of control was often lacking. While the Israelis committed two division headquarters and eight brigade headquarters, one brigade, Reshev's 14th, was strapped with seven battalion-equivalent units reporting to it. Added to Reshev's difficulties was that he soon became embroiled in combat at the Tirtur-Lexicon crossroads. Adan's divisional headquarters, led by the most experienced armored commander in the operation, was left uncommitted for almost the first 24 hours of the operation. Meanwhile Sharon was attempting to control the crossing operation, Reshev's battle, and, on the other side of the enemy's blocking position, a brigade towing the bridging equipment, and another executing a diversionary attack. Despite this large span of control, Sharon essentially spent most of his time personally overseeing the crossing operation.⁶⁵

At the other extreme when only two battalion-equivalents were across the canal, there were also two brigade headquarters controlling them (Matt's and

Erez's), and Colonel Uzi Ya'iri's regular 35th Parachute Brigade controlled only Mordecai's battalion in its night attack on 17 October.

In terms of unit employment, while tactical intelligence proved to be an obvious problem during the operation, the one available reconnaissance unit was attached directly to an armored brigade and then used like a tank battalion in an assault on the Tirtur-Lexicon crossroads, which resulted in the battalion's destruction. The temptation to use a recon battalion equipped with tanks as a main battle unit, even when intelligence is sorely needed, is very great, particularly when the battalion has been attached or assigned directly to a brigade which only has a limited amount of tank assets available to it to begin with.

When the war started, the Israeli armored forces had assigned units of mechanized infantry. But in the course of the war, the quality of these forces was considered so low that small units of paratroopers were brought forward and reequipped with armored personnel carriers. This improvisation, while providing elite infantry, also ensured that this infantry would be unfamiliar with the role of mechanized infantry. And in at least one case, a shortage of armored personnel carriers resulted in paratroopers having to be shuttled forward.

While there was no effort to balance spans of control between different brigades based on their missions and the situation, there was also no appreciation for the personalities of the subordinate commanders. Bar Lev and Gonen had to realize Sharon was a difficult subordinate who would, if not kept under firm control, attempt to twist their intent into whatever it was he wanted to do. Knowing he favored a crossing, they gave him a key role in it. However, Sharon paid inadequate attention to the clearing of the route to the crossing site, leaving that to an overextended subordinate, while he himself concentrated on the crossing itself. Additionally, Bar Lev and Gonen allowed Sharon's role to allow him to be geographically separated from direct contact with higher headquarters with predictable results: vague reports and frequent unavailability. With such a complicated operation, placing such a difficult subordinate, who believed in improvisation over planning, out where he could act independently, created unnecessary stress and command and control difficulties.⁶⁶

After initial setbacks, the Israelis proved to be masters of modern mobile warfare. However, they also proved how difficult such operations could be, even when there is clear radio communication and leaders at all levels display high initiative. Improvisation is not necessarily a good substitute for planning and routine staff work.

The Israeli command coordinated its operations far more successfully in the Battle of the Chinese Farm than it had in its previous Sinai operations, even though this action was complicated by the need to move specialized bridging

equipment down certain roads, astride which the Egyptians had placed dug-in infantry. While this operation had some command and control problems, primarily concerned with massing adequate forces to eject the Egyptians from the Chinese Farm area itself, overall the Israelis achieved their objective of opening a crossing site at the canal. While Egyptian resistance proved tougher than expected and their deployments a surprise, this time the Israelis were ready for the unexpected. The leading force from Sharon's division suffered from a span of control problem, with one brigade commander given control of too many subordinate elements, each with disparate missions. The situation was compounded when that commander was soon cut off behind Egyptian lines in running battles with Egyptian armored forces. However, the extensive preparations paid off as each separate Israeli unit commander knew the intent of the operation and were able to continue with the mission even when not under any superior's direct command and control. Sharon had his division actually deployed on two fronts with a large Egyptian force between them and a forward element across the Suez Canal. Bar Lev alleviated this difficulty by giving Adan control over Sharon's forces facing the Egyptians from the east. The IDF command was under such good control in the later phases of this operation that Adan was able to easily respond to an enemy threat from a new direction and set up a trap and then destroy an Egyptian armored brigade.

The Israelis managed to learn from their mistakes and adjust to the new situation, realign their forces into a better combined arms team and execute an operation that both destroyed the SAM umbrella and made the position of the Egyptian forces dug in along the east bank of the Suez Canal perilous before a ceasefire ended the conflict.

Notes

1. Abraham Rabinovich, *The Yom Kippur War: The Epic Encounter that Transformed the Middle East* (New York: Schocken Books, 2004), 468.
2. Rabinovich, 242-3.
3. For a detailed analysis of Sharon's performance see Trevor Dupuy, *Elusive Victory: The Arab-Israeli Wars 1948-1974* (Fairfax, VA: HERO Books, 1984), 585-6.
4. Avraham Adan, *On the Banks of the Suez: An Israeli General's Personal Account of the Yom Kippur War* (London: Arms and Armour Press, 1980), 6.
5. Adan, 40,
6. Rabinovich, 249-50; Adan, 144-6, 152. Adan had to detach his recon battalion to a separate command on the northern end of the Sinai front.
7. Adan, 207-8. While chief of the IDF armored Corps, Adan tried to raise the training, equipment and recruiting standards of the IDF mechanized infantry, with mixed results.
8. Adan 17, 25.
9. Adan, 18.
10. Adan, 10, 17.
11. Chaim Herzog, *The War of Atonement: October, 1973* (Boston: Little, Brown and Company, 1975), 158.
12. Adan, 25, Herzog, 159, 161, 165.
13. Adan, 141.
14. Rabinovich, 327-8, 330; Adan, 215, 227.
15. Adan, 219.
16. Rabinovich, 271-4.
17. Ibid., 331.
18. Adan, 196, 221, 227, 229.
19. Ibid., 207-210/
20. Herzog, 204-5.
21. Saad el Shazly, *The Crossing of the Suez* (San Francisco: American Mideast Research, 1980), 245-8; Rabinovich, 346-8.
22. Adan, 231, 236.
23. Rabinovich, 353, 355; Adan, 239.
24. Adan, 239.

25. Ibid., 218.
26. Brom had been vacationing abroad when the war started and had assumed command of the battalion after its previous commander had been killed by artillery fire. Brom had been serving on the staff of the 14th Armored Brigade, under which Sharon had subordinated the battalion.
27. Rabinovich., 282-3.
28. Herzog, 217.
29. Ariel Sharon, with David Chanoff, *Warrior: The Autobiography of Ariel Sharon* (New York: Simon and Schuster, 1989), 312-3; Simon Dunstan, *The Yom Kippur War 1973* (2); *The Sinai*, Campaign series (Oxford: Osprey, 2003), 70-2; Rabinovich, 359-60.
30. Ibid.
31. Sources conflict on the composition of the infantry and recon components of Reshev's task force. However it seems to have consisted on three small infantry battalion task forces, consisting of parachute troops in half-tracks and some tanks. However, one source claims (see Dupuy, 496) that one of the battalions was the mechanized infantry battalion from the 421st Armored Brigade and another was a separate mechanized infantry battalion. The recon battalion was Sharon's divisional unit (the 87th) reinforced with additional tanks. For the best discussion of Reshev's order of battle, see Frank Chadwick and Joseph Bermudez, "Historical Notes and Scenarios Booklet," *Suez '73: The Battle of the Chinese Farm: October 15-22, 1973* (Normal, IL: Game Designer's Workshop, 1981), 5.
32. Rabinovich, 368-9; Herzog, 211-2,214; Adan, 263-4, 266.
33. The rest of this battalion was divided up as follows: one company sent to unsuccessfully clear the Tirtur Road, and the last company to join the brigade reserve force near Lakekan, Task Force Shuneri. See Chadwick and Bermudez, 5. Uzi's complete name is not given in available sources (Herzog, 222.)
34. The tank company followed the paratroopers back down Akavish and joined the rest of its battalion south of the Tirtur-Lexicon crossroads. Adan, 267.
35. The tank company came from Ami Morag's battalion. See note 78 below.
36. Rabinovich, 362, 364; Adan, 267. Available sources do not indicate Dan's complete name.
37. Rabinovich, 374; Adan, 264. See note 87. Zvi's battalion would not get across until the 17th. Sometimes Zvi's name is given as Ziv.
38. Dupuy, *Elusive Victory*, 499; Rabinovich, 374, 385-6; the tank company came from Lieutenant Colonel Ami Morag's tank battalion in Erez's brigade. While most sources claim all tanks in the company were destroyed at the crossroads, Rabinovich claims only four of the company's seven tanks were destroyed.
39. Chadwick and Bermudez, 5; Herzog, 212; Sharon, 315.

40. Rabinovich, 369-70.
41. Ibid., 376-7; Adan, 267-8.
42. Rabinovich, 375; Herzog, 216.
43. Herzog, 216-7; Adan, 269; Rabinovich, 381. The infantry probably came from either Task Force (TF) Schmulik or TF Shaked (possibly really designated as the 42d Parachute Infantry Battalion), both of which were with the brigade but whose actions are not mentioned in most sources. The tanks probably came also from Uzi's tank battalion borrowed from Raviv's brigade.
44. Herzog, 218; Sharon, 313.
45. Rabinovich, 379-80, 388; There's some confusion about Lev's battalion as sources seem to indicate it was in two places at once: 14 tanks across the canal and a battalion under Nir with Adan's division to the east. Probably the battalion had been split into two task forces, a common IDF practice.
46. Rabinovich, 379; Sharon, 316; Adan, 268.
47. Rabinovich, 378, 385, 388-9; Adan, 276.
48. Rabinovich, 382, 385-8; Herzog 222; Adan, 269. Morag's battalion had been providing security for the roller bridge.
49. Rabinovich, 382-3; Herzog, 221-2.
50. Adan, 277-8, 293.
51. Rabinovich, 391-3; Sharon, 317-320.
52. Rabinovich, 373, 393; Adan, 278.
53. Adan, 279-81, 284-5.
54. Ibid., 286-8, 291; Rabinovich, 396-8
55. Adan, 290-1; Rabinovich, 399, 412.
56. Adan, 292-3; Natan's and Lapidot's complete names are not given in available sources.
57. Gawrych 63; Adan, 293; Rabinovich, 403-4; Chadwick and Bermudez, 6-7.
58. Adan, 298-9; Rabinovich, 409-10.
59. Adan, 301-3; Herzog, 228; Rabinovich, 411-2.
60. Rabinovich, 426.
61. *The 87th Armored Recon Battalion*. <http://www.87th.org.il/enhistory.html>. Accessed 3 Aug 2005.

62. Barak's battalion was composed of 10 Centurions, 10 M60A1 Pattons and 10 armored personnel carriers. The unit joined Adan's command on 13 October. See Adan, 286-8, Rabinovich, 396-8..
63. Sharon, 319; Adan 277, Herzog, 223; Rabinovich, 389.
64. Sharon, 321, 323-4.
65. Adan, 268; Gawrych, 60.
66. Adan, 277; Rabinovich, 406-8; Sharon, 321.

**McGrath Slide Addendum:
Sinai 1973: Israeli Maneuver Organization and
the Battle of the Chinese Farm**

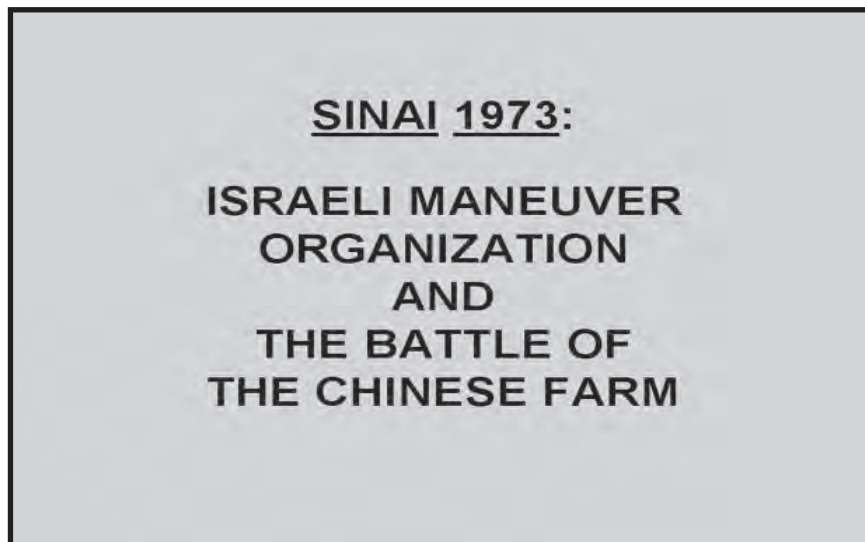


Figure 1

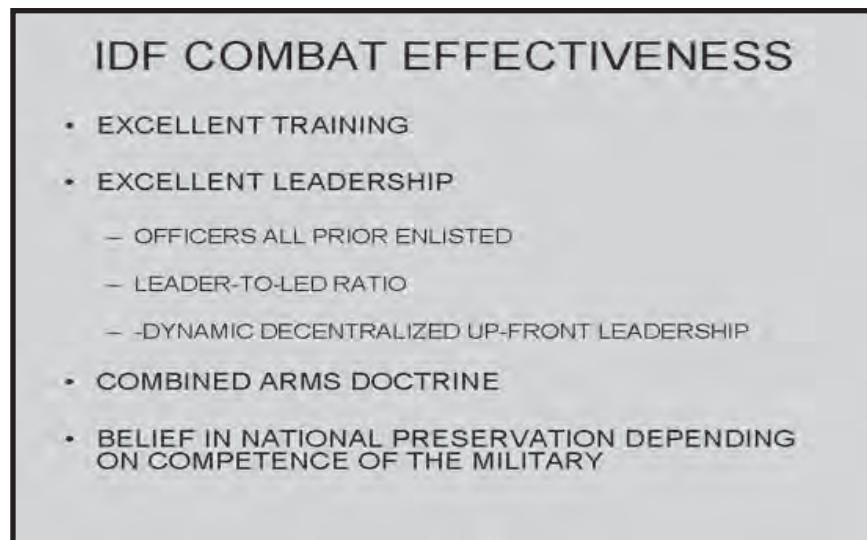


Figure 2

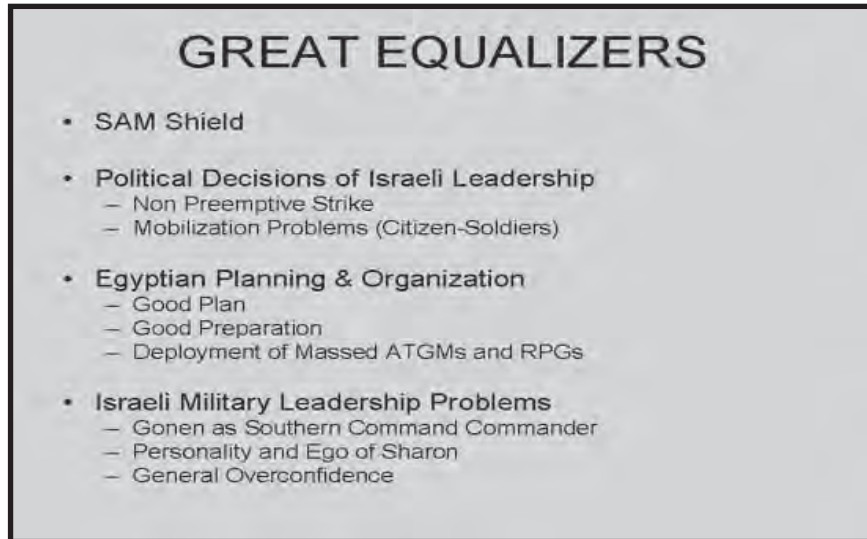


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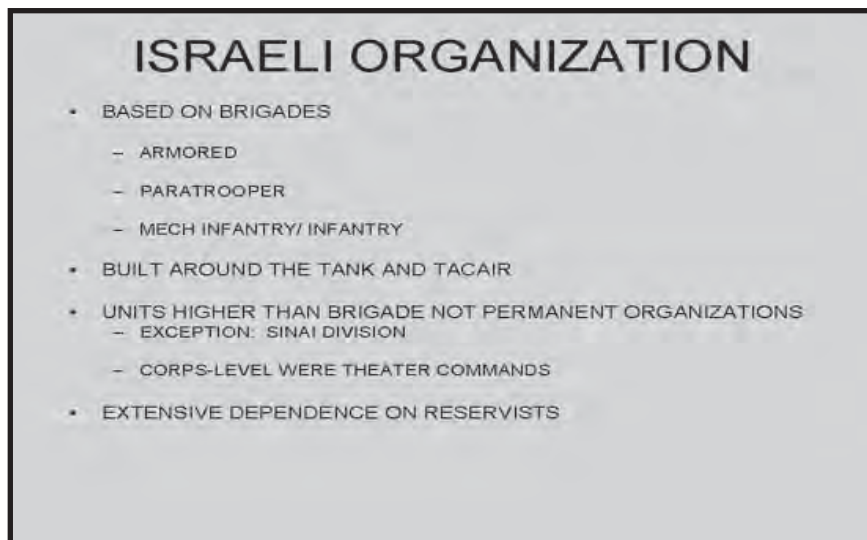


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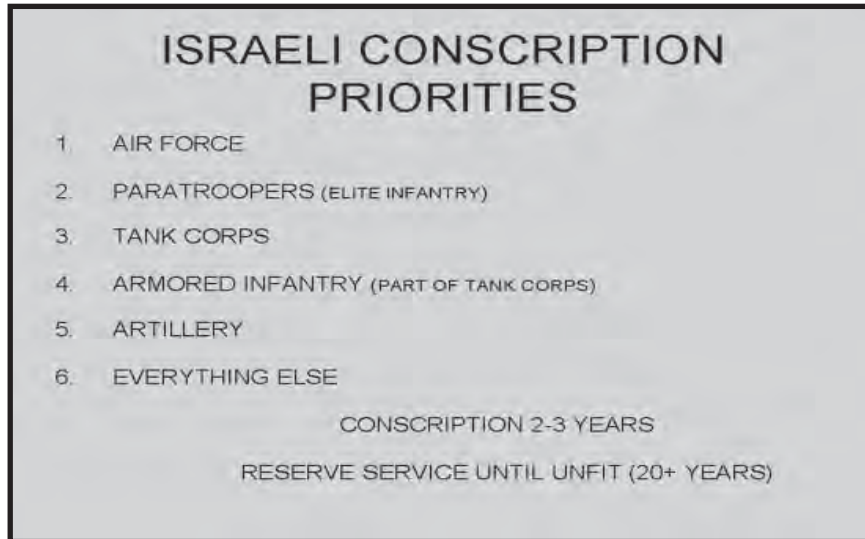


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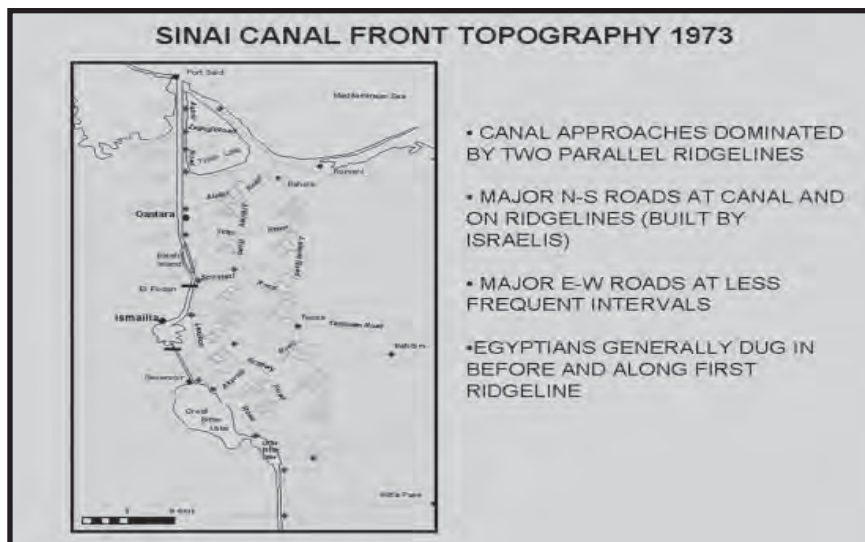


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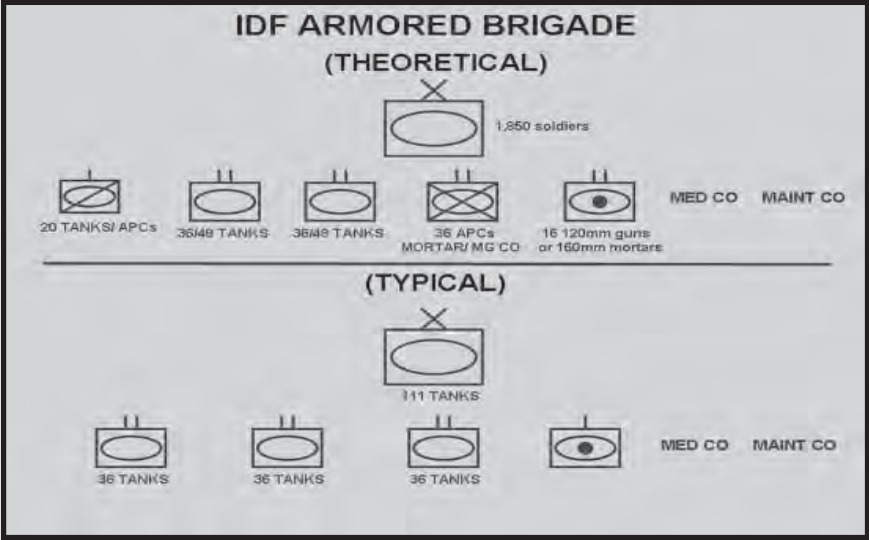


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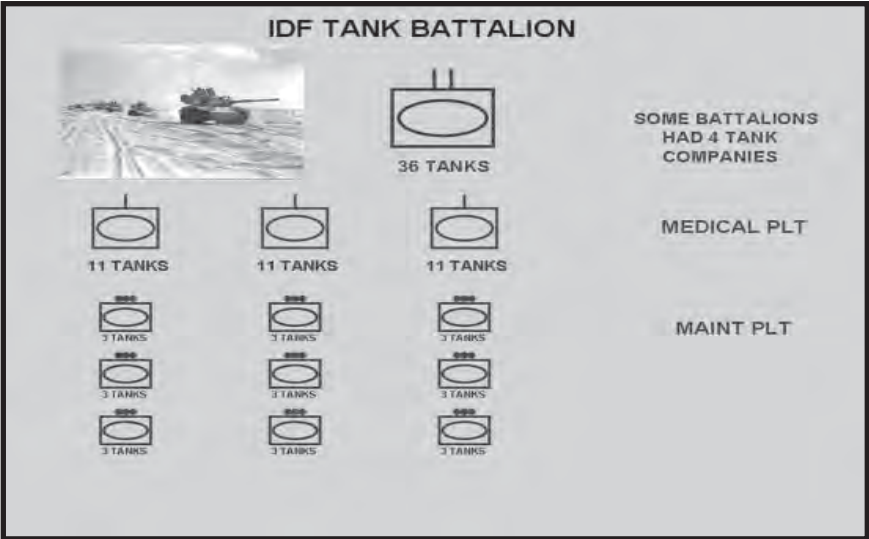


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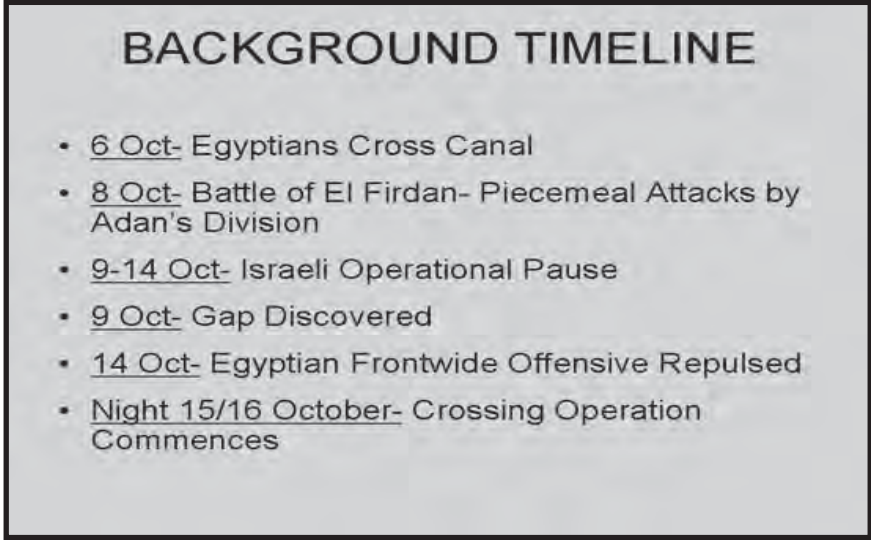


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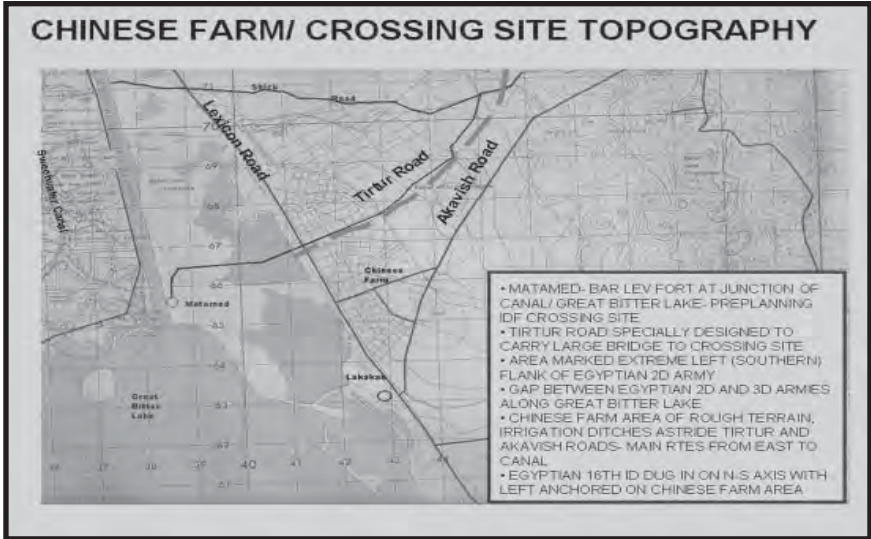


Figure 10

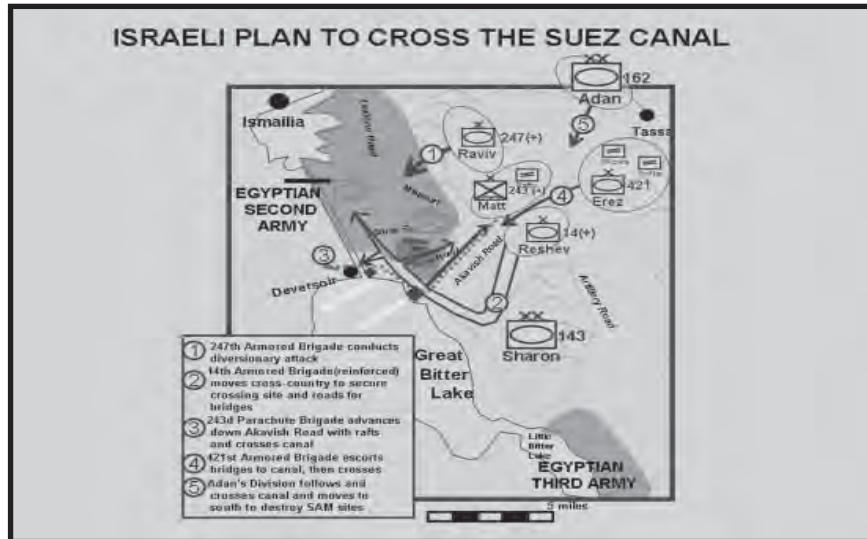


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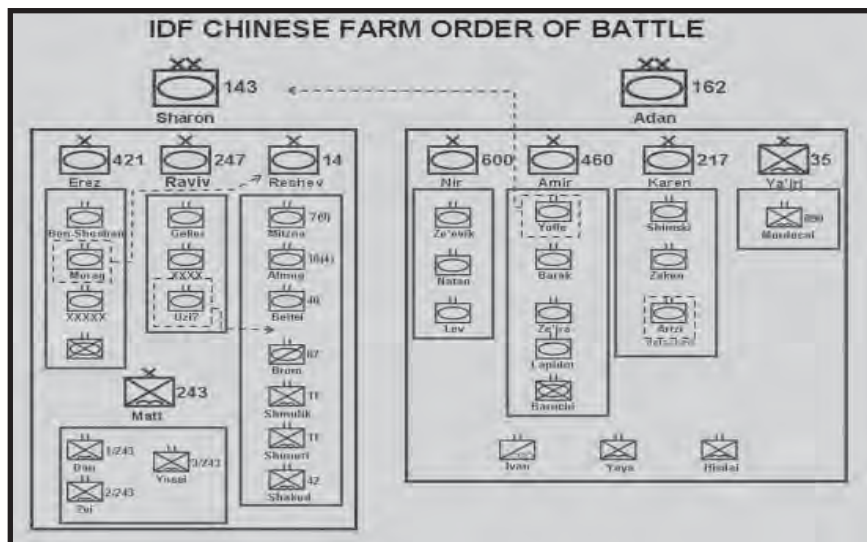


Figure 12





MISSIONS OF SHARON'S BRIGADES		
	FORCES	MISSIONS
 14 Reshevet	•4 TANK BATTALIONS •3 MECH PARATROOPER TF •1 HVY RECON BN	•SPEARHEAD DRIVE TO CANAL •SECURE CROSSING SITE AND THREE ROADS •CONTROLS DIV RECON BN
 247 Raviv	•2 TANK BATTALIONS	•DIVERSIONARY ATTACK FROM EAST-SEPARATE FROM REST OF DIVISION ONCE OPERATION STARTS
 421 Enz	•2 TANK BATTALIONS •1 MECH INF BN	•ESCORTS BRIDGES TO CANAL THEN CROSSES
 243 Matz	•3 PARA INF BATTALIONS REQUIRING APC FERRYING 1 BN AT A TIME	•ADVANCES AFTER 14TH BDE TO CANAL WITH RAFTS AND CROSSES

Figure 13

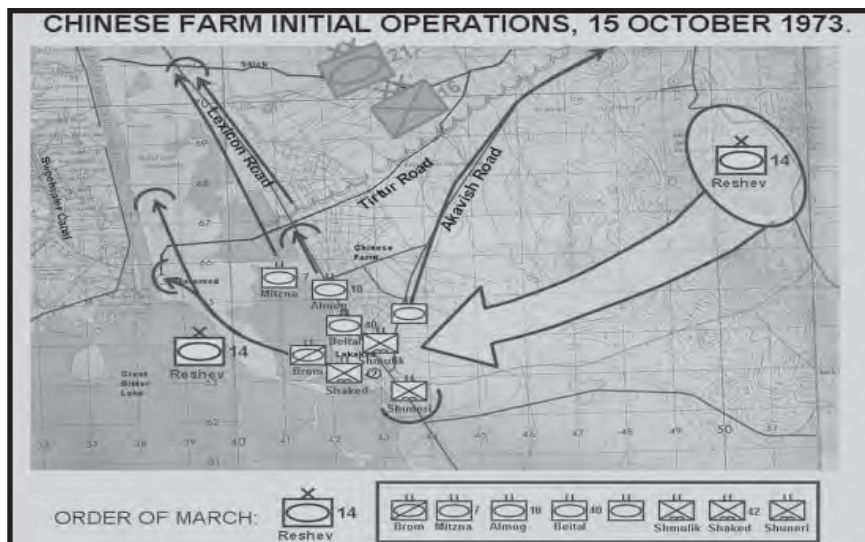


Figure 14

IDF RIVERCROSSING MEANS

- RUBBER BOATS- LIGHT TROOPS ONLY
- GILOWA FERRIES- MOTORIZED MODULAR RAFTS CAPABLE OF CARRYING TANKS
- PONTOON BRIDGE- MOTORIZED MODULAR BRIDGE
- ROLLER BRIDGE- REQUIRED TOWING BY 12 TANKS DOWN SPECIAL ROAD (TIRTUR)

Figure 15

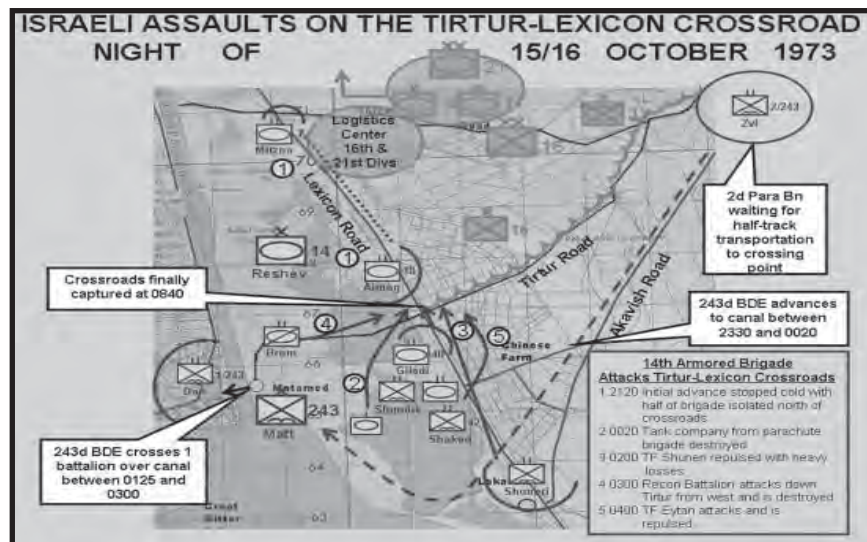


Figure 16



Figure 19

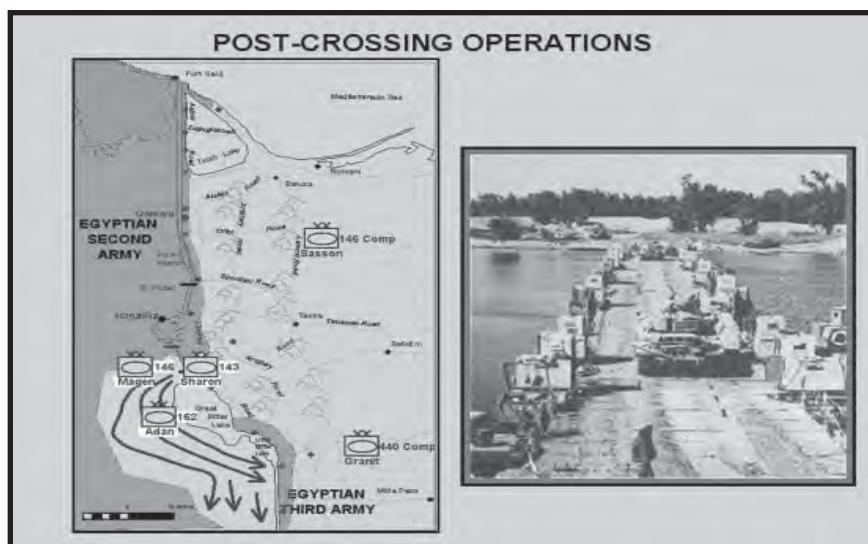


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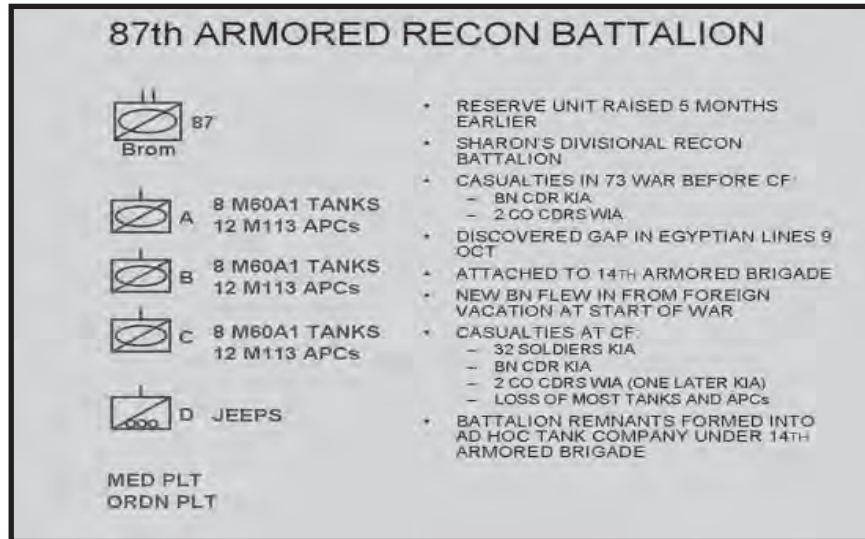


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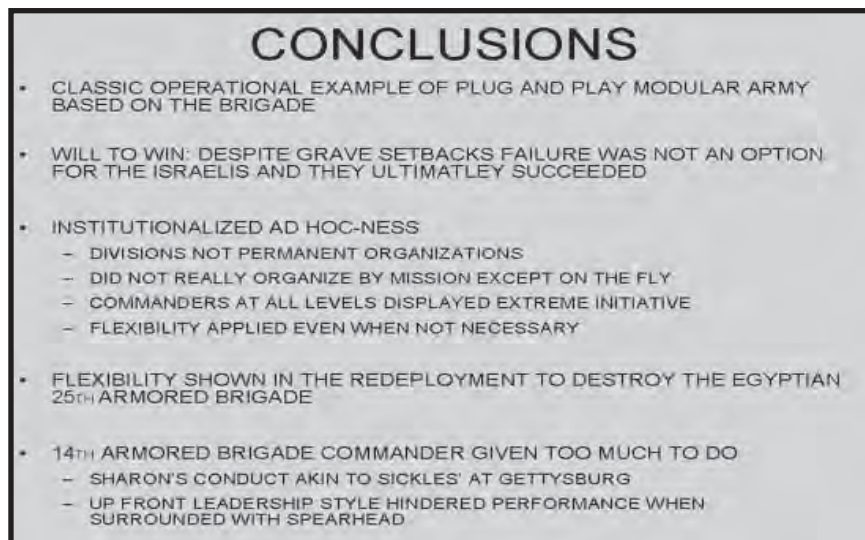



Figure 22

CONCLUSIONS

- MANEUVER FORCE ORGANIZATION
 - NO DISTINCTION BETWEEN RA AND RESERVISTS (70% OF FORCE)
 - MECH INFANTRY LOW STATUS- REPLACED ON FLY BY PARATROOPERS
- UNEVEN TACTICAL INTELLIGENCE
 - RECON BATTALION USED AS A TANK BATTALION AND DESTROYED IN BATTLE
- TOOK TOO LONG TO ORGANIZE A COORDINATED ATTACK ON THE CHINESE FARM (2 DAYS AND 7 FAILED ATTACKS)
 - 5 PIECEMEAL ASSAULTS FROM WEST AND SOUTH (MOST OF BATTALION SIZE OR SMALLER)
 - 2 PIECEMEAL ASSAULTS FROM THE EAST (MOST OF BATTALION SIZE)
 - 1 COORDINATED ASSAULT FROM THE EAST SOUTH AND WEST (OF 5 BATTALION STRENGTH)
- GREAT FLEXIBILITY IN SHIFTING FROM COORDINATED CHINESE FARM ATTACK TO SETTING UP REINFORCED DIVISION AMBUSH TO THE SOUTH TO DESTROY EGYPTIAN 25TH ARMORED BRIGADE

Figure 23



"In the Armored Corps we take our orders on the move"

- Colonel Arieh Karen, Commander, Israeli 217th Armored Brigade, 1973

Figure 24



Figure 25

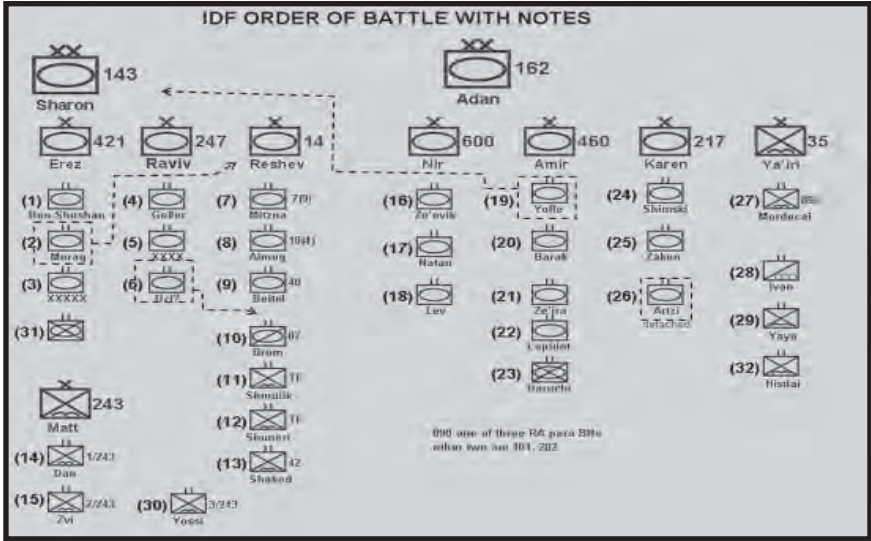


Figure 26

NOTES ON IDF UNITS

NO	Commander	Remarks
	COL Haim Eröz	421st Armored Brigade
	COL Regev	247th Armored Brigade
	COL Amnon Reshev	14th Armored Brigade; RA, originally with Mandler's division, the Sharon's, TF which advanced to the canal
	COL Natke Nir	600th Armored Brigade
	COL Gavriel Gabi Amir	460th Armored Brigade; RA, originally with Mandler's division, then Adan's
	COL Arieh Karén	217th Armored Brigade
	COL Uz Ya'ir	35th Parachute Brigade; RA, attached with 1 battalion to Adan's div, then whole bde to Sharon; assaulted Chinese Farm
	COL Dedi Matt	243d Parachute Brigade; attached to Sharon's division for crossing operation and after

Figure 27

NOTES ON IDF UNITS CONTINUED

1	LTC Shimon Ben-Shoshan	escorted roller bridge until broke, then first tank BN across canal
2	LTC Ami Morig	battalion, overlooking Adan's attack on 8 Oct withdrawn by Sharon; guarded roller bridge in movement, sent as reinforcement to Reshev 16 Oct by attacking up Tirtur Road from east; got 2/3ds of the way (7 miles) down road before repulsed
3		
4	LTC Yehuda Gejer	pulled out of line to tow roller bridge after Ben-Shoshan; detached during battles of early 17 Oct; resumed towing morning of 18th with Tirtur now open, reached canal at last light with bridge mile north of pontoon bridge, attacked Missouri from Lexicon to ne on 21st; heavy losses as atk fortified int position with just tanks (22)
5		probably unit which attacked Tirtur on 17th and Missouri from the south on the 21st; heavy losses
6	Uz?	att to Reshev for crossing op; one co up Akavish, escorted Matt's bde back to crossing then was destroyed at TLX, one co tried to go up Tirtur; destroyed near TLX, one co w TF Shuren
7	LTC Amran Mitzna	lead bn in Reshev advance; surrounded at Schick-Lexicon; retreated with great losses; Mitzna badly wounded in leg
8	LTC Avraham Almog	follow on bn to Mitzna's; decimated at TLX, Almog replaced Sheul Shalev, KIA several days before 15 Oct; ops off LT Zeev Lichtman
9	MAJ Shaya Beitel	Beitel had just assumed command, 3d in line after Mitzna and Almog, mission to move up Tirtur; devastated at TLX and Beitel wounded; CPT Gideon Gilad took over remnants; att to TF Shuren to clear Tirtur; CPT (MAJ?) Gabriel Vardi conducted one of final attacks on TLX on morning of 16th

Figure 28

NOTES ON IDF UNITS CONTINUED

10	LTC Yoav Brom	Sharon's divisional recon battalion, reinforced with additional tanks; Brom KIA at TLX 16 Oct 73, discovered gap in Egyptian lines
11	LTC Schmilik	2 para co's (from 23rd Para Bde?) [para recon br? Rabinovich 375]
12	Major Natan Shuren	2 para co's, 106mm RR co on jeeps, companies (made up of recalled vets- Rabinovich 375), attacked TLX at 0200, 16th, with remnants of 40th Tk Bn
13	Shaked	
14	LTC Dan	1st troops across canal
15	LTC Dan Zvi (Ziv?)	2d troops across canal- had to wait for round tip of half tracks- Akavish blocked, portion of Matt's brigade sent down Akavish on morning of 16th escorted by Ben-Shoshan's battalion on half-tracks- forced to turn back
16	MAJ Ze'evik	original commander LTC Assaf Yagun, POW 8 Oct 73, MAJ Ehli acting cdr, LTC Mula, bn cdr KIA 11 Oct, Ze'evik replaced from div staff
17	LTC Natan	Natan wounded 19 Oct, commanded from stretcher in M113 through CPT Nitzan
18	LTC (Ma'?) Giora Lev	escorted Gilwas to Sharon then his 14 tanks were ferried across canal to support Matt's bde and destroy SAM sites. listed on Adan's map as being in attack on 25th Bde as part of Nir's Bde, Lav WIA 19 Oct, replaced by MAJ Micha
19	LTC Amir Yoffe	Originally part of 14th Bde on 6-7 Oct, 20 tanks on 8 Oct, transferred to Karen's bde on 8 Oct as a reinforcement, returned to Amir's bde, attd to Reshev holding Shick Road line for most of Chinese Farm battle
20	LTC Ehud Barak	Battalion composed of soldiers in USA when war started, supported 35th Bde attack down Tirtur on 17 Oct, Barak later PM of Israel, started with 38 tanks, 10 Centurions, 10 Patton's, and 10 APCs, joined Adan on 13 Oct 73
21	MAJ Ze'ira	Original commander LTC Haim Adini wounded in charge on 8 Oct

Figure 29

NOTES ON IDF UNITS CONTINUED

22	LTC Lapidot	Originally a 2 company TF in Amir's bde on 6 Oct, fought on northern flank until assigned to Adan on 10 October
23	LTC Elanochi	half-track mounted infantry; asst after 8 Oct
24	LTC Elashiv Shmisk	Centurion tanks, helped destroy 25th Bde, reached canal west bank near Suez right before ceasefire
25	LTC Nafum Zakem	lead advance on Suez city
26	LTC Z Artzi	Original commander, Dan Sapir, KIA 8 Oct 73, detached holding Zinna position north of crossing sector, returned to div 20 Oct, Artzi KIA 21 Oct 73
27	LTC Yitzhak Mordiscal	890th Parachute Battalion, attacked Chinese Farm early on 17 Oct 73 with great losses (50 percent in some companies)
28	MAJ Ivan	mechanized recon bn, mounted on 15 BTR-50s captured in 1967, 150 soldiers
29	Yaya	
30	Yossi Yoffe	third battalion of Matt's brigade, attached to Adan near end of campaign to take Suez city—had been in north near Budapest then helicoptered into bridgehead, fought in Suez city
31		only mentioned in Suez 73 as attached to Reshev for crossing operation, also mentions another separate mech bn attached to Reshev
32	LTC Ya'acov Hladai	attached to Adan's division near end of war, 80 men, fought in Suez city

Figure 30



Figure 31

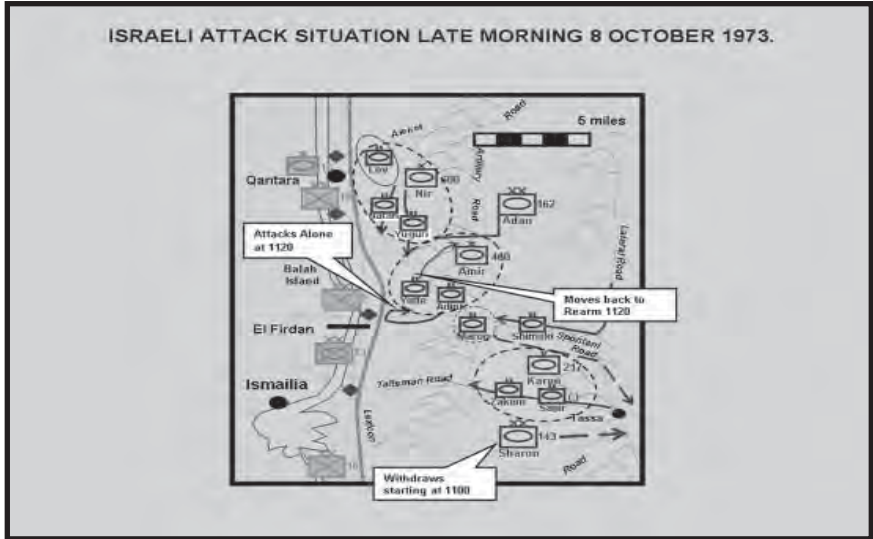


Figure 32

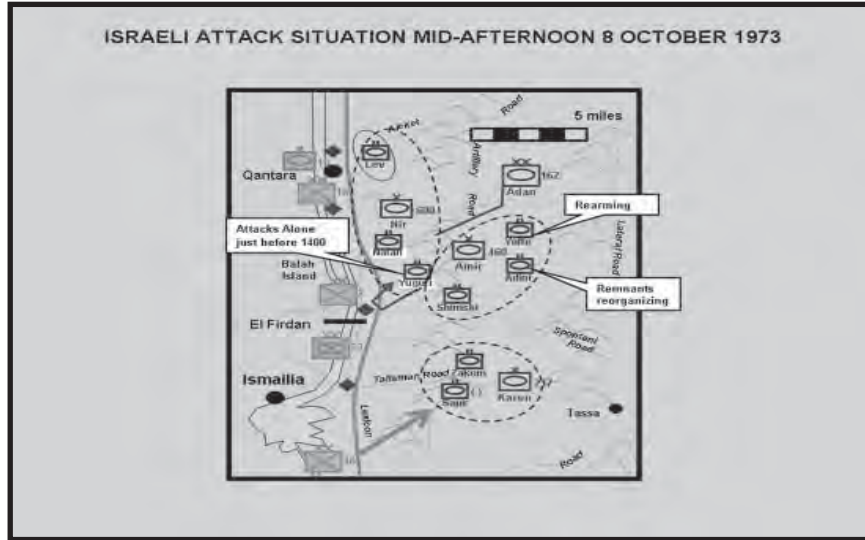


Figure 33



Figure 34

Asymmetric Warfare and Military Thought

Adam Lowther, PhD—Columbus State University

History is marked with the contributions of military chroniclers, historians, strategists and tacticians. In both East and West, men have long-sought to understand the soul of battle and the art of victory. From the earliest writings of the great Chinese strategist and tactician Sun-tzu, to Colonel John Boyd's recent development of the OODA Loop, every aspect of warfare has experienced close examination.¹ With the evolution of government and technology has come the evolution of warfare. Rather than adding to the vast body of military theory, this article examines a number of important works in an effort to determine if, in fact, classic military theory holds the key to a better understanding of modern asymmetric conflict.

Contrary to the work of analysts and scholars examining asymmetric conflict, I argue that many of the strategic and tactical concepts of modern asymmetry are simply restatements of concepts developed decades, centuries, and millennia ago. What is often mistaken for innovation is the rediscovery of forgotten ideas modified by the application of new technology. In assessing prominent works, the focus is not on the primary theoretical developments in each treatise, but on those aspects of military theory relevant to asymmetric conflict. Often, the concepts highlighted are ancillary to the main theoretical focus, but illustrative of the author's conceptual understanding of asymmetry in warfare.

The theoretical developments of asymmetry have taken distinctly divergent paths in the East and West. Developing first in the East, asymmetric means have long dominated Eastern military theory. The same cannot be said of military theory in the West. In the East, strategists developed concepts along a much different line than their Western counterparts. Eastern warfare, from its earliest theoretical conception in Sun-tzu's, *Art of War*, written in the fifth century B.C., to the more recent works of Mao Zedong and Vo Nguyen Giap, have long emphasized defeating an adversary with minimal direct combat.

In distinct contrast, Western theorists have long emphasized the significance of a direct collision between opposing armies. In an environment dramatically different from that of the East, Western warfare developed with a distinct bias in favor of the decisive battle epitomized in Carl von Clausewitz's, *On War*. Conflict in the West has, however, seen the development of strategic and tactical doctrine similar to those dominating Eastern military theory. The early Roman strategist Vegetius emphasized the use of asymmetry in warfare in the decades before the collapse of the Western Roman Empire.

In light of the distinct differences in the development of Eastern and Western military theory, the two are treated independently in the pages that follow. With the East's development of asymmetric theory, Western states, particularly the United States, should not find it unusual that insurgents in Afghanistan and Iraq utilize their current tactics. Abu Musab al-Zarqawi and Osama bin Laden likely never read the work of prominent Eastern military theorists, yet both men utilize the very tactics developed by Sun-tzu, Chairman Mao and General Vo. More than two millennia of conflict between East and West should have certainly led to a convergence of military theory. This is not, however, the case. Where Sun-tzu played a major role in the development of Mao's "mobile guerrilla warfare," Clausewitz and other Western strategists were unfamiliar with his work. Much the same can be said of Eastern theorists and their familiarity with Western military theory.

Because East and West took divergent paths in the development of military theory, each is treated independently, beginning with early Western military thought. From there I move to the work of early Eastern military theorists. The article then progresses to the current day, examining the development of military theory in both the East and the West. In addition to examining those works relevant to modern asymmetric conflict, influential Western works, which offer little to the development of the West's understanding of asymmetry, are, however, briefly discussed in order to highlight the evolution of Western military theory.

In the broad discussion of force transformation for which this article is written, there are three key principles I wish to highlight.

1. The form of conflict the United States is likely to face in the coming years (asymmetric) is not new; rather it is conflict's oldest form.
2. Non-Western cultures have a highly developed strategic and tactical history of asymmetric conflict. With the United States likely to face non-Western adversaries in future conflicts and with the United States' military supremacy likely to remain intact for decades to come, adversaries are likely to rely heavily on **traditional** asymmetric means when confronting the United States.
3. Conventional conflicts are, in fact, an anomaly in the history of the American use of military force. In the more than two hundred cases in which American forces were deployed to zones of conflict, fewer than a dozen can be considered conventional conflicts. With the dominant role asymmetric conflict has played in American military history, the United States needs to maintain a force prepared to achieve victory against likely adversaries, i.e., asymmetric actors.

Early Western Military Thought (Herodotus, Thucydides and Xenophon)

Strategy is derived from the Greek term *strategos*, which is defined as the art of the general. As the developers of strategy, and conversely tactics, it is with the work of the classical Greek historian Herodotus that Western military thought must begin. Herodotus was not a military theorist as are many who followed him. He was the “father of history,” as the great Roman politician and orator Cicero called him. It is primarily from Herodotus that the modern world understands the causes, events, and results of the war between Greece and the Persian Empire which began in the middle of the sixth century B.C.² Herodotus, in addition to elaborating the reasons for Cyrus’ invasion of Greece, provides his readers with an understanding of the strategy and tactics utilized by the Greeks and their Persian adversaries.

What makes Herodotus significant is the understanding he provides of the Greek military system. Like his younger contemporary Thucydides, historian of the Peloponnesian War, Herodotus provides detailed accounts of the plans, stratagems and tactics the Greeks utilized against a superior adversary.³ According to Herodotus, Greek warfare was based on the hoplite, an infantryman drawn from the yeomanry of the Greek city-states. Heavily armored and carrying a long spear and short sword, the hoplite fought in the phalanx, a tightly packed infantry formation usually eight rows deep. After marching into close proximity to an adversary the phalanx would charge using its crushing weight and protruding spears to break the ranks of the enemy. For nearly a thousand years the hoplite protected Greece from invaders.

Greeks, dependent upon the hoplite, were accustomed to conventional warfare. As Herodotus explains, Athens and its allies never looked to asymmetric means for a defense against a significantly larger Persian invasion force during their protracted conflict. The deciding events in the prolonged war between Greece and the Persian Empire were the battles of Marathon and Salamis. In both battles, outnumbered Greeks used the weight of their heavy infantry (Marathon) and sturdy triremes (Salamis) to defeat larger Persian forces in conventional combat.

Thucydides’s *History of the Peloponnesian War* offers an account of the war between Athens and Sparta (431-404 B.C.) in a fashion similar to that of Herodotus. Much like his contemporary, Thucydides provides an account of the war’s causes, manner in which it was fought, and the outcome. Thucydides’s history provides little evidence that the Greeks, the dominant Western society at the time, understood anything other than conventional warfare. Xenophon’s *Anabasis*, which offers an account of the expedition originally led by Cyrus the Younger to depose Artaxerxes II of Persia and Xenophon’s subsequent withdrawal of

Greek forces from deep within enemy territory, provides an additional account of the strategy and tactics utilized by Greek hoplites.⁴ Again, the development of asymmetric means is not apparent. Greece, as the cradle of Western civilization, rarely faced an adversary employing tactics similar to modern asymmetric actors. Instead, Greeks usually found themselves fighting one another or their nemesis, the Persians. The success of the Greeks against the Persians and the acceptance of a set style of battle in internal conflict led to strategic and tactical stagnation within Greek warfare.

It was not until the conquest of Greece by Phillip II of Macedon and his son, Alexander the Great, that Greek warfare experienced significant modification. Alexander, culturally Greek, but a native of the Macedonian plains, added cavalry to a modified phalanx and developed tactical formations with greater mobility. As the classical Greek historian Arrian explains, it was Alexander's modifications to classical Greek tactics and his exceptional leadership that led Alexander to conquer much of the known world.⁵ The tactical modifications of Alexander enabled Greek culture and power to reach its zenith, but stagnation once again set in and Greece lost its preeminent position in the Western world when, at the battle of Pydna (168 B.C.), Perseus of Macedon was defeated by the Roman consul Lucius Aemilius Paulus. Maneuverability proved the deciding factor as the Roman Legions proved more than a match for the Macedonian phalanx.

Roman Warfare (Polybius, Livy, Caesar, Josephus and Vegetius)

With the defeat of Macedon and the Greeks at the battle of Pydna (168 B.C.), Roman power quickly reached its zenith. In addition to waging war against Macedon, Rome continued its conflict with Carthage, which began with the First Punic War (264-241 B.C.). After defeating Carthage in what was primarily a naval war, Rome gained preeminence in the Mediterranean giving Rome the economic power needed to continue its expansion throughout Europe, North Africa, and the Near East. In addition to toppling Carthage from its dominant position in the Mediterranean, the First Punic War brought Hamilcar Barca to power setting the stage for the Second and Third Punic Wars (218-201 B.C.).

Polybius, the classical Greek historian and scholar, also served as tutor to Scipio Africanus, the Younger, and accompanied him on his campaign in North Africa in which Carthage was razed to the ground. Polybius's account of the Punic Wars offers the first account of Roman military strategy and tactics.⁶ Rome, unlike the Greek city-states it conquered, found itself in conflict with various adversaries employing a divergent set of strategies and tactics. From the Goths in modern-day France to Carthage in North Africa, Roman Legions succeeded in

defeating numerous adversaries because they continued to adapt to ever-changing circumstances. According to Polybius and Livy, a later Roman historian of the Punic Wars, the greatest advantage a Roman Legionnaire possessed was his superior training and discipline.⁷ Throughout much of Roman military history, the Legions, dispatched to conquer new lands and quell rebellion in unruly provinces, faced enemies that often maintained a significant numerical advantage and, with equal frequency, refused to give battle.⁸

Rome, like the Greek city-states, depended largely on infantry and close-quarters combat to destroy an adversary's forces. When Hannibal, commander of Carthaginian forces, crossed the Alps into northern Italy (218 B.C.), Roman forces were caught off guard by the risk Hannibal had taken in crossing the Alps in the dead of winter. Racing from Sicily to meet Hannibal in northern Italy, the consul Sempronius Longus, after an exhausting march of forty days, found Hannibal's forces on the west side of the Trebbia River. Initiating the battle, Hannibal sent his light cavalry across the frozen river against the Romans. The Carthaginians feigned a route in what is one of the East's greatest tactical developments, the Parthian shot, luring pursuing Romans across the Trebbia where they were cut down by heavy cavalry and infantry.⁹ Throughout Hannibal's march across the Italian peninsula during the Second Punic War (218-217, 218-204 B.C.), Hannibal acted unexpectedly, giving battle only when he had carefully planned for victory.

After Rome's defeat at Trebbia, Hannibal marched south where the newly-elected consul Gaius Flaminius was set to ambush the Carthaginians at Arretium. Hearing of the ambush, Hannibal marched around the Romans forcing them to pursue his army. At Lake Trasimene, Hannibal ambushed the consular army annihilating the only force standing between Hannibal and the capital.¹⁰ After being badly defeated in two battles in which Hannibal had utilized asymmetric tactics, Rome elected Fabius Maximus dictator. This proved a fortunate turn of events for Rome because Fabius had long advocated refusing battle to Hannibal. Instead, he implemented a strategy, which sought to starve and harass Hannibal until he was forced to leave the Italian peninsula. Fabius's scorched earth tactics quickly proved effective. In concert with this policy, Fabius harassed Hannibal's lines of supply and communication. When Hannibal sought to bring the Romans to battle, they quickly dispersed and retreated to the hills and mountains.

The effectiveness of Fabius's strategy and tactics proved little to the people of Rome, who found it contemptuous to refuse battle to an enemy. The effectiveness of Fabius's methods is unquestionable and led to the development of the term "Fabian tactics" as a description for various asymmetric tactics. For the West, the campaign of 218-217 B.C. marked the first time Rome developed a strategic plan

built on the utilization of asymmetric means. The developments of Fabian were, however, short-lived as Rome quickly returned to conventional warfare.

After nearly defeating Hannibal without having fought a single battle, Fabius was replaced by the consuls Lucius Aemilius Paulus and Caius Terentius Varro who, leading the largest Roman army ever assembled (70,000 men), set out to force Hannibal into a decisive battle. The Roman and Carthaginian armies met near the Apulian village of Cannae where, in one of history's greatest battles, Hannibal drove the Roman cavalry from the field, enabling his cavalry and heavy infantry to surround the Romans. From that point, the Legionnaires were forced in on themselves, creating such a tightly packed mass that they could not draw their weapons. At the hands of a smaller Carthaginian army, 50,000 Romans perished. Cannae was the greatest defeat ever suffered by Rome.¹¹

Rather than returning to the strategy and tactics of Fabius, Rome raised a new army and continued the conventional conflict that had, thus far, proven disastrous. For another twelve years Hannibal fought the Romans in Italy and Iberia before suffering his lone defeat at the battle of Zama (202 B.C.), which ended the Second Punic War. With the defeat of Hannibal, Rome rapidly grew in wealth and power. And with the growing power of Rome came its expansion into the civilized and uncivilized world where the Legions fought adversaries employing tactics dramatically different from their own.

Julius Caesar, perhaps better than any other Roman commander, understood the methods of the uncivilized tribes in the West. After nine years of campaigning in Gaul, Germania and Britain, Caesar had conquered much of Europe and created an efficient Roman military system, which depended on the superior training and discipline of its Legionnaires to defeat tribal armies fighting on their home soil and at a numerical advantage. Caesar's *The Gallic Wars* provide a detailed account of the people and campaigns faced by Caesar and his Legions.¹²

A prolific chronicler of his experiences, Caesar illustrates to the modern reader why he is often considered one of history's great captains, yet he offers relatively limited insight into his strategic and tactical developments. The same is true of his other great work, *The Civil Wars*, in which he details the collapse of the Triumvirate and his own rise to power.¹³ Although Caesar transformed the Legion into a professional army that — unlike the Legions of the Punic Wars—maintained its Legionnaires for many years, developing the most skilled and disciplined soldiers in the world, Caesar wrote as a historian of his conquests leaving those who came after him to their own devices when extracting strategic and tactical insights from his work.

Rome's expansion throughout Europe and the Mediterranean led to frequent and often prolonged conflicts between occupying forces and native populations.

Among the most significant of these conflicts was the Great Jewish Revolt (66-73 A.D.), which was chronicled by the Jewish rebel-turned-Roman citizen and historian, Josephus. Judea, a province of the Roman Empire since 6 A.D., chafed under the rule of Roman procurators who forced a devout Jewish people to worship or pay tribute to Roman deities. Led by John of Giscala and Simon ben Giora, Jewish rebels executed a well-crafted asymmetric campaign against the superior forces of Cestius Gallus, whose Legion was nearly obliterated at Beit-Horon. According to Josephus, the Jewish revolt saw early success as its small bands of rebels attacked isolated Roman garrisons utilizing tactics similar to those employed by Fabius Maximus against Hannibal.¹⁴ Emperor Nero responded to the defeat of Cestius by sending Vespasian and 60,000 men to quell the Jewish revolt. By 66 A.D. Vespasian controlled northern Judea, which suffered near total destruction at the hands of the Romans.

Caesar, in his campaigns in Gaul, developed an effective strategy for combating the asymmetric tactics of the Gauls: depopulation. On occasion, Caesar killed every man, woman and child in a conquered region or sold the surviving women and children into slavery. By depopulating an area, Caesar denied enemy troops the logistic support necessary for sustaining viable opposition to Rome. Caesar's tactics also discouraged potential adversaries from confronting the superior might of the Roman army.

Utilizing the tactics of his predecessor, Vespasian depopulated much of northern Judea, with many of Caesar's strategic goals in mind. It was not, however, until 70 A.D. that Titus Flavius, son of the newly-crowned Emperor Vespasian, conquered the Jewish capital of Jerusalem, effectively ending Jewish resistance.¹⁵ Josephus records that Titus's men razed the Temple of Solomon, burning the city, and slaughtering its citizens. In total, Judea lost a minimum of 750,000 inhabitants, with estimates ranging as high as 1.5 million. Josephus's account of the Great Jewish Revolt illustrates the manner in which Rome dealt with adversaries who themselves utilized asymmetric tactics. In many instances, those who faced Rome in conventional conflict suffered the destruction of their army and the death of their leadership, but the citizenry went unharmed. The harsher tactics of Caesar, Vespasian and Titus were reserved for adversaries who refused to stand and fight.

Aeneas the Tactician, writing in the fourth century B.C., was the first among Western strategists to systematically examine warfare.¹⁶ It was, however, not until Flavius Renatus Vegetius's *Epitoma Re Militaris* (A Summary of Military Matters) that a comprehensive strategic and tactical analysis of Roman warfare was written.¹⁷ Writing in the late fourth century A.D., Vegetius sought to restore

a declining Roman Empire to its former glory by reinvigorating the institution responsible for Rome's dominance of the known world: the Legions.

Epitoma Re Militaris, considered the greatest work of military theory before *Vom Kriege* (On War), offers a great deal more than a simple description of Roman warfare at its height. Beginning with the formation of the Legions, Book One offers criteria for the selection of Legionnaires and the training needed to restore the physical strength and skill to the once-feared Legionnaire, an area in dramatic decline by the end of the fourth century. According to Vegetius, "Victory in war does not depend entirely upon numbers or mere courage; only skill and discipline will ensure it." He continues, "We find that the Romans owed the conquest of the world to no other cause than continual military training, exact observance of discipline in their camps and unwearied cultivation of the other arts of war."¹⁸ While Vegetius was speaking to the Emperor Valentinian, as commander of the Legions, Vegetius's maxim is applicable to conventional and asymmetric actors alike. The success of al Qaeda is, in large part, due to the highly skilled and disciplined operatives that form the loosely organized network. This does not suggest that al Qaeda operatives are as equally well trained as American, British and other allied militaries but it does suggest that the level of skill and discipline achieved by al Qaeda enables the organization to wage a global terror campaign against the United States, while continuing to elude the combined efforts of the world's states.

Vegetius turns, in Book Two, to the organization of the Legions. Here he elucidates the formation of the Legions and supporting units, distribution of rank, promotion within the Legions and role of support personnel. While providing a detailed description of the Roman Legion's composition, Vegetius offers few insights into asymmetric conflict.

Book Three, however, proves Vegetius's most prolific contribution. Here he discusses military strategy and tactics, admonishing the Emperor and military leaders with maxims similar to those of Sun-tzu. It was because of the concepts and maxims offered in Book Three that Henry II of England, Richard the Lionheart, Ludwig the Just, Niccolo Machiavelli, Montecuccoli and Field Marshal Ligne considered *Epitoma Re Militaris* the single greatest work of military theory ever written. Vegetius begins by warning the Emperor against deploying large armies in the field. He notes that Rome seldom deployed more than two Legions (approximately 20,000 men) to an area of conflict. In a style similar to J.F.C. Fuller, Vegetius warns, "An army too numerous is subject to many dangers and inconveniences. Its bulk makes it slow and unwieldy in its motions; and as it is obliged to march in columns of great length, it is exposed to the risk of being continually harassed and insulted by inconsiderable parties of the enemy."¹⁹

Instead, Vegetius favors mobility over mass relying on the superior skill and discipline of the Legions to strike decisive blows at unexpected times and places.²⁰ During the reign of Valentinian, Rome's position remained precarious as the Legions, long in decline, no longer possessed the ability to defeat an adversary in conventional conflict.

Vegetius, understanding the weakness of the Legions, wisely suggests, "Good officers decline general engagements where the danger is common, and prefer the employment of stratagem and finesse to destroy the enemy as much as possible in detail and intimidate them without exposing our own forces."²¹ Reminiscent of Sun-tzu, Vegetius's preference for mobility, speed and deception illustrates a clear understanding of Rome's adversaries and the asymmetry of conflict.²² Vegetius does not stop with these suggested reforms. He further emphasizes the need for flexibility in strategic and tactical planning as well as in the mental agility of commanders. Continuing with his emphasis on flexible leadership, Vegetius admonishes commanding generals, in a fashion similar to Sun-tzu's maxim "know thy enemy and know thy self" stating, "It is essential to know the character of the enemy and of their principal officers – whether they be rash or cautious, enterprising or timid, whether they fight on principle or from chance, and whether the nations they have been engaged with were brave or cowardly." He adds, "Thus a vigilant and prudent general will carefully weigh in his council the state of his own forces and of those of the enemy, just as a civil magistrate judging between two contending parties."²³

From this point, Vegetius uses the remainder of Book Three for a detailed discussion of Roman order of battle, with one exception. Before offering a detailed description of conventional order of battle, Vegetius speaks to the veteran soldier saying:

He should form ambushes with the greatest secrecy to surprise the enemy at the passage of rivers, in the rugged passes of mountains, in defiles in woods and when embarrassed by morasses of difficult roads. He should regulate his march so as to fall upon them while taking their refreshments or sleeping, or at a time when they suspect no danger and are dispersed, unarmed and their horses unsaddled.²⁴ He should continue these kinds of encounters till his soldiers have imbibed a proper confidence in themselves...If the enemy makes excursions or expeditions; the general should attack him after the fatigue of a long march, fall upon him unexpectedly, or harass his rear. He should detach parties to endeavor to carry off by surprise any quarters established at a distance from

*the hostile army for the convenience of forage or provision. For such measures should be pursued at first as can produce no very bad effects if they should happen to miscarry but would be of great advantage if attended with success.*²⁵

Vegetius continues suggesting that a commander should sow dissension among the adversary's ranks in an effort to create discord in the opposing army and society.²⁶

In integrating asymmetric and conventional warfare in Book Three, Vegetius, like Fabius Maximus, illustrates an ongoing need for flexibility, which, in some instances, may call for pitched battle and in others strategic asymmetry. After examining many classical military texts in his effort to develop a comprehensive guide to warfare, Vegetius sees the need to encourage innovation within strategic and tactical doctrine. By the time Vegetius writes *Epitoma Re Militari*, the Roman Empire had split into East and West, with the Goths sacking Rome and the Legions suffering defeat at the hands of the Huns, Goths, Vandals and other tribes. The declining state of the Legions led Vegetius to ask, "Are we afraid of not being able to learn from others what they before have learned from us?"²⁷

Valentinian and subsequent emperors of the Western Roman Empire failed to adjust to the increasing pressure of northern tribes. In 410 A.D. Rome was sacked and from that point forward, the Western Empire rapidly declined. Had Rome reformed the Legions and developed an understanding of asymmetry introduced by the Goths and Vandals, perhaps history would have written a different end for the Roman Empire. The failure to adapt to the changing face of warfare doomed the once dominant empire to a fate from which it never recovered.

The End of Early Western Theory (Machiavelli)

The millennia following Vegetius saw significant evolution in warfare as the era of heavy infantry ended and that of heavy cavalry began. Soon after the final collapse of the Western Roman Empire in the sixth century, the mounted knight came to prominence as the dominant force in European warfare. And with the knight, came feudalism, which dominated Europe until the dramatic social changes brought on by the French Revolution (1789-1799) and the Napoleonic Wars (1804-1815). The millennia proceeding Vegetius also marked a decline in the development of Western military theory. It was not until 1520 that a significant treatise on warfare appeared in Europe. At this time the author of the widely read *Il Principe* (The Prince), Niccolo Machiavelli, penned what would be the last military treatise before firearms revolutionized warfare.

Machiavelli's *Dell'arte della guerra* (Art of War) sought to find the laws and principals of warfare by examining the work of Tacitus, Frontinus, Polybius, Xenophon, Livy and Vegetius.²⁸ Written in the form of a dialogue between the main character, Fabrizio Colonna, and a group of young men, the *Art of War* was read and admired by military commanders from Frederick the Great to Napoleon. Machiavelli's work, while widely read and admired, made little tactical impact on warfare. Much to Machiavelli's disadvantage, he failed to see the revolution firearms would bring to warfare. Instead, he advocated a form of warfare similar to that of early Rome. The Florentine's lack of vision left the *Art of War* less than a rival to his greatest work: *The Prince*.

New concepts are, however, introduced or reintroduced in some cases, into Western military theory. Among Machiavelli's greatest contributions is his advocacy of total warfare waged by citizen soldiers and national militias.²⁹ For the patriotic Florentine, conscription and the establishment of the militia, to confront the 16th century mercenary armies of the European monarchs, serves to imbibe nationalism among the citizens of a nation.³⁰ Much as in the *The Prince*, Machiavelli's conception of war as a no holds barred contest in which victory is the aim, leads him to reject conventional morality as a governing force in conflict. For Machiavelli, war creates its own morality which is based on values such as opportunity and expediency.³¹ Machiavelli's explicit rejection of just war proves a precursor to the development of *realpolitik* several centuries later.³² It also challenges the Western conception of war as an activity reserved for the nobility.

Book Five of the *Art of War* finds Fabrizio offering strategic and tactical advice to his young listeners, who, familiar with conventional conflict, find Fabrizio's advice exceptional. Here, Machiavelli distinguishes his thought from his contemporaries by advocating the use of deception, ambush, unpredictability, and stratagems as key tactical devices.³³ Unlike military commanders of Machiavelli's time, the Florentine sees little purpose in confronting an adversary in open combat, particularly if the adversary possesses superior strength.³⁴ Instead, Machiavelli focuses on the ends of war (victory) rather than the means by which it is fought. Thus, if asked: Do the ends justify the means? Machiavelli would respond with a resounding: Yes!

In both conventional and asymmetric conflict, combatants frequently take a Machiavellian position concerning the use of tactics, which many find objectionable.³⁵ The attacks of September 11, 2001, and Osama bin Laden's justification for them is a case in point.³⁶ Although neither is unique to any one form of warfare, the use of tactics that target non-combatants is increasingly becoming strategic doctrine for asymmetric actors as they adapt to the superior might of the

United States military and are forced to justify the means by which they achieve their ends.

Early Chinese Military Theory (Sun-tzu)

Older than Western civilization by more than a thousand years, the Sinitic world began its examination of warfare at a much earlier time than the West. By the Spring and Autumn Period (722-481 B.C.), China, the center of Sinitic civilization, developed a feudal system similar to that which developed in the West more than a thousand years later. The Spring and Autumn, and Warring States Periods that followed, were marked by continual warfare as competing kingdoms sought the conquest of their neighbors and the unification of China under one ruler.

It was sometime between the late Spring and Autumn and early Warring States Periods that Sun-tzu penned his famous treatise, *The Art of War*, for the King of Wu.³⁷ Warfare in China, by the time of Sun-tzu, was developed into a highly ritualized act with combatants expecting an adversary to meet on open ground for set piece battle. In those instances in which a weaker combatant refused to give battle, an attacking force would besiege an adversary retreating behind his city walls. Thus, *The Art of War* was revolutionary in the principles it introduced. Sun-tzu was the first strategist to develop a systematic treatise on warfare, which advocated radically altering warfare, rejecting conventional tactics.

He was not, however, the last. Sun-tzu's *The Art of War*, the writing of Wu-tzu, Ssu-ma Fa's *The Methods of the Ssu-ma*, *Questions and Replies Between T-ang T'ai-tsung and Li Wei-kung*, *Three Strategies of Huang Shih-kung*, and T'ai Kung's *Six Secret Teachings* were compiled by scholars of the Sung Dynasty as the *Seven Military Classics*.³⁸ Like *The Art of War*, these additional texts emphasize asymmetry and the Tao in warfare. Closely guarded for their military secrets, the *Seven Military Classics* were read by few kings, generals, and emperors.

Rather than discussing each of the *Seven Military Classics*, I focus on *The Art of War*, which receives the greatest attention in the West. It also plays a prominent role in the development of later Eastern and Western theory unmatched by the other six military classics.³⁹

Sun-tzu begins *The Art of War* by elaborating his general principles of warfare. Highest among these is the principle of winning without fighting. Here Sun-tzu warns commanders against seeking pitched battles. He counsels, "The highest realization of warfare is to attack the enemy's plans; next is to attack their alliances; next to attack their army; and the lowest is to attack their fortified cities. Thus one who excels at employing the military subjugates other people's armies without engaging in battle, captures other people's fortified cities without prolonged fight-

ing. He must fight under Heaven with the paramount aim of ‘preservation.’ Thus his weapons will not become dull, and the gains can be preserved.”⁴⁰ Chinese history is littered with the remains of costly conflicts in which Sun-tzu’s highest principle is violated with great and bloody force.⁴¹ Although considered one of China’s great works, *The Art of War* and the asymmetry it introduces to Chinese warfare has often fallen on deaf ears. As later sections will illustrate, it was not until the beginning of the 20th century that Sun-tzu’s work played a major role in the conduct of Eastern warfare.

Often credited with providing inspiration to modern asymmetric actors, *The Art of War* actually addresses conflict between states. In many instances, the ascription of concepts and tactics used by guerrillas, terrorists and other non-state actors to the work Sun-tzu is erroneous. Asymmetry, for Sun-tzu, enables conventional military forces to overcome their adversaries with the least loss of life and wealth. Sun-tzu’s purpose in writing is often overlooked.

To illustrate this point I turn to Sun-tzu’s general principles where he says, “Whenever possible ‘victory’ should be achieved through diplomatic coercion, thwarting the enemy’s plans and alliances, and frustrating his strategy.” He further adds, “Preserving the enemy’s state capital is best, destroying their capital is second best. Preserving their army is best; destroying their army is second best...For this reason attaining one hundred victories in one hundred battles is not the pinnacle of excellence. Subjugating the enemy’s army without fighting is the true pinnacle of excellence.”⁴² Throughout *The Art of War*, Sun-tzu emphasizes the need for self-control and the obligation of avoiding all engagements without first conducting detailed analysis of the economic, military and political circumstances in each of the adversarial states. As Sun-tzu says, “Warfare is the greatest affair of state, the basis of life and death, the Way (Tao) to survival or extinction. It must be thoroughly pondered and analyzed.”⁴³

Setting Sun-tzu apart from many modern asymmetric actors is his emphasis on rational action. Where many 20th century guerrilla movements and 21st century terror networks act based on a deep seated hatred of their perceived enemy, Sun-tzu warns against allowing personal emotions, such as anger and hatred, from influencing military decisions. When emotions direct action a ruler risks losing the mandate of Heaven, which Sun-tzu considers necessary for victory. This emotional and spiritual component of Sun-tzu differs significantly from the *realpolitik* of Machiavelli and the Islamic fundamentalism of Osama bin Laden.

For Sun-tzu, war is the proper use of *ch’i* (unorthodox) and *cheng* (orthodox). In his clear preference for the unorthodox Sun-tzu says, “Warfare is the Way (Tao) of deception. Thus although [you are] capable, display incapability to them. When committed to employing your forces, feign inactivity. When [your objec-

tive] is nearby, make it appear as if distant; when far away, create the illusion of being nearby.” He continues, adding, “If they are substantial, prepare for them; if they are strong, avoid them...If they are angry, perturb them; be deferential to foster their arrogance.” Sun-tzu concludes saying, “Go forth where they will not expect it.”⁴⁴ Colonel Douglas M. McCready juxtaposes warfare, as seen by Sun-tzu, and that of the West saying, “One difference between Sun-tzu’s approach and the American way of war can be seen as the difference between the Asian game of Go and the Western game of Chess. In Go, the opponents place their pieces so as to maximize their control and restrict their opponent’s options. The enemy loses pieces and the game by being outmaneuvered, not through direct attack. In Chess, the goal is to capture the opponent’s key piece, the king. This requires territorial control by capturing enemy pieces so they cannot threaten one’s own king and so that they cannot protect their own king.”⁴⁵

In making this distinction, McCready addresses one of the central differences between the conventional conflict of the West and the asymmetry of Sun-tzu: attrition. Interestingly, in *The Art of War*, Sun-tzu never discusses attrition as a fundamental element of warfare. Instead, he focuses on developing strategic and tactical concepts that seek to preserve one’s own economic, military and political assets. It is preservation, as a motivating force, that leads Sun-tzu to move away from the conventional tactics of his time and toward the asymmetry for which he is known. Sun-tzu’s most frequently quoted statement on leadership is a warning to aggressive and reckless commanders willing to suffer heavy casualties for sake of honor and pyrrhic victories. He warns, “Thus it is said that one who knows the enemy and knows himself will not be endangered in a hundred engagements. One who does not know the enemy but knows himself will sometimes be victorious, sometimes meet with defeat. One who knows neither the enemy nor himself will invariably be defeated in every engagement.”⁴⁶

Unlike Western theorists, who have long seen attrition as a key aspect of warfare, Sun-tzu’s emphasis on preservation, through asymmetric means, requires military commanders to act with a level of skill unnecessary in Western conflict. Where the Western military commander seeks to hone the skills of his men through repetitive drill and simplification of tasks, Sun-tzu seeks to move warfare to as much an intellectual activity as a physical one. This point is illustrated when he says, “[Simulated] chaos is given birth from control; [feigned] weakness is given birth from strength. Order and disorder are a question of numbers; courage and fear are a question of strategic configuration of power (*shih*); strength and weakness are a question of the deployment [of forces] (*hsing*).” Sun-tzu concludes, “Thus one who excels at warfare seeks [victory] through the strategic configuration of power (*shih*), not from reliance on men. Thus he is able to select men and employ strategic power (*shih*).”⁴⁷

Epaminondas, Sherman, Rommel, Patton, and MacArthur grasped the innate truth in Sun-tzu's principles, demonstrating the validity of the ancient Chinese strategist's concepts in their respective campaigns.⁴⁸ On the contrary, the strategic and tactical developments of Mao Zedong and Vo Nguyen Giap, while utilizing aspects of Sun-tzu's tactical innovations, fail to understand his larger conception of warfare.

The question then remains: What aspects of *The Art of War* are most relevant to current developments in warfare, and the conflicts in Afghanistan and Iraq? Simply stated, deception, according to Sun-tzu, is the Tao (Way) of war and the objective of conventional (American forces in Afghanistan and Iraq) and unconventional (Taliban and al Qaeda fighters) forces. Asked by the King of Wu, "The enemy is courageous and unafraid, arrogant and reckless. His soldiers are numerous and strong. What should we do?" Sun-tzu replied, "Speak and act submissively in order to accord with their intentions. Do not cause them to comprehend [the situation], and thereby increase their indolence. In accord with the enemy's shifts and changes, submerge [our forces] in ambush to await [the moment]. Then do not look at their forward motion nor look back to their rearward movement, but strike in the middle. Even though they are numerous, they can be taken. The Tao for attacking the arrogant is to not engage their advance front."⁴⁹ American forces in Iraq are experiencing the tactical application of Sun-tzu's reply. They, in turn, have not responded in kind. Instead, American commanders continue to rely on superior firepower, rather than deception.

Linear Warfare (Frederick II, Guibert, Beulow, Suvorov, Napoleon and Jomini)

By the end of the Thirty Years War and the creation of the Peace of Westphalia (1648), the musket and the cannon rapidly became the most important weapons in Western warfare. The *tercio*, a Spanish infantry formation of 3,000 men, one-third of whom bore muskets and two-thirds the pike, dominated European warfare in the 16th and early 17th centuries. Gustavus Adolphus, King of Sweden (1611-1632), recognized the emerging power of firearms and modified the *tercio* by employing two-thirds musketeers and one-third pike-men. He also placed cannons on mobile carriages giving his armies increased firepower and greater maneuverability. Gustavus Adolphus's innovations turned Sweden into a major European power while signaling the beginning of the new era of linear warfare. The strength of the *tercio*, like the phalanx, was in its mass. Firearms, however, required thinner ranks because of the need to increase the volume of fire. Gustavus Adolphus's death during the battle of Lutzen (1632) prematurely ended the career of the 17th century's most capable commander, yet the development of linear tactics continued in the century after his death.⁵⁰

From the Peace of Westphalia to the Seven Years War (1756-1763) Europe remained at relative peace with war kept from turning into pan-European conflict, as was true of the Thirty Years War (1618-1648). The Seven Years War once again brought much of the Continent and North America into conflict. Frederick II, the Great of Prussia proved to be the 18th century's most capable commander and a prolific writer of letters, manuals and military instructions. He did not, however, attempt a comprehensive analysis of war, as would come in the years after the defeat of Napoleon.

Frederick the Great, often considered one of history's great commanders, did not develop the powerful Prussian military system which dominated European warfare for more than two centuries. That credit belongs to his father, Frederick William I. Frederick the Great's contributions turned the Prussian Army into the most disciplined and skilled army on the Continent. He did so by molding Prussian peasants into unwavering soldiers who feared their officers more than the enemy.⁵¹

Frederick was a commander of his time, maximizing the efficiency of his troops, but also constraining his strategic and tactical developments to the capabilities of 18th century cannon and musket.⁵² He did, however, read Vegetius and classical theorists incorporating their thoughts into his own. The maxims of Frederick best illustrate the dichotomy of his time, where linear warfare dominated and the innovation and asymmetry of the classical world played a minor role in warfare:

1. Your strategy must pursue an important objective. Undertaking only what is possible and reject whatever is chimerical.
2. Never deceive yourself, but picture skillfully all the measures that the enemy will take to oppose your plans, in order to never be caught by surprise.
3. Know the mind of the opposing generals in order to better divine their actions, to know how to force your actions upon them, and to know what traps to use against them.
4. The opening of your campaign must be an enigma for the enemy, preventing him from guessing the side on which your forces will move and the strategy you contemplate.
5. Always attempt the unexpected: this is the surest way to achieve success.⁵³

Frederick's maxims can easily be mistaken for those of Sun-tzu because of their relevance to asymmetric conflict, yet the great Prussian commander rarely utilized his own strategy in such a manner. Instead, he fought linear battles relying on the superior discipline, skill, speed, maneuverability, and internal lines to defeat his French, Austrian and Russian adversaries. Frederick did, however, recognize the effect partisans could have on the costs of war, which he gained while fighting Austria. For Austria, Croatian partisans served as skirmishers and harassed enemy lines of supply and communication. The disproportionate effect they had during Prussia's two wars against Austria led Frederick to devise his maxims for fighting an adversary more than twice one's own strength:

1. Wage partisan warfare: change the post whenever necessary.
2. Do not detach any unit from your troops because you will be beaten in detail. Act only with your entire army.
3. If you can throw your army against the enemy's communications without risking your own magazines, do so.
4. Activity and vigilance must be on the watch day and night at the door of your tent.
5. Give more thought to your rear than to your front, in order to avoid being enveloped.
6. Reflect incessantly on devising new ways and means of supporting yourself. Change your method to deceive the enemy. You will often be forced to wage a war of appearances.
7. Defeat and destroy the enemy in detail if it is at all possible, but do not commit to pitched battle, because your weakness will make you succumb. With time—that is all that can be expected of the most skillful general.
8. Do not retreat to places where you can be surrounded: remember Poltava without forgetting Stade.

Frederick, often outnumbered two to one, violated his maxims regularly. He lost as many battles as he won, yet he successfully waged war against the three most powerful continental powers (France, Austria and Russia) and expanded the size of Prussian territory while building an army that became the envy of Europe. Many reasons may explain Frederick's failure to adhere to the maxims he estab-

lished.⁵⁴ What remains clear is that the concept of asymmetry in conflict did not perish during the era of linear warfare.

Jacque Antoine Hippolyte, Comte de Guibert, was a contemporary of Frederick who left a lasting impression on Western warfare. In his *Essai generale de tactique* (1772), Guibert suggests that warfare is an action of the unified forces of the state, rather than the army alone.⁵⁵ In order to sustain war waged by the state, Guibert saw conscription as the sole method of gaining the necessary soldiers. The expense of Guibert's reforms called on an already overextended treasury to feed, clothe and arm an army larger than ever seen in Europe. Thus, he suggests "war should feed war." His final reform called for creating autonomous military units each with all the necessary men and equipment to wage war. Rather than moving as one large mass, as armies of the day were expected to do, each self-sufficient unit was capable of feeding itself and fighting.

Guibert, much like his Prussian contemporary Adam Heinrich Dietrich von Bulow, saw war as an activity of the state. Where monarchs once waged war with private armies funded with the revenue from their estates and the funds granted by the nobility, the taxing authority of the state vastly increased the available funds for warfare. Guibert and Bulow saw the increasing scope of war and the role of state governments in waging war. In *Geist des neuern kriegssystems* (1799), Bulow prophetically declares that states will wage war to expand their perceived territorial boundaries.

Neither Guibert nor Bulow saw war as an activity of disaffected groups within the state as it has become in the era of asymmetry. The concept of a challenger rising to contest the state was inconceivable. Thus, both men expected war to continue moving into the sphere of the state with larger states overwhelming their smaller neighbors by sheer might.⁵⁶

The Comte de Guibert and Baron von Bulow served their respective nations as military commanders achieving distinguished careers. Neither, however, is considered among history's great captains. Their contemporary, Generalissimo Aleksandr Vasilievich Suvorov, achieved what only Alexander the Great had before him. In a career lasting more than five decades and more than two dozen major battles, Suvorov never suffered defeat.⁵⁷ At a time when the Russian military was mired in tactics of an age long since passed, Suvorov, as a young major, began instituting reforms as commander of the Suzdal regiment, which later ensured victory in all of his many battles against the Poles, Turks and French.

Eighteenth-century Russian tradition expected the nobility to serve in either the military or bureaucracy. At birth, many Russian noblemen were enrolled in the Russian army, waiting until they were teenagers to begin their service. The advantage of enrollment at birth was rank. Often, boys not old enough to marry

entered their regiments as captains and majors having earned rank and seniority while they were children. Suvorov, however, took a different path and was not enrolled in the army until he was a teen, which left him to begin his service as a private. He quickly showed his abilities in battle winning respect and promotion. Suvorov also saw the cronyism of the Russian army and the costs the Russian soldier bore for having an incompetent officer corp.

After many years of service Suvorov was promoted to major and given command of the Suzdal Regiment, which he soon began to transform into the Russian army's best fighting unit. Where most Russian soldiers were trained in elaborate parade marches, Suvorov spent countless hours leading his men on long and wearying marches. He improved the marksmanship of his men and trained them using simulated combat. Suvorov rationalized the harsh punishment of soldiers and improved their food and clothing. Rather than pocketing the funds the Tsar sent for the support of the regiment, as was the practice, Suvorov spent it on improving the lives and skill of his men.⁵⁸ When Suvorov's men finally faced an adversary in Poland, they arrived five weeks early and repeatedly defeated larger Polish forces, fighting on their home soil.

From 1768-1773 Suvorov spent much of his time fighting Polish rebels who struck unexpectedly and then quickly dispersed. Spending his time in Poland hunting the famed Polish nationalist, Francis Pulawski, Suvorov developed tactical insights which he later used to defeat the numerically superior forces of the Turks and French.⁵⁹ For Suvorov, skill, discipline, speed, mobility, secrecy of action, surprise, and morale were indispensable components of victory. Often accused of fighting without tactics, Suvorov never failed to adapt to the conditions and adversary he faced. Lacking artillery, siege equipment, cavalry, or men never proved problematic because the great commander never failed to adapt to the current set of circumstances. This willingness to change led Suvorov to defeat Polish, Turkish and French adversaries who each fought in a very different manner.

Little known in the West, Aleksandr Suvorov's *Science of Victory* served as an operational, strategic and tactical manual for the Russian army during the life of the Generalissimo.⁶⁰ Although it quickly fell out of favor with those who served under and came after him, Suvorov's treatise is among the few works written during the era of linear warfare which proves useful in the current era of asymmetry. His principles of discipline, skill, speed and mobility are similar to those of Vegetius. Secrecy, surprise and morale played a major role in victory, which are also of great importance in the writing of Sun-tzu and Vegetius. Among the three theorists, Suvorov alone applied his theory to actual warfare.

With the death of Aleksandr Suvorov on May 18, 1800, there were no great captains left to challenge the growing success of Napoleon Bonaparte. The “Little Corporal” was in France when his subordinates were defeated by Suvorov at Cassano, Trebbia and Novi. In lamenting the fact that he never faced Suvorov, Bonaparte marked the passing of the one man capable of defeating him in battle.⁶¹ Much like Suvorov, Bonaparte was a prolific writer of correspondence, law, orders, and other articles. From his writing it is possible to understand Bonaparte’s thoughts on asymmetry in warfare.

In order to understand Napoleon Bonaparte, context is needed. Bonaparte, perhaps more than any commander before or since, with the exception of General George S. Patton, read and understood the treatises, histories and memoirs of great captains such as Alexander, Hannibal and Caesar. The influence of the past led Bonaparte, early in his career, to place preeminence in warfare on the abilities of a commander. Victory, thought Bonaparte, can be won in any battle with an exceptional captain.⁶² Throughout his campaigns, Bonaparte rarely maintained an army equal in size to that of his adversaries. Consistently outnumbered, the French captain relied on the superior fighting quality and *élan of La Grande Armée* which could march faster, fight harder, and strike with greater secrecy than any army of the day. Warfare, for Bonaparte, was as the Comte de Guibert predicted. The full might of the French state waged war against the monarchies of Europe.

Once crowned Napoleon I, the Emperor sought to bend the might of France to his will. According to Napoleon, “The art of war is a simple art and everything depends upon execution: there is nothing vague, everything is common sense, and nothing about it is ideological. The art of war consists, with an inferior army, of always having more forces than your enemy at the point where you attack, or at the point which is attacked; but this art cannot be learned either from books or from practice. It is feeling of command which properly constitutes the genius of war.”⁶³ Napoleon clearly believed, above all, that genius, or the lack of, won and lost battles. He also makes a point Carl von Clausewitz gains great fame for in the decades following the end of the Napoleonic wars: superior force at the decisive point of battle. Traditionally considered a maxim of conventional conflict, it also plays a role in the asymmetric conflicts of the 21st century. The ambush is little more than combining surprise with superior force at the decisive point of attack. It is particularly important to follow Napoleon’s maxim when in an inferior position since it is possible to overwhelm an adversary bit by bit.

While Napoleon fought what may be considered wars devoid of an asymmetric element, he continually relied on tactics relevant to the modern asymmetric actor. Similar to the writers discussed thus far, Napoleon placed great value in

discipline, intelligence, secrecy, deception, speed, mobility, and unity of command. Napoleon, speaking of discipline, states, “The success of an army and its well-being depend essentially upon order and discipline, which will make us loved by the people who come to greet us and with whom we share enemies.”⁶⁴ He says of intelligence, “Study the country: local knowledge is precious knowledge that sooner or later you will encounter again.”⁶⁵

When speaking on the subject of secrecy and deception Napoleon advises, “In war, intellect and judgment is the better part of reality. The art of the Great Captains has always been to...make their own forces appear to be very large to the enemy and to make the enemy view themselves as being inferior.”⁶⁶ In correspondence with Marshall Massena, Napoleon adds, “You know very well...the importance of the most profound secrecy in such circumstances...You will employ all the demonstrations and appearances of movement that you judge convenient to deceive the enemy about the real strategic objective and persuade him that he will first be attacked by you.”⁶⁷

Of speed, Napoleon says, “Great operations require speed in movements and as much quickness in conception as in execution.”⁶⁸ Mobility was also one of *La Grande Armée*'s most important attributes since it was mobility that enabled Napoleon to defeat Allied armies piecemeal on multiple occasions. Finally, unity of command, which Napoleon considered a necessity, enabled the French to defeat the Allies who failed to unite their numerically superior forces under the command of one captain.⁶⁹

In the aftermath of the Napoleonic wars, two of the greatest military theorists penned their influential works. Carl von Clausewitz, who served as chief of staff to General Thielmann during the war, wrote the West's most widely read treatise while serving as director of the War College of Berlin. *Vom Krieg* (On War), published in 1832 by his wife after Clausewitz's premature death, has served as a fundamental text for young officers from the United States to Russia for more than a century. A contemporary of this Prussian theorist, Baron Antoine Henri de Jomini served as chief of staff to Marshall Ney, and, like Clausewitz, entered the service of the Tsar during Napoleon's invasion of Russia. Jomini went on to organize the Russian staff college and continued in the service of the Tsar until his retirement in 1829. It was during his retirement that Jomini wrote prolifically. He is perhaps best known for *Précis de l'art de la guerre* (The Art of War) (1836), which is, unquestionably, the greatest treatise on linear-geometric warfare ever written.

Although *On War* appeared four years before *The Art of War*, it is to the latter that I now turn. Jomini was perhaps the 19th century's greatest student and rationalist of linear warfare. Beginning with his early writings, Jomini set out to

establish a set of universal principles of war. In his effort to make a “scientific” study of warfare, Jomini developed concepts such as “theatre of operations” and “zone of operation” as well as others.⁷⁰ Jomini’s efforts led to a preoccupation with strategy as he sought to develop a set of prescriptive rules for the conduct of war.⁷¹ Ultimately, Jomini would conclude that strategy is the key to warfare and is, in fact, governed by universal principles. The key element in war, said Jomini, is to have the greater mass at the decisive point of battle.⁷² Jomini was not alone in arriving at this decision. Frederick the Great, Napoleon and Clausewitz had all seen the utility of such action. Strategy, according to Jomini embraced the following points:

1. The selection of the theatre of war, and the discussion of the combinations of which it admits.
2. The determination of the decisive points in these combinations, and the most favorable direction of operations.
3. The selection and establishment of the fixed base and of the zones of operation.
4. The selection of the objective points, whether offensive or defensive.
5. The strategic fronts, lines of defense, and fronts of operations.
6. The choice of lines of operations leading to the objective point or strategic front.
7. For a given operation, the best strategic line, and the different maneuvers necessary to embrace all possible cases.
8. The eventual base of operations and the strategic reserves.
9. The marches of armies considered as maneuvers.
10. The relation between the position of depots and the marches of the army.
11. Fortresses regarded as strategic means, as a refuge for an army, as an obstacle to its progress: the sieges to be made and to be covered.
12. Points for entrenched camps, *tets de pont*, etc.,...
13. The diversions to be made and the large detachments necessary.⁷³

Attempting to apply the work of Jomini to asymmetric conflict is precarious. Jomini was a patron of linear warfare and concerned with the combat of his day, which consisted of national armies applying linear tactics to create the greatest volley of fire in a given area. Little was he concerned with partisan warfare, despite having served as a senior staff officer under Marshall Ney and Napoleon, who both spent a great deal of energy dealing with the morass that developed in the Peninsular War (1808-1814).⁷⁴ In developing a universal set of principles for war, Jomini saw war much like a game of chess with each piece known in advance and placed on the board so that its movements can be predicted well ahead of the next move.

Although it was never the intent of Jomini to develop concepts applicable to asymmetric conflict, *The Art of War* offers some useful advice for the asymmetric actor. Whether a conventional military force or a terrorist network, Article XIII concerning military institutions offers twelve essential conditions for making a perfect army:

1. To have a good recruiting system;
2. A good organization;
3. A well-organized system of national reserves;
4. Good instruction of officers and men in drill and internal duties as well as those of campaign;
5. A strict but not humiliating discipline, and a spirit of subordination and punctuality, based on conviction rather than on the formalities of the service;
6. A well digested system of rewards, suitable to excite emulation;
7. The special arms of engineering and artillery to be well instructed;
8. An armament superior, if possible, to that of the enemy, both as to the defensive and offensive arms;
9. A general staff capable of applying these elements, and having an organization calculated to advance the theoretical and practical education of its officers;
10. A good system for the commissariat, hospitals, and of general administration;

11. A good system of assignment to command, and of directing the principle operations of war;
12. Exciting and keeping alive the military spirit of the people.⁷⁵

Each of these conditions is present to a greater or lesser degree in all combat organizations whether conventional or asymmetric. They are of special importance for asymmetric actors who often exist and operate somewhere between legitimacy and illegitimacy, state sponsored and illegal.

Jomini later enumerates ten essential bases for military policy of a wise government. Few have direct relevance; numbers seven and nine, however, offer prudent counsel to asymmetric and conventional actors alike. Number seven urges, “Nothing should be neglected to acquire knowledge of the geography and the military statistics of other states, so as to know their material and moral capacity for attack and defense, as well as the strategic advantages of the two parties.”⁷⁶ The need for accurate intelligence and an understanding of one’s adversary is common sense but has often led to the defeat of a power that underestimates or misjudges its enemy. The need for intelligence is of the greatest importance for the adversary of an asymmetric actor because it is his desire to operate unnoticed.

In essential base number nine, Jomini warns, “The system of operations ought to be determined by the object of the war, the kind of forces of the enemy, the nature and resources of the country, the character of the nations and their chiefs, whether of the army or of the state. In fine, it should be based upon the moral and material of attack or defense which the enemy may be able to bring into action; and it ought to take into consideration the probable alliances that may obtain in favor of or against either of the parties during the war.”⁷⁷ Had Osama bin Laden followed Jomini’s advice, he certainly would have judged President Bush to be a man willing to use force unlike President Clinton. In misjudging the character of President Bush, bin Laden also misjudged the character of the American people and the force it could bring to bear on Taliban and al Qaeda forces in Afghanistan. In a similar manner, Saddam Hussein incorrectly judged the President despite the War in Afghanistan (2001-2003) and, conversely, American leaders underestimated the strength of the insurgency that formed in the aftermath of the invasion of Iraq.

In his discussion of decisive points, Jomini also develops what he calls “political objective points” which are determined by their political, rather than strategic importance, and play an influential role in the considerations of adversaries.⁷⁸ Jomini’s development of political objective points is, in part, derived from his reading of Clausewitz, who placed great importance on the relationship between political and military factors. And, although Jomini’s intent was to address the

importance of political objectives in conventional conflict, for the 21st century asymmetric actor political objective points are the primary target when waging wars of asymmetry. Al Qaeda, Hamas, Hezbollah and other organizations waging war against the United States and Israel, for example, concentrate strikes against political targets rather than those of military significance. Rocket propelled grenade (RPG) attacks into Baghdad's green zone, attacks on police stations and the kidnapping and beheading of civilians in Iraq also serves to strike at political objective points.

This look at Jomini gives only limited attention to one of the most influential military theorists in Western history. The continuing, and often unrecognized, impact of Jomini within the American military is slowly beginning to decline as the United States faces a future moving a distinctly different direction than envisioned by the 19th-century Swiss strategist. And, although limited in the scope of application, Jomini still offers valuable insight into asymmetric warfare. As I now turn to the work of Clausewitz, the West's most influential military theorist, it is worth noting that it was Jomini, not Clausewitz who, for a time, reigned as the most widely read and admired military theorist in North America and Europe.

Originally read by only a limited number of European officers, *On War* rose to prominence with the rapid defeat of France in the Franco-Prussian War (1870-1871). In the war's aftermath, Helmuth Graf von Moltke, Chief of the Prussian General Staff, remarked of the influence *On War* played in the development of his thinking, setting off a wave of interest in the work of Clausewitz.

Unlike his contemporary Jomini, Clausewitz viewed war as an elemental act of violence, which negates social constraints and makes war the arbiter of moral and social norms.⁷⁹ Rather than looking for timeless principles of warfare, which Clausewitz believed did not exist, the Prussian sought to understand the nature of war. Thus, Clausewitz set himself apart from Bulow and Jomini by emphasizing the human elements of war: chance, friction, genius, will, and others.⁸⁰ For the Prussian, "War is nothing but a duel on a larger scale. Countless duels go to make up war, but a picture of it as a whole can be formed by imagining a pair of wrestlers. Each tries through physical force to compel the other to do his will; his *immediate* aim is to *throw* his opponent in order to make him incapable of further resistance."⁸¹

Clausewitz's concentration on the human elements of war makes *On War* timelessly relevant to asymmetric conflict. In addition, Clausewitz understood better than his contemporaries the impact of partisan war on conventional armies.⁸² While serving as a deputy to Prince August at the battle of Auerstedt, Clausewitz ordered one-third of his men to fight as skirmishers opposing the flexibility of the French. After Prussia's defeat, Clausewitz, in violation of the armistice agreement

between France and Prussia, participated in the raising of the home guards in order that they might fight as partisans against future French invasion. When he later served as the director of General Scharnhorst's office in Berlin, Clausewitz lectured on partisan warfare.⁸³ In *On War* Clausewitz dedicates a chapter to the subject, making him one of the few theorists of his time to give active attention to asymmetric conflict.

Clausewitz is perhaps best known for saying, "War is merely the continuation of policy by other means." In viewing war as a political act, Clausewitz speaks more directly to the many attributes that make asymmetric conflict such a difficult task for states who find themselves embroiled in them. Although often credited with advocating total war, Clausewitz understood well that war is directed by the political objectives for which it is undertaken. Thus, Clausewitz is far more flexible in his conception of war than he is often credited.⁸⁴

Clausewitz dedicates chapter twenty-six of Book Six to "The People in Arms." Here, the Prussian treats insurrection as another means of war, which he considers, "an outgrowth of the way in which the conventional barriers have been swept away in our lifetime by the elemental violence of war."⁸⁵ Clausewitz begins his discussion by enumerating five conditions under which partisan warfare can be effective:

1. The war must be fought in the interior of the country.
2. It must be decided by a single stroke.⁸⁶
3. The theatre of operations must be fairly large.
4. The national character must be suited to that type of war.
5. The country must be rough and inaccessible, because of mountains, or forests, marshes, or the local methods of cultivation.⁸⁷

In effect, Clausewitz details similar points to those made by later insurgents, recognizing the key attributes that enable insurgencies to develop, sustain themselves and succeed. Clausewitz explains the significance of geography, noting that the greater the degree of difficulty terrain presents, the greater will be the viability of partisan units.⁸⁸ He then moves to the deployment of partisans. Clausewitz, illustrating a well-considered understanding of the asymmetry of partisan warfare advises, "Militia and bands of armed civilians cannot and should not be employed against the main enemy force—or indeed against any sizeable force. They are not supposed to pulverize the core but to nibble at the shell and around the edges."⁸⁹ Clausewitz adds, "A general uprising, as we see it, should be

nebulous and elusive; the resistance should never materialize as a concrete body, otherwise the enemy can direct sufficient force at its core, crush it, and take many prisoners. When that happens, the people will lose heart and, believing the issue has been decided and further efforts would be useless, drop their weapons.”⁹⁰

Vice Admiral Arthur K. Cebrowski underscores Clausewitz’s point by arguing that mass is insurance against the fog of war, which is often an important attribute for the asymmetric actor who depends on the uncertainty created by the tactics he employs for the provision of his safety and the success of his mission.⁹¹ Rear Admiral John G. Morgan further elaborates on the significance of mass in war. Acknowledging the asymmetry of modern warfare, Rear Admiral Morgan suggests that Iraqi soldiers must have an adversary to whom they can surrender.⁹² In addition, efforts such as Operation Anaconda (2003) and operations to clear Fallujah (2004) are dependent upon mass to successfully encircle and capture insurgents. Just as conventional force in an asymmetric conflict seeks to create mass at the decisive point, partisans and insurgents, must, as Clausewitz advises, remain dispersed.⁹³

Clausewitz continues his discussion by further elaborating the ultimate necessity for partisan forces to employ conventional tactics to defeat an enemy. He adds, “On the other hand, there must be some concentration at certain points: the fog must thicken and form a dark and menacing cloud out of which a bolt of lightning may strike at any time. These points of concentration will, as we have said, lie mainly on the flanks of the enemy’s theatre of operations. That is where insurgents should build up larger units, better organized, with parties of regulars that will make them look like a proper army and enable them to tackle larger operations.”⁹⁴ Clausewitz further discusses the effects of large unit tactics emphasizing the psychological effects of partisan attacks.

Anticipating the Chinese Communist’s tactical failure in the Five Encirclements Campaign (1927-1934) and the success of the Long March (1934), the Prussian theorist warns partisans against turning to tactical defense for the preservation of geographic gains. Clausewitz explains the weakness of tactical defense stating, “Moreover, not much is lost if a body of insurgents is defeated and dispersed—that is what it is for. But it should not be allowed to go to pieces through too many men being killed, wounded or taken prisoner: such defeats will soon dampen its ardor.”⁹⁵ Clausewitz’s grasp of the role played by asymmetric actors is clear: they win by not losing. This point later plays a central role in the war waged by Mao and the Chinese Communists against the Kuomintang.

The advice of Clausewitz bears increased relevance in the current global environment where the overwhelming military supremacy of the United States leads to a doctrine which seeks to bring adversaries to battle. As Peter R. Moody and

Edward M. Collins point out, modern democracies view war as a distinct moral act which requires direct confrontation with the enemy. This leaves the United States and other Western democracies little room to wage protracted wars against an enemy which refuses to give battle.⁹⁶ Clausewitz perhaps falls short because he fails to elaborate the means by which conventional forces can overcome partisans. Conceivably, he saw no solution to partisan warfare if waged in the manner he describes.

Before his death, Clausewitz remarked that *On War* was incomplete and in need of revision because his thoughts on war had evolved since he began writing. The untimely death of Clausewitz prevented him from ever making the revisions he considered essential. Whether revisions would have offered clarification of his views on asymmetric conflict can never be known. His contributions to the Western understanding of partisan warfare are without question and among the first efforts in the modern era to understand what has come to dominate 21st century warfare. Later theorists of both East and West would restate the principles elaborated by Clausewitz, offering new terminology but much the same idea.

Alfred Thayer Mahan and Julian Corbett

Rear Admiral Alfred Thayer Mahan, USN, a veteran of the War Between the States (1861-1865) and the first president of the Naval War College remains one of history's most influential naval theorists. His first and greatest work, *The Influence of Sea Power upon History, 1660-1783* (1890) is widely regarded as the single most influential treatise on naval strategy and tactics ever written.⁹⁷ Mahan, a prolific writer and student of Jomini, applies the linear concepts of the Swiss strategist to naval combat suggesting that naval warfare, like its land counterpart, follows a set of timeless principles.⁹⁸ Primary among them is the need for great powers to maintain supremacy of the seas. In controlling the seas, great powers (Britain) are able to ensure the free flow of trade, which enriches a nation. Mahan gained his earliest insight from a reading of the history of the Second Punic War (218-201).⁹⁹ During that war, Carthage and Hannibal were restrained in their ability to effectively wage war against Rome because of Rome's dominance in the Mediterranean. Realizing the significant role sea power played in the ultimate defeat of Carthage, Mahan began his study of the influence of British sea power in the seventeenth and eighteenth centuries.

Taking up the central premise of Jomini, Mahan saw the key to winning naval supremacy as the concentration of (naval) force at the decisive point of battle. Thus, Mahan was an advocate of major naval engagements which either led to total defeat or victory. Rather than viewing great power navies as supporting services, Mahan saw in them the key to economic, military, and political domi-

nance.¹⁰⁰ Not only do they fight, but naval assets ensure the free flow of goods, destroy enemy trade and blockade enemy ports. They transport troops and deny transport to the enemy. Lastly, they keep open the lines of communication between colonial possessions and the metropole.¹⁰¹

Throughout his writings, Mahan remains focused on the great power rivalries of his day. The concept of asymmetry in naval combat is one Mahan showed little grasp of. British naval historian Julian Corbett, a younger contemporary of Mahan, differed greatly in his conception of the role of naval forces in warfare. Corbett's most influential work, *Some Principles of Maritime Strategy* (1911), directly challenges Mahan's conception of the navy's role in warfare.¹⁰² Unlike Mahan, Corbett viewed the navy as a service with the primary role of supporting land warfare. Where Mahan and the British Admiralty believed that the Royal Navy should seek the decisive battle, Corbett proposed a more limited role for naval elements. Much as Jomini and Clausewitz were advocates of concentrating force on the decisive point in battle, concentration remained a key element of naval combat in the early 20th century.¹⁰³

Corbett, however, regards concentration as a poor strategy for maintaining command of the sea. Three reasons explain why. First, when naval forces are concentrated an adversary may more easily refuse battle by flight. Second, dispersing one's forces creates an element of shapelessness and surprise, which cannot be achieved by concentration. Third, when concentration is a principle of naval combat, flexibility of action is lost.¹⁰⁴

Limited conflict, according to Corbett, was and remains the dominant form of warfare. Thus, it is imperative to fight on one's own terms rather than those of the enemy. Additionally, limited conflicts should be fought in such a way that the greatest gains are made at the lowest costs. This translates into support for the strategic offensive, which relies on taking offensive action when risks are low and gains high. The strategic offensive serves as a force multiplier, greatly increasing the effective strength of a state's naval forces.¹⁰⁵

The strategic and tactical innovations of Mahan and Corbett, while often diametrically opposed, include no conception of naval warfare as an element of asymmetric conflict. Mahan's fixation with total warfare left little room for the small scale asymmetric conflicts of the 21st century. Although Corbett's suggestions of surprise, flexibility and shapelessness are significant attributes of command of the sea, he fails to anticipate the use of naval assets by partisans, guerrillas and terrorists. Thus, neither man offers insights relevant to the study of asymmetric conflict.

Considering the time in which Mahan and Corbett wrote, it would have been difficult for either to anticipate events such as the hijacking of the cruise ship

Achille Lauro in October 1985 or the bombing of the USS Cole in October 2000. For both theorists, naval combat belonged to the nation-state alone. Thus, naval theory has great potential for innovation as asymmetric actors seek new ways to minimize the advantage naval forces provide to the United States and major powers.

Theory after the Great War (Lawrence, Liddell-Hart and Fuller)

Western military theory experienced its next major development in the 1920s as a response to the heavy casualties incurred during the trench warfare of the Great War. Throughout Western Europe an entire generation of men was lost in the pyrrhic charges across no man's land where machine-gun fire and artillery bloodied the landscape with the corpses of more than five million men. The horrific scenes of the Somme and other major battles where hundreds of thousands of men lost their lives in a single day left an indelible impact on the strategists who would spend the post-war decades considering ways to prevent such catastrophic losses in the future.

There was, however, one dramatic exception from the trench warfare of the Great War. In the sparsely populated desert of Arabia, the Ottoman Turks attempted to maintain control of Medina and smaller towns and villages and the lone rail line linking these remote areas to Palestine, Syria and the rest of the Ottoman Empire. As an ally of Germany, the Ottomans found themselves in conflict with the British, whose possession of Egypt and the Suez Canal was threatened by the proximity of the Ottomans and their German allies.¹⁰⁶

As one of the few British officers fluent in Arabic and familiar with the culture and customs of the Arabs, Captain Thomas Edward Lawrence, or Lawrence of Arabia as he is better known, left his post in Egypt to serve as British Royal Army liaison to Sherif Hussein in Mecca. The British sought to encourage the Sherif to lead a revolt against the Arab's Ottoman overlords, drawing Turks from the fight in Europe and keeping the Ottomans occupied in the vast expanse of Arabia. In return, the British offered technical assistance and material support. Although serving under superior officers, Captain Lawrence quickly became the leader of British cooperation with the Arabs. He also soon found himself commanding Arab irregulars and serving with Emir Feisal as one of the "Arab Revolt's" commanders.¹⁰⁷

As an archeologist by profession, Lawrence had little military training and even less experience when he began leading what would become one of the most significant asymmetric conflicts in history. Although Lawrence was without the training of a soldier, he was widely read in military theory and understood, conceptually, the strategic and tactical options available to him. The lack of military

training proved an asset during the Arab Revolt because Captain Lawrence was unconstrained by the tactics of his day.

Popularized in his account of the Arab Revolt, *The Seven Pillars of Wisdom: A Triumph* (1926), T. E. Lawrence provides the modern asymmetric actor strategic and tactical advice worthy of note.¹⁰⁸ Significant among his many contributions, Captain Lawrence understood the skill, material condition and mindset of the Bedouins who comprised the irregular force he led against the Ottomans. As important, Lawrence also understood the Ottoman soldier recognizing that they were often poorly trained, unmotivated and fatalistic.¹⁰⁹ With this in mind, it was then possible for Captain Lawrence to develop a strategy, which utilized the strengths of his allies and attacked the weaknesses of the enemy.¹¹⁰ The untrained and fiercely independent tribesmen of the desert were undisciplined and accustomed to receiving booty as a spoil of war. This left Lawrence little choice but to wage a guerrilla war, which he did with great success and little loss of life.¹¹¹

Captain Lawrence explains the beginning of the Arab Revolt stating, “So I began with three propositions. Firstly, that irregulars would not attack places, and so remained incapable of forcing a decision. Secondly, that they were unable to defend a line or point as they were to attack it. Thirdly, that their virtue lay in depth not in face.”¹¹² He further explains the strategy of the Arab Revolt saying, “The Arab war was geographical, and the Turkish Army an accident. Our aim was to seek the enemy’s weakest material link and bear only on that till time made their whole length fail...Consequently we must extend our front to its maximum, to impose on the Turks the longest possible passive defense, since that was, materially, their most costly form of war.”¹¹³

Lawrence and his Arab allies relied on flexibility, accurate intelligence, geography, mobility, speed and surprise to strike at Ottoman outposts and rail lines.¹¹⁴ Fighting on their native soil, a limited number of tribesmen held down large numbers of Ottoman troops, rarely failing to fight on the terms set by Lawrence and Feisel. The hit and run tactics of the Arabs left the Ottomans trapped in their garrisons, too weak and afraid to make a concerted attempt to clear Arabia of irregulars. As the war progressed, Lawrence’s strategy made it possible for Arab forces with only limited support to push the Ottomans out of Arabia where they were eventually defeated in Palestine and Syria by a combined Anglo-Arab force.

Written in the decade after the Great War, *The Seven Pillars of Wisdom: A Triumph* has been called the first coherent theory of guerrilla warfare.¹¹⁵ As much as this may be true, Lawrence’s great skill was not in developing new strategic concepts but in applying what he knew from his study of strategy to the situation in which he found himself. Rather than attempting to force the Arab Revolt to fit a European model, Captain Lawrence became the West’s most distinguished

asymmetric actor by proving to be flexible in thought and action. This flexibility is perhaps T. E. Lawrence's greatest contribution to the study of asymmetric conflict.

For men such as B. H. Liddell-Hart and J. F. C. Fuller, who experienced the carnage of trench warfare, the post-war years were devoted to developing a new way of warfare, absent the frontal charges which left so many young men dead on the fields of France. Working in the early 1920s, Liddell-Hart and Fuller developed independent, yet complimentary, approaches to warfare, which played a major role in General Heinz Guderian's development of the Blitzkrieg and General Erwin Rommel's mechanized warfare.

Working with his younger contemporary, Major General Fuller moved within the British Royal Army to encourage the development of an all mechanized army consistent with his Plan 1919.¹¹⁶ Liddell-Hart, twenty years Fuller's junior, gained prominence with his publication of *Decisive Wars of History* (1929), which was later revised to become the 20th century's most prolific strategic treatise, *Strategy* (1954).¹¹⁷

Liddell-Hart develops what he calls the "indirect approach," which was a direct challenge to the warfare of his day, and based on his view that military and political leaders had lost sight of the objective of war.¹¹⁸ Rather than making frontal charges against an entrenched enemy, the indirect approach calls for attacking the enemy's lines of supply, communication and rear.¹¹⁹ For Liddell-Hart, attacking an adversary where he least expects it and where one's loss is minimized is of the greatest importance. This is not simply to suggest that Liddell-Hart advocates attacking the enemy's front when he least expects it, rather he seeks to prevent such attacks by first destroying those assets which make war possible, while also creating turmoil and dissention. In the case studies utilized to illustrate the indirect approach, Liddell-Hart offers a number of cases from the earliest times to the present. Two of note are General William T. Sherman's March to the Sea and T. E. Lawrence's leadership in the Arab Revolt. While Sherman led a conventional army through the heart of the Confederacy, burning crops, destroying homes and tearing up rail lines, Lawrence led irregular Bedouins on a campaign of hit-and-run attacks against rail lines and isolated garrisons. For Liddell-Hart the indirect approach applies to conventional and unconventional conflict alike.

The former infantry captain develops eight maxims as part of the indirect approach, which he considers the "concentrated essence of strategy and tactics":

Positive

1. Adjust your end to your means.
2. Keep your object always in mind.
3. Choose the line (or course) of least expectation.
4. Exploit the line of least resistance.
5. Take a line of operation which offers alternative objectives.
6. Ensure that both plans and dispositions are flexible—adaptable to circumstances.

Negative

1. Do not throw your weight into a stroke whilst your opponent is on guard—whilst he is well placed to parry or evade it.
2. Do not renew an attack along the same line (or in the same form) after it has once failed.¹²⁰

He adds, “The essential truth underlying these maxims is that, for success, two major problems must be solved — *dislocation* and *exploitation*. One precedes and one follows the actual blow — which in comparison is a simple act. You cannot hit the enemy with effect unless you have first created the opportunity; you cannot make the effect decisive unless you exploit the second opportunity that comes before he can recover.”¹²¹

Dislocation and exploitation are of greater significance to the asymmetric actor because his inferiority *requires* him to rely on the elements of war dislocation and exploitation seeks to utilize. Where a conventional force can take advantage of its superior numbers and technology, the asymmetric actor must rely on alternative means.¹²² In Iraq, for example, al Zarqawi and Saddam loyalists are using car bombs, Improvised Explosive Devices (IED) and other tactical devices to first dislocate American forces, Iraqi police or Interior Ministry troops in an initial explosion, which is then followed by a second attack carried out by insurgents exploiting the confusion and destruction caused by the initial attack. On a small scale, these types of attacks are illustrative of Liddell-Hart’s indirect approach.

Discussing guerrilla warfare, Liddell-Hart makes two additional points of importance. He suggests that there are three keys to guerrilla warfare: distraction,

disturbance and demoralization.¹²³ Each affects the physical and psychological elements of conflict, which serves to magnify the effect of the indirect approach. In maximizing the effect of these elements, the probability of defeating an adversary through attacks on lines of communication, supply, and in the rear are increased. Liddell-Hart underscores this point adding, “A guerrilla movement that puts safety first will soon wither. Its strategy must always aim to produce the enemy’s increasing overstretch, physical and moral.”¹²⁴

20th Century Eastern Warfare (Mao, Giap and Guevara)

Mao Zedong, more than his predecessor Sun-tzu, is the East’s most influential military theorist. As a military commander and leader of the Chinese communists from the Chinese Communist Party’s (CCP) earliest days, Mao developed the strategy and tactics responsible for the 1949 victory over the Kuomintang (KMT) in the Chinese Civil War (1925-1949). Developing his first major treatise, *On Guerrilla Warfare* (1934), early in the civil war, Mao went on to lead the Fourth Route Army on the Long March (1934-1935), which saw Mao and 40,000 of his comrades march more than 6,000 miles while being chased and harassed by KMT forces.¹²⁵

Mao suggests guerrilla warfare develops in three phases. In phase I, guerrilla movements organize, consolidate, and concentrate on preserving their existence.¹²⁶ This requires that guerrillas win the support of the population, which will play a pivotal role in their success. Without the protection and assistance of the populace, insurgents, guerrillas and asymmetric actors will not be victorious. The intelligence, material, food, and recruits provided by the people cannot be replaced.

When Vespasian and Titus instituted a scorched earth policy in Judea during the Jewish Revolt, rebels were forced from northern Judea because the population, which was either killed or forced to flee, could no longer provide assistance.¹²⁷ More recent instances offer similar results.¹²⁸ When a central government, colonial power or invading state depopulates the area in which guerrillas operate, the movement collapses. A population unwilling to support a guerrilla movement also causes collapse. The defeat of the *Sendero Luminoso* in Peru was largely due to the lack of assistance locals provided to guerrillas and the covert, and sometimes open, support given to government forces.¹²⁹

In Afghanistan, the Taliban and al Qaeda were unpopular among a majority of Afghans who disliked the foreign presence of al Qaeda and viewed the Taliban negatively because of tribal loyalties and the Taliban’s extreme views. When the United States proved to be very different from the Soviet and British invaders of the past, local tribal leaders quickly shifted support from the Taliban, instead

choosing the United States and its local allies. Iraq is proving to be a more difficult situation. While demonstrations against terrorist attacks show a lack of support for Saddam loyalists and al Zarqawi, the lengthier the American presence, the greater will be the decline in support for the United States among Iraqis.¹³⁰ Thus, popular support is limited for both sides of the current conflict in Iraq, making it difficult for either to win a clear victory.

Phase II calls for the progressive expansion of guerrilla forces. Here guerrillas begin expanding the territory within which they operate, increasing offensive operations and expanding the overall scope of their activity. It is in phase II that guerrillas begin steadily waging a war of attrition against enemy forces and material, attacking in what Mao calls “lightening raids.”¹³¹

It is in moving to phase III that many guerrilla movements make a strategic error by transitioning to conventional operations in order to strike a deciding blow to weakened government forces. As Mao points out, guerrilla movements, in order to ultimately succeed, must topple the national government, which requires conventional operations. Moving to phase III too early can lead to catastrophic defeat such as occurred during the Tet Offensive when American and South Vietnamese forces wiped out the Viet Cong, who mistakenly believed the time was right to launch a final strike against South Vietnam. It took more than four years to recover from the defeat of the Viet Cong and North Vietnamese. Mao, after near defeat in the Five Encirclements Campaign (1928-1934), proved a more adept commander than General Vo Nguyen Giap, military commander of the North Vietnamese Army (NVA), who repeatedly moved to phase III too early against a superior adversary.¹³²

Mao relied on “...imaginative leadership, distraction, surprise and mobility to create a victorious situation before battle is joined.”¹³³ He further explains guerrilla warfare as:

1. Arousing and organizing the people.
2. Achieving internal unification politically.
3. Establishing bases.
4. Equipping forces.
5. Recovering national strength.
6. Destroying the enemy’s national strength.
7. Regaining lost territories.¹³⁴

Mao then asks the question, “What is guerrilla strategy? Guerrilla strategy must be based primarily on alertness, mobility and attack.”¹³⁵ This does not suggest Mao favors decisive battle. He does not. Much as Liddell-Hart, Lawrence, and Clausewitz before him, Mao warns guerrillas against seeking the decisive battle adding, “There is in guerrilla warfare no such thing as a decisive battle; there is nothing to the fixed, passive defense that characterizes orthodox war.”¹³⁶

A strategy of “death by a thousand cuts” is akin to the strategic thought of Mao and is similar to the strategy utilized by asymmetric actors today. Where the CCP understood that the ultimate goal of the war against the KMT was the destruction of the nationalist government and its replacement by communism, the same is not true for many 21st-century asymmetric actors. Instead, they seek to force the withdrawal of a foreign military power’s occupying force. For the asymmetric actor this means phase III is never entered, which sets conflicts of asymmetry apart from the mobile guerrilla warfare of the Chinese Civil War.

Where Mao makes his greatest contribution to military theory is in his discussion of the political elements of guerrilla warfare. Understanding the dominant role politics plays in war, Mao established a code of conduct for the Fourth Route Army, which required soldiers to treat peasants, with whom they interacted, with dignity and respect. In doing so, Mao sought to generate the support of the populace necessary for communist success. Areas controlled by communist forces also saw land lords punished for “exploitative” behavior, land rents reduced, public health improved, the introduction of local democracy and major re-education campaigns designed to introduce the peasantry to communist ideology.¹³⁷

After the Japanese invasion of Manchuria and their expansion south, Generalissimo Chiang moved his Kuomintang (KMT) forces into central China, seeding the most productive areas of the country to the Japanese. Mao, however, suspended operations against the Nationalists and moved against the Japanese. This endeared the communists with large segments of the Chinese population because they alone challenged the Japanese invasion and occupation. For Mao, waging a guerrilla war against the Japanese was a calculated risk undertaken because of the political gains it might bring. Chiang’s unwillingness to confront the Japanese was a terrible miscalculation because it demoralized his troops and led to the evaporation of support for the KMT.¹³⁸

Asymmetric conflicts are similar in their political aims. While seeking to attrite the enemy and force his withdrawal, asymmetric actors wage a public relations campaign to win the support of the populace while turning them against the external power. Asymmetric actors do, however, violate one of Mao’s fundamental rules: they target civilians with acts of terrorism. Recent public protests in Iraq underscore the negative political effect of such acts, which continue to

target civilians.¹³⁹ Chinese military theory takes an exceptionally negative view of terrorism because it, in fact, turns the mass against the military force utilizing it.¹⁴⁰ In those instances in the West where communist guerrilla movements were defeated in Bolivia (1967), Chile (1981), Peru (1992) and elsewhere, the use of terrorism against civilians led to the withdrawal of support among the populace. Understanding that guerrilla warfare is at its foundation political, Mao prohibited the use of terrorism.¹⁴¹

Mao's contemporary, Vo Nguyen Giap, military commander of the Viet Minh during the War of Liberation against the French (1945-1954) and commander of the People's Army of Vietnam (PAVN or NVA), wrote two significant treatises on guerrilla warfare which must not be overlooked. General Vo developed his strategic and tactical innovations under circumstances which more closely mirror those of 21st-century asymmetric conflict than Mao. It was Mao, however, whose writings served to stimulate the former high school teacher as he sought to defeat an experienced French commander in General Navarre.

It has been said that General William Westmoreland, Military Assistance Command, Vietnam (MACV) Commander, kept a copy of Vo's *People's War People's Army: The Viet Cong Insurrection Manual for Underdeveloped Countries* on his nightstand while MACV Commander, but never read it.¹⁴² Had he done so, General Westmoreland would have understood the strategy employed by General Vo, which ultimately forced American withdrawal from Vietnam. In keeping with the work of Mao, Vo viewed guerrilla warfare as developing in three phases (consolidation, expansion and destruction). Vo, however, placed a greater emphasis on the political elements of guerrilla conflict. According to Vo, "The war of liberation of the Vietnamese people proves that, in the face of an enemy as powerful as he is cruel, victory is possible only by uniting the whole people within the bosom of a firm and wide national united front based on the worker-peasant alliance."¹⁴³ Where Mao limited the indoctrination of the Chinese peasant, Vo sought to thoroughly unify the political will of the Vietnamese people.

Placing added importance on the intellectual unification of the Vietnamese, Vo viewed "people's war" as developing in six initial stages:

1. Develop and consolidate the organizations for national salvation.
2. Expand the organizations to the cities, enterprises, mines and plantations.
3. Expand the organizations to the provinces where the revolutionary movement is still weak and to the minority areas.
4. Steel the Party members' spirit of determination and sacrifice.

5. Steel the party members so that they may have capacity and experience to enable them to lead and cope with the situation.
6. Form small guerrilla groups and soldiers' organizations.¹⁴⁴

The jargon of communism often clouds the meaning of its authors, but it is clear that Vo places great importance on political elements early in the development of a guerrilla movement. In addition to placing great emphasis on the political aspects of war, General Vo emphasizes the dominance of propaganda over combat saying, "...political activities were more important than military activities, and fighting less important than propaganda..."¹⁴⁵

Vo follows his discussion of politics and guerrilla warfare with a description of the war waged by the Viet Minh and the Democratic Republic of Vietnam (DRV). Of greatest relevance is his discussion of the mobilization of the economy, military and people for war. In essence, the People's War waged by the Vietnamese communists was a total war, waged for total ends (the overthrow of the Republic of Vietnam), by total means.¹⁴⁶ France and the United States, however, fought a limited war. For the French, the objective was the destruction of the Viet Minh, which they almost achieved, but for the limited means employed. The United States fought for the preservation of a non-communist South with limited resources.

As is often the case, the side waging a total war, in this case the Vietnamese communists, maintained a psychological advantage gained by viewing conflict as a life or death struggle. Asymmetric actors are similar in their perception of the conflict in which they are engaged, which provides a psychological advantage to the asymmetric actor as well.

In the years following the withdrawal of American forces and the defeat of the Republic of Vietnam by the North, General Vo explains his success in *How We Won the War*, which offers some additional insight into the successful guerrilla campaign.¹⁴⁷ Vo suggests that the Viet Cong and NVA were successful against American and Army of the Republic of Vietnam (ARVN) forces because they regularly seized opportunities to take the offensive, giving communist forces the momentum at the point of attack.¹⁴⁸ Speed also played a key role in the success of the North, which was combined with superior mass at the decisive point of attack to ultimately demoralize and annihilate ARVN forces.¹⁴⁹

Throughout the three phases of the War in Vietnam, leading to the ultimate defeat of ARVN forces in the Ho Chi Minh Campaign of 1975, General Vo utilized the combined strength of what he called, "Revolutionary War."¹⁵⁰ This includes the regular army (NVA), regional forces (Viet Cong), militia and guerrillas. Prior

to the 1975 offensive and with the exception of the Tet Offensive (1968) and a second offensive in 1972, General Vo relied on the guerrilla capabilities of the Viet Cong and NVA. During the final offensive in 1975, the North was able to overwhelm the South from within (guerrillas) and without (conventional forces). And, while one of the largest and best equipped militaries in the world, ARVN quickly succumbed to the pressure of the unrelenting Northern onslaught.

Although an Argentine by birth, Che Guevara, the doctor-turned-Marxist guerrilla, viewed guerrilla warfare in a similar manner to his Asian counterparts. In his treatise on the subject, *Guerrilla Warfare*, Guevara emphasizes the importance of safe base areas, mobility, speed and the strategic attack.¹⁵¹ He does, however, differ from Mao and Vo in one significant area, which he elaborated in three “fundamental lessons”:

1. Popular force can win a war against the army.
2. It is not necessary to wait until all conditions for making revolution exist; the insurrection can create them.
3. In underdeveloped America the countryside is the basic area for armed fighting.¹⁵²

Guevara differs with Mao and Vo in numbers one and two. It is there that the Latin American revolutionary minimizes the political and psychological attributes of warfare, which were so important to both Mao and Vo. Failing to cultivate the assistance and sympathy of the local population cost Guevara his life when a deserter from his guerrilla band informed the Bolivian army of his position. He was quickly captured after a short battle and executed in October 1967.

Guevara’s failure to properly judge the political environment in Bolivia was a major miscalculation. His mistaken view that a small band of revolutionaries can spark a general revolution is one asymmetric actors are tempted to make. Efforts by Osama bin Laden to overthrow the Saudi royal family are one example. The current insurgency in Iraq is another. In both instances asymmetric actors initiated combat before first gaining the support of the populace and, in both cases, insurgents failed or are failing to achieve their objective.

Of greatest relevance to 21st-century asymmetric conflict is Guevara’s discussion of guerrilla tactics. Two points are prophetic and speak directly to the current insurgency in Iraq. First, Guevara warns, “There is one point very much in controversy in opinions about terrorism. Many consider that its use, by provoking police oppression, hinders all more or less legal or semi-clandestine contact with the masses and makes impossible unification for actions that will be necessary

at a critical moment. This is correct, but it also happens that in a civil war the repression by the government power in certain towns is already so great that, in fact, every type of legal action is suppressed already, and any type of action of the masses that is not supported by arms is impossible.”¹⁵³ He goes on to further warn guerrillas against the use of terrorism saying, “We sincerely believe that terrorism is of negative value, that it by no means produces the desired effects, that it can turn a people against a revolutionary movement, and that it can bring a loss of lives to its agents out of proportion to what it produces.”¹⁵⁴ Insurgents in Iraq would be wise to heed Guevara’s warning, given the increasing unpopularity of terrorist attacks.

Guevara’s second point is one insurgents in Iraq are currently exploiting effectively. According to Guevara, “One of the weakest points of the enemy is transportation by road and railroad. It is virtually impossible to maintain yard by yard over a transport line, a road, or a rail yard. At any point a considerable amount of explosive charge can be planted that will make the road impassable; or by exploding it at the moment that a vehicle passes, a considerable loss of lives and material to the enemy is caused at the same time that the road is cut.”¹⁵⁵ The current use of IEDs by insurgents in Iraq is an illustration of the effectiveness of roadside bombs. Had Guevara followed his own tactical advice more closely, rather than his ill-conceived strategic plan, he may have succeeded rather than lost his life.

Conclusion

Throughout human history man has devoted great effort to the understanding of one of humanity’s more endearing institutions: war. These pages have examined a number of the most influential treatises on warfare and the thoughts and actions of some of history’s great captains in an effort to determine if influential works of the past offer insight into 21st century asymmetric conflict. The emphasis has been on the strategic and tactical contributions of those authors examined and the application of specific innovations to the current conflicts in Afghanistan and Iraq.

In addition to the principle aims of this article, an underlying theme emerged. For many of the theorists examined, a common set of strategic and tactical elements play an important role in the thought of each writer. Elements such as mobility, speed, surprise and others frequently appear in the work examined, which spans more than two millennia of military thought. As the United States moves forward into the 21st century, American leaders, civilian and military, would be wise to look to the past when determining the face of the future. For as much as

technology and time have changed the face of warfare, history shows that many of the elements of conflict span the centuries and are as relevant today as they were more than two millennia ago.

Notes

1. Berndt Brehmer, "The Dynamic OODA Loop: Amalgamating Boyd's OODA Loop and the Cybernetic Approach to Command and Control," (Stockholm: Swedish National Defense College, 2004). (Osborne 1996)
2. Herodotus, *The Histories*, trans. George Rawlinson (New York: Alfred A. Knopf, 1997).
3. Thucydides, *History of the Peloponnesian War*, trans. Rex Warner (New York: Penguin Books, 1954).
4. Xenophon, *Anabasis*, trans. Carleton Brownson (Cambridge: Harvard University Press, 1998).
5. Arrian, *The Campaigns of Alexander*, trans. Aubrey de Selincourt (New York: Penguin Classics, 1958).
6. Polybius, *The Rise of the Roman Empire*, trans. Ian-Scott Kilvert (New York: Penguin Books, 1980).
7. Ibid. Livy, *The War with Hannibal*, trans. Aubrey De Selincourt (New York: Penguin Classics, 1972).
8. During the Second Punic War it was Hannibal who was often outnumbered by Roman forces, but still managed his greatest victories.
9. Livy, *The War with Hannibal*, 85.
10. Ibid., 101-03.
11. Ibid., 145-50.
12. Caesar, *The Conquest of Gaul* (New York: Penguin Books, 1983). Caesar, *The Gallic Wars*, trans. H. J. Edwards (Cambridge: Harvard University Press, 2000).
13. Caesar, *The Civil Wars*, trans. A. G. Peskett (Cambridge: Harvard University Press, 1984).
14. Flavius Josephus, *The Jewish War*, trans. G. A. Williamson (New York: Penguin Classics, 1984).
15. The final end of the revolt took place at the citadel of Masada where, in 73 A.D., the remnants of the rebellion flung themselves from the citadel walls hours before Legionnaires stormed the gates.
16. Martin Van Crevald, *The Art of War: War and Military Thought* (London: Cassell, 2002), 45.

17. Flavius Renatus Vegetius, *The Military Institutions of the Romans*, trans. John Clark (Westport, CT: Greenwood Press, 1985).
18. Ibid., Book 1, Page 1.
19. See J. F. C. Fuller, *Memoirs of an Unconventional Soldier* (London: Nicholson and Watson, 1936). Vegetius, *The Military Institutions of the Romans*, Book 3, Page 1.
20. Vegetius admonishes the Emperor saying, "But of all precautions the most important is to keep entirely secret which way or by what route the army is to march. For the security of an expedition depends on the concealment of all motions from the enemy." Vegetius, *The Military Institutions of the Romans*, Book 3, Page 4.
21. Ibid., Book 3, Page 8.
22. In Books One and Two, Vegetius suggests that the Legions regularly undertake training marches of twenty miles in half a summer day (five hours), as they had in ancient times. This was while carrying a sixty-pound pack and fully armed. During the Napoleonic wars, *La Grande Armee*, the speediest army in the world, covered 15-20 miles in a full day, making the Roman rate of march significantly faster.
23. Vegetius, *The Military Institutions of the Romans*, Book 3, Pages 8-9.
24. At the end of Book Three Vegetius offers a number of maxims one of which states, "It is much better to overcome the enemy by famine, surprise or terror than by general actions, for in the latter instance fortune has often a greater share of valor. Those designs are best which the enemy are entirely ignorant of till the moment of execution." Ibid., Book 3, Page 19-20.
25. Ibid., Book 3, Page 10.
26. In a maxim reminiscent of Sun-tzu, Vegetius says, "To distress the enemy more by famine than the sword is a mark of consummate skill." Ibid., Book 3, Page 21.
27. Ibid., Book 3, Page 10.
28. Niccolo Machiavelli, *The Art of War*, trans. Ellis Farnsworth (Cambridge: Da Capo Press, 1965).
29. Ibid., 26.
30. Machiavelli, a former official of the Florentine Republic, was deeply concerned with the plight of Florence, which was little more than a pawn in the power politics of his day.
31. Peter Paret, ed., *Makers of Modern Strategy from Machiavelli to the Nuclear Age* (Princeton: Princeton University Press, 1986), 26-40.
32. Steven Forde, "Varieties of Realism: Thucydides and Machiavelli," *The Journal of Politics* 54, no. 2 (1992).
33. Machiavelli, *The Art of War*, 141-44.

34. In Book Seven Machiavelli, like Sun-tzu and Vegetius before him, says, “If a general knows his own strength and that of the enemy perfectly, he can hardly miscarry.” *Ibid.*, 202-03.
35. General William T. Sherman, Commander of the Army of Tennessee, explained his March to the Sea by proclaiming that war is inherently a nasty affair, which should be made as terrible as possible so that those who wage it will do so less frequently. Victor Davis Hanson, *The Soul of Battle: From Ancient Times to the Present Day, How Three Great Liberators Vanquished Tyranny* (New York: NY: Anchor Books, 1999).
36. Walter Laqueur, ed., *Voices of Terror: Manifestos, Writings and Manuals of Al Qaeda, Hamas, and Other Terrorists from Around the World and Throughout the Ages* (New York: Reed Press, 2004), 413-14.
37. Sun-tzu, *The Art of War*, trans. Ralph D. Sawyer (New York: Barnes and Noble Books, 1994), 59.
38. *The Seven Military Classics of Ancient China*, trans. Ralph D. Sawyer (Boulder, CO: Westview Press, 1993).
39. First translated in the West by a French clergyman during the rise of Napoleon Bonaparte, *The Art of War* was read and admired by the Future Emperor and, later, by leaders of the Nazi regime.
40. Sun-tzu, *The Art of War*, 129.
41. Alistair Ian Johnston, in an analysis of Chinese conflict, beginning with China’s first recorded warfare, finds that Chinese rulers seek the offensive when they possess superior military strength. When weaker, rulers turn to defense. And, when rulers see their position as exceptionally weak, adversaries are appeased with tribute and other concessions. Rarely, however, is Sun-tzu’s advice utilized. Alastair Johnston, *Cultural Realism: Strategic Culture and Grand Strategy in Chinese History* (Princeton: Princeton University Press, 1998).
42. Sun-tzu, *The Art of War*, 129.
43. *Ibid.*, 167.
44. *Ibid.*, 168-71.
45. Douglas M. McCready, “Learning from Sun-Tzu,” *Military Review*, no. May-June (2003): 86-87.
46. Sun-tzu, *The Art of War*, 179-82.
47. *Ibid.*, 188.
48. Epaminondas’s march through the Peloponnese, Sherman’s March to the Sea, Rommel’s North Africa campaign, Patton’s drive to the Rhine and MacArthur’s island-hopping campaign and Inchon invasion demonstrate the application of Sun-tzu’s emphasis on ch’i and the strategic configuration of power. Hanson, *The Soul of Battle: From Ancient Times to the Present Day, How Three Great Liberators Vanquished Tyranny*. See also

Archer Jones, *The Art of War in the Western World* (Oxford: Oxford University Press, 1987). J. F. C. Fuller, *A Military History of the Western World: From the Earliest Times to the Battle of Lepanto* (Cambridge: Da Capo Press, 1987).

49. Sun-tzu, *The Art of War*, 245-46.

50. Henry Guerlac describes the development of military theory in the 17th century best when he says, "If we ask how these developments are reflected in the military literature of the sixteenth and seventeenth centuries, the answer is simple enough: the volume is, on average, greater than the quality. Antiquity was still the greater teacher in all that concerned the broadest aspects of military theory and the secrets of military genius." Henry Guerlac, "Vauban: The Impact of Science on War," in *Makers of Modern Strategy from Machiavelli to the Modern Age*, ed. Peter Paret (Princeton, NJ: Princeton University Press, 1986), 71.

51. Frederick saw the Prussian army as an instrument of his own will, which must respond to commands with immediate action. Gerhard Ritter, *Frederick the Great: A Historical Profile*, trans. Peter Paret (Berkeley, CA: University of California Press, 1968).

52. Ian Westwell, *Warfare in the 18th Century* (Austin, TX: Raintree Steck-Vaughn, 1999). See also Jeremy Black, *Warfare in the 18th Century* (London: Cassell Company, 2002).

53. Frederick Hohenzollern, *Frederick the Great on the Art of War*, trans. Jay Luvaas (Cambridge: Da Capo Press, 1999), 334.

54. For Frederick, desertion was as a great a threat to his army as was the enemy. Thus, Frederick was loathe to turn loose soldiers to harass lines of communication and supply for fear his conscripts would desert. R. R. Palmer, "Frederick the Great, Guibert, Bulow: From Dynastic to National War," in *Makers of Modern Strategy from Machiavelli to the Nuclear Age*, ed. Peter Paret (Princeton, NJ: Princeton University Press, 1986).

55. Guibert's conception of the unified state is later called grand strategy by B. H. Liddell-Hart. Jacques Hippolyte, *Stratégiques, Classiques De La Stratégie* (Paris: l'Hern, 1977).

56. Van Crevald, *The Art of War: War and Military Thought*, 90-99.

57. Philip Longworth, *The Art of Victory: The Life and Achievements of Generalissimo Suvorov* (London: Constable and Company, 1965).

58. *Ibid.*, 35-40.

59. Unknown to many in the West, Generalissimo Suvorov was responsible for the capture of Francis Pulawski, Yemelyan Pugachev and Tadeusz Kosciuszko, hero of the American War of Independence and Polish patriot.

60. Bruce W. Menning, "Train Hard, Fight Easy: The Legacy of A. V. Suvorov and His 'Art of Victory,'" *Air University Review* November-December (1986).

61. Alan Schom, *Napoleon Bonaparte: A Life* (New York: Perennial, 1998).

62. Jay Luvaas, ed., *Napoleon on the Art of War* (New York: Free Press, 1999), Ch 6.
63. Ibid., 133. See also Yann Cloarec, ed., *How to Make War* (Paris: Ediciones La Calavera, 1998).
64. Napoleon Bonaparte, "Order of the Army No. 14552," in *Napoleon on the Art of War*, ed. Jay Luvaas (New York: Free Press, 1808), 10.
65. Napoleon Bonaparte, "Correspondence from Napoleon to Eugene," in *Napoleon on the Art of War*, ed. Jay Luvaas (New York: Free Press, 1999), 14.
66. Luvaas, ed., *Napoleon on the Art of War*, 19.
67. Ibid., 88. See also David G. Chandler, *The Campaigns of Napoleon* (New York: Schribner, 1973).
68. Napoleon Bonaparte, "Napoleon to the Executive Directory," in *Napoleon on the Art of War*, ed. Jay Luvaas (New York: Free Press, 1796), 65.
69. General Dwight Eisenhower is often considered one of history's great generals, but not because of his success as a combat commander. His strategic and tactical vision were mediocre at best. General Eisenhower's contribution to warfare lay in his ability to keep American, British, French and other Allied forces united.
70. Van Crevald, *The Art of War: War and Military Thought*, 100. See also John R. Elting, "Jomini: Disciple of Napoleon," *Military Affairs* 28, no. Spring (1964).
71. John Shy, "Jomini," in *Makers of Modern Strategy from Machiavelli to the Nuclear Age*, ed. Peter Paret (Princeton, NJ: Princeton University Press, 1986), 144.
72. Jomini says, "Indeed, if the art of war consists in throwing the masses upon the decisive points, it will be necessary to take the initiative." Antoine Henri de Jomini, *The Art of War* (London: Greenhill Books, 1996), 73.
73. Ibid., 69-70.
74. Jomini does warn against fighting what he calls "double wars." Spain serves as his primary example. The ultimate defeat of France is often attributed to the material and personnel losses and large number of troops kept in Spain fighting guerrillas and Lord Wellington. Ibid., 36-38.
75. Ibid., 43-45. Jomini also says of morale, "The first means of encouraging the military spirit is to invest the army with all possible social public consideration. The second means is to give the preference to those who have rendered services to the state, in filling any vacancies in the administrative departments of the governments, or even to require a certain length of military service as a qualification for certain offices." Hezbollah, Hamas and the PLO have all followed Jomini's maxim as each has fostered a spirit of martyrdom among their constituents, creating a ready supply of homicide bombers and guerrillas. de Jomini, *The Art of War*, 61.
76. de Jomini, *The Art of War*, 50.

77. Ibid., 50-51. See also Michael Handel, *Masters of War: Sun Tzu, Clausewitz and Jomini* (London: Frank Cass, 1992).
78. de Jomini, *The Art of War*, 91.
79. Van Crevald, *The Art of War: War and Military Thought*, 109.
80. Alan Beyerchen suggests that the human elements of Clausewitz's work make it eternally valid. Alan Beyerchen, "Clausewitz, Nonlinearity, and the Unpredictability of War," *International Security* 17, no. 3 (1992): 60.
81. Carl von Clausewitz, *On War* (New York: Alfred A. Knopf, 1993), 83.
82. Clausewitz viewed war primarily as a conventional act between state-sponsored militaries. It is his views on conventional conflict and the totality of war that have enshrined the Prussian theorist in Western military thought. His discussion of partisan or people's war generally receives little discussion.
83. Peter Paret, "Clausewitz," in *Makers of Modern Strategy from Machiavelli to the Nuclear Age*, ed. Peter Paret (Princeton, NJ: Princeton University Press, 1986), 191-92.
84. Among Clausewitz's most articulate critics is Martin van Crevald who challenges the applicability of Clausewitz in the post-Cold War world suggesting that his conception of total war is inappropriate for the asymmetric conflict of the 21st century. Van Crevald adds that Clausewitz's understanding of war, as an elemental act of violence waged by states, is as outmoded as his conception of total war. Martin Van Crevald, *The Transformation of War: The Most Radical Reinterpretation of Armed Conflict since Clausewitz* (New York: Free Press, 1991). Gary Ulman also argues that Clausewitz is irrelevant in the 21st century because he does not conceive of an enemy whose purpose is the annihilation of a people, as is the case with many asymmetric actors.
85. von Clausewitz, *On War*, 578.
86. In his own time, the defeat of France in Spain took many small engagements to slowly destroy French forces. Conventional battles between Anglo-Spanish forces and the French were rare and indecisive. History has also shown that partisan war is won bit by bit rather than "by a single stroke."
87. von Clausewitz, *On War*, 580.
88. Ibid.
89. Ibid., 581.
90. Ibid.
91. Arthur K. Cebrowski, "The Small, the Fast and the Many," *Net Defense*, January 15, 2004.
92. John G. Morgan, and Anthony D. Mc Ivor, "Rethinking the Principles of War," *Proceedings* October (2003).

93. Clausewitz recognizes that conventional forces and the asymmetric actors opposing them rely on tactics which are largely diametrically opposite. Where American forces in Iraq, for example, seek to cordon insurgents in Fallujah utilizing mass to overwhelm the enemy, insurgents seek to remain dispersed and prevent themselves from being trapped because they have initiated a tactical defense. See Walter M. Hudson, "The Continuing Influence of Clausewitz," *Military Review* March-April (2004).
94. von Clausewitz, *On War*, 581.
95. Ibid., 582. In his discussion of offensive and defensive warfare, Yitzhak Klein illustrates the difficulty conventional forces have in fighting the type of war advocated by Clausewitz. As Klein points out, "...military establishments tend to prefer offensives because planning offensives creates an impression of control over the course of events and because successful offensives make things happen in a particular way—they compel." Yitzhak Klein, "Long Defensives: Victory without Compellence," *Comparative Strategy* 15 (1996).
96. Peter R. Moody, "Clausewitz and the Fading Dialectic of War," *World Politics* 31, no. 3 (1979). Edward M. Collins, "Clausewitz and Democracy's Modern Wars," *Military Affairs* 19, no. 1 (1955).
97. A. T. Mahan, *The Influence of Sea Power Upon History, 1660-1783* (New York: Little Brown & Co., 1980). The basic premise of Mahan's greatest work is straightforward. Britain won the 17th- and early-18th-century contest with France because it gained supremacy of the seas and maintained the free flow of goods between Britain and its colonies.
98. See also A. T. Mahan, *The Influence of Sea Power Upon the French Revolution, 1793-1812* (Boston: Little & Brown, 1892). A. T. Mahan, *Armaments and Arbitration* (New York: Harper, 1912).
99. Jon Sumida, "New Insights from Old Books," *Naval War College Review* 54, no. 3 (2001).
100. Keith and Elizabeth Jane Errington Nielson, ed., *Navies and Global Defense: Theories and Strategy* (Westport, CT: Praeger, 1995).
101. Mahan, *The Influence of Sea Power Upon History, 1660-1783*.
102. Julian Corbett, *Some Principles of Maritime Strategy* (New York: Longman, Green and Company, 1911).
103. Michael Handel, "Corbett, Clausewitz and Sun Tzu," *Naval War College Review* 53, no. 4 (2000).
104. Ibid.: 3.
105. See Stephen W. Roskill, *The Strategy of Sea Power: Its Development and Application* (London: Collins, 1962).

106. John E. Mack, *Prince of Disorder: The Life of T. E. Lawrence* (Cambridge, MA: Harvard University Press, 1998).
107. Maxwell Johnson, "The Arab Bureau and the Arab Revolt: Yanbu to Aqaba," *Military Affairs* 46, no. 4 (1982).
108. T.E. Lawrence, *The Seven Pillars of Wisdom: A Triumph* (New York: Anchor, 1991).
109. Lawrence expressed his understanding of the Arabs and their Ottoman enemies saying, "Armies were like plants, immobile, firm-rooted, nourished through long stems to the head. We might be a vapor, blowing where we listed. Our kingdom lay in each man's mind; and as we wanted nothing material to live on, so we might offer nothing material to the killing." He adds, "In Turkey things were scarce and precious, men less esteemed than equipment. Our cue was to destroy, not the Turk's army, but his materials. The death of a Turkish bridge or rail, machine gun or charge of high explosive, was more profitable to us than the death of a Turk." *Ibid.*, 192-94.
110. *T. E. Lawrence on Guerrilla Warfare* (2004 [cited February 15, 2004]); available from <http://pegasus.cc.ucf.edu/~eshaw/lawrence.htm>.
111. Lawrence, *The Seven Pillars of Wisdom: A Triumph*, Ch 15.
112. *Ibid.*, 224.
113. *Ibid.*, 225.
114. Lawrence viewed war as possessing three basic elements: hecastic (geography, weather, railways, etc.), bionomic (wear and tear, life and death, humanity) and diathetic (psychological). All aspects belong to one of these three elements. J. A. English, "Kindergarten Soldier: The Military Thoughts of Lawrence of Arabia," *Military Affairs* 51, no. 1 (1987).
115. Van Crevald, *The Art of War: War and Military Thought*, 204-05.
116. After retiring from the Royal Army in 1933, Major General Fuller began a prolific writing career, which increased his popularity and solidified his place as one of the 20th century's most influential strategists. Among his most influential works are *Military History of the Western World* and *Armament and History*.
117. B. H. Liddell-Hart, *Strategy*, 2nd ed. (New York: Meridian, 1991).
118. Robert H. Larson, "B. H. Liddell-Hart: Apostle of Limited War," *Military Affairs* 44, no. 2 (1980): 70.
119. Liddell-Hart, *Strategy*, Ch 1.
120. *Ibid.*, 334-36.
121. *Ibid.*, 337.
122. According to James D. Atkinson, technology and the psycho-political aspects of war are central to understanding the success of the indirect approach. For the asymmetric actor, overcoming the technological disadvantage and exploiting the psychological is key.

James D. Atkinson, "Liddell-Hart and Warfare of the Future," *Military Affairs* 29, no. 4 (1965).

123. Italian general and pioneer of air power theory, Giulio Douhet, suggests in his classic *Command of the Air* that strategic bombing before the use of ground forces can win a war before it starts. By knocking out communications, industry and military facilities a nation can be so demoralized that it sues for peace. In effect, Douhet advocates an indirect approach utilizing airpower to accomplish what Liddell-Hart expected ground forces to accomplish. Giulio Douhet, *Command of the Air* (Washington, D. C.: Office of Air Force History, 1983). See also Michael J. Eula, "The Classical Approach: Giulio Douhet and Strategic Air Force Operations: A Study in the Limitations of Theoretical Warfare," *Air University Review* September-October (1986).

124. Liddell-Hart, *Strategy*, 367.

125. Mao Tse-tung, *On Guerrilla Warfare*, trans. Samuel B. Griffith II (Urbana-Champaign, IL: University of Illinois Press, 1961). For a more in depth look at the military thought of Mao, see his collected works. Mao Tse-tung, *Selected Works of Mao Tse-Tung*, vol. 1 (London: Lawrence and Wishart, 1954).

126. Tse-tung, *On Guerrilla Warfare*, 21.

127. Josephus, *The Jewish War*.

128. In his translation of *On Guerrilla Warfare*, General Samuel B. Griffith suggests that it is virtually impossible to defeat a guerrilla movement if it successfully passes through phase I. Tse-tung, *On Guerrilla Warfare*, 33.

129. Leroy Thompson, *The Counter-Insurgency Manual* (London: Greenhill Books, 2002).

130. Historically, the overthrow of an unpopular ruler by an outside power holds wide support early, but quickly loses favor the longer an intervening power remains. This was true of the Romans after the battle of Pydna (168 B.C.), when the Legions removed Macedonian dominance from Greece, but stayed, and has been the case in many other examples since.

131. Tse-tung, *On Guerrilla Warfare*.

132. General Vo, while ultimately victorious, moved to phase III prematurely in 1950 and 1968. Vietminh and, later, Viet Cong forces were obliterated, nearly leading to the collapse of communist efforts.

133. Tse-tung, *On Guerrilla Warfare*, 26.

134. *Ibid.*, 46.

135. *Ibid.*, 48.

136. *Ibid.*, 52. Mao also explains that the strategy of the guerrilla is based on tactical offense, tactical speed and tactical operations on exterior lines of operation. Acknowledging the defensive nature of guerrilla warfare, Mao warns the guerrilla that he must be pre-

pared for protracted operations. Most importantly, Mao warns the guerrilla commander against the use of static defense. Tse-tung, *On Guerrilla Warfare*, 97-98.

137. Tse-tung, *Selected Works of Mao Tse-Tung*. See also *Mao Tse-tung, Selected Works of Mao Tse-Tung*, vol. 2 (London: Lawrence and Wishart, 1954).

138. Zedong Mao, *The Situation and Tasks in the Anti-Japanese War after the Fall of Shanghai and Taiyuan* (New York: Foreign Language Press, 1956). Marjorie Dryburgh, *North China and Japanese Expansion 1933-1937: Regional Power and the National Interest* (London: Curzon Press, 2000).

139. Karim Kadim, "Insurgent Attacks Kill 8: Iraqi Official Discourages Protests," *USA Today*, March 28, 2005.

140. Sun-tzu and Mao discouraged the use of terrorism for the very reason mentioned.

141. Anthony James Joes, *Resisting Rebellion: The History and Politics of Counterinsurgency* (Lexington, KY: University of Kentucky Press, 2004).

142. Nguyen Giap Vo, *People's War People's Army* (New York: Bantam Books, 1962).

143. *Ibid.*, 27.

144. *Ibid.*, 68.

145. *Ibid.*

146. Donald M. Snow suggests war is waged for limited or total ends by limited or total means. See Donald M. Snow, *From Lexington to Desert Storm and Beyond* (Armonk, NY: M. E. Sharpe, 2000), Ch 1.

147. Nguyen Giap Vo, *How We Won the War* (Philadelphia, PA: Recon, 2001).

148. *Ibid.*, 24.

149. *Ibid.*, 48-49. Throughout the American presence in Vietnam, communist forces operated under a strategic and tactical doctrine similar to that of Afghan forces during the Afghan War (1979-1989). Both relied heavily on the ambush to attack unsuspecting patrols and convoys. They also sought to harass communication and supply lines. In most instances, attacking forces dispersed before air support could arrive. See Ali Jalali, *Afghan Guerrilla Warfare: In the Words of the Mujahideen Fighters* (St. Paul, MN: MBI Publishing, 2001).

150. In other instances he also uses People's War.

151. Che Guevara, *Guerrilla Warfare* (Lincoln, NE: University of Nebraska Press, 1998).

152. *Ibid.*, 7-9.

153. *Ibid.*, 22.

154. *Ibid.*, 99-100.

155. *Ibid.*, 23.

**Lowther Slide Addendum:
Asymmetric Warfare and Military Thought**

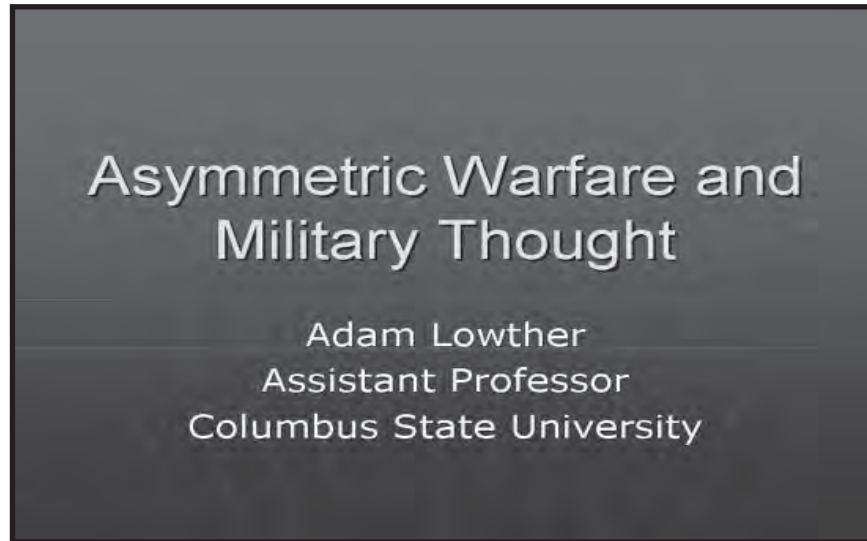


Figure 1

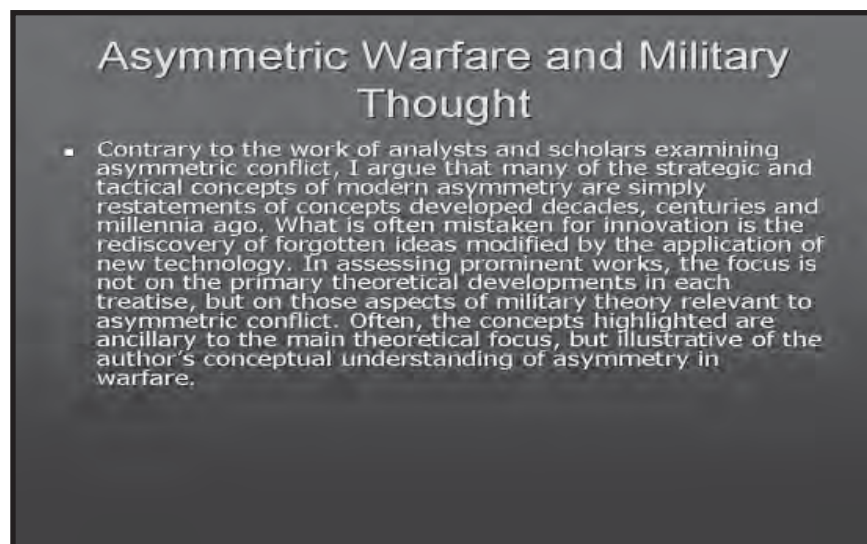


Figure 2

Asymmetric Warfare and Military Thought

- In the broad discussion of force transformation for which this article is written, there are three key principles I wish to highlight.
 1. The form of conflict the United States is likely to face in the coming years (asymmetric) is not new; rather it is conflict's oldest form. Non-Western cultures have a highly developed strategic and tactical history of asymmetric conflict. With the United States likely to face non-Western adversaries in future conflicts and with the United States's military supremacy likely to remain intact for decades to come, adversaries are likely to rely heavily on **traditional** asymmetric means when confronting the United States.
 2. Conventional conflicts are, in fact, anomalously in the history of the American use of military force. In the more than two hundred cases in which American forces were deployed to zones of conflict, fewer than a dozen can be considered conventional conflicts. With the dominant role asymmetric conflict has played in American military history, the United States needs to maintain a force prepared to achieve victory against likely adversaries, i.e., asymmetric actors.

Figure 3

Asymmetric Warfare and Military Thought

- **Early Western Military Thought (Herodotus, Thucydides and Xenophon)**
- Beginning of Western Warfare
- **Roman Warfare (Polybius, Livy, Caesar, Josephus and Vegetius)**
- Development of asymmetric warfare in the West

Figure 4

Asymmetric Warfare and Military Thought

- **The End of Early Western Theory (Machiavelli)**
- **Early Chinese Military Theory (Sun-tzu)**
- Challenge to Chinese Warfare
- **Linear Warfare (Frederick II, Guibert, Beulow, Suvorov, Napoleon and Jomini)**

Figure 5

Asymmetric Warfare and Military Thought

- **Alfred Thayer Mahan and Julian Corbett**
- **Theory after the Great War (Lawrence, Liddell-Hart and Fuller)**
- **20th Century Eastern Warfare (Mao, Giap and Guevara)**

Figure 6

“Adapting to Maneuver Warfare in a Civil War Campaign: Union Reactions to Sterling Price’s Missouri Expedition of 1864”

Dr. Kyle S. Sinisi–The Citadel

In the late summer of 1864, Sterling Price began what would be the last major Confederate offensive of the Civil War. Headquartered south of Little Rock, Arkansas, Price intended nothing less than the reconquest of Missouri, a state that had been occupied by Union forces since September 1861. The expedition was a dismal failure. Price marched north to Missouri with 12,000 cavalymen and fourteen pieces of artillery in August 1864. He then lingered in the state for almost two months, attempting to stage a popular uprising. Union forces from Kansas, Missouri, Illinois, and Tennessee eventually concentrated against Price, ejecting him from the state in a series of battles fought along the Kansas and Missouri border.

Price’s expedition has drawn its fair share of historiographical attention. Not so surprisingly, most of that attention has focused on the Confederate side of the campaign. A host of questionable decisions haunted Sterling Price, and historians have rarely missed the opportunity to analyze them in various ways. The list of problematical decisions includes everything from mission objectives, march rates, the willingness to give battle at certain points, and the desire to loiter in the state in search of recruits. This concentration, though important, has distorted a more complete understanding of the campaign. With an obvious parallel to the historiography of the Battle of Gettysburg, historians have thus been more prone to ask how the Confederacy lost the Missouri expedition as opposed to how the Union won it.¹

A shift of attention to Union operations reveals one of the more striking aspects of the campaign. Union forces in Missouri were completely unprepared for a large-scale invasion. Only in hindsight, and against a litany of Confederate woes, does Union victory seem almost certain. At the time of the invasion, the United States Army had just concluded a massive reduction of manpower in the Department of Missouri. For most of the war, the army had maintained substantial numbers of troops in the state. These numbers were a testament not only to the scale of the state’s bloody guerrilla war, but also the strategic importance of St. Louis as a staging area for Union expeditions into the lower south. But with the ascendancy of Ulysses S. Grant to the overall command of the army, the Union developed for the first time a coherent strategy to the end the war. However, that strategy focused almost exclusively on operations east of the Mississippi River. Believing Missouri secure from everything except guerrilla uprisings, the army then stripped the Department of Missouri of its manpower throughout 1864.

By September 30, the department had lost 42,000 soldiers, or 67% of its aggregate strength. All that was left was 18,000 men and fifty pieces of field artillery to defend a state of 69,000 square miles.²

The loss of these volunteer troops presented William S. Rosecrans, the commander of the Department of Missouri, with another problem. The soldiers left behind in Missouri were specialized, but they also carried a distinct set of virtues and liabilities. Most of Rosecrans's troops were members of the Missouri State Militia or MSM. Unique in American military history, the MSM was a full-time state militia paid and supplied by the United States government. Designed primarily for counter-guerrilla operations, the MSM could never leave the boundaries of Missouri. Over the years of the war, a number of MSM units developed into fairly capable guerrilla fighters. By the same token, an equal number of MSM units developed a reputation for brutality born of prewar blood feuds and a simple desire to plunder northern and southern sympathizers alike.

This then was the army that General Rosecrans had to defend Missouri in 1864. Trained to fight guerrillas, this force had little regimental structure aside from that appearing on paper. To cover the maximum amount of territory, Rosecrans scattered the MSM about the state in company- or detachment-size outposts. Although there was no shortage of regimental commanders who participated in some small-unit raids and ambushes, it was the rare commander who ever took the field at the head of his entire regiment. These men were guerrilla fighters and little more. To defeat Sterling Price, the Union army would have to adapt quickly to a changed mission. Although ultimately successful, the army did some things better than others. As befitted its great capabilities in steam transportation, the Union was able to move back into the department significant numbers of men who would be vital to the final victory. Similarly, Federal troops could readily adapt pre-existing technical advantages in armaments and intelligence gathering to fighting a large-scale maneuver campaign. Nonetheless, the one thing the Union could not adapt quickly was training. This was especially so for field-grade officers and senior commanders. Thrust into command situations involving strange circumstances and large numbers of men, these officers frequently became either tentative or indecisive.

A Description of the Campaign

Sterling Price started his campaign in late August 1864. Stationed at Princeton, just sixty miles south of Union occupied Little Rock, Price gathered together two divisions of cavalry and aimed to penetrate a line of Union occupied posts that ranged down the Arkansas River from Fort Smith to the Post of Arkansas near the Mississippi River. By September 6, Price had successfully frozen the Union

garrison at Little Rock and passed around it to the west. Over the next nine days Price marched slowly, heading for Batesville in northeastern Arkansas. Price met no resistance and benefited greatly from poor Union decision making back at Little Rock. He was not, in other words, pursued. In the vicinity of Batesville, Price linked up with his third, and final, division. The Army of Missouri was now complete and ready to march into Missouri.

Price intended to seize St. Louis. Aside from its valuable military stores, the city was important as a symbol, and Price believed that its early capture would result in a recruiting bonanza for his small army. While Price's assessment of recruiting possibilities was grossly exaggerated, he never got the chance to attack the city. He crossed the Missouri border on September 19 only to discover that fears of his invasion had prompted Union authorities to redirect to St. Louis at least one division of infantry that had been headed toward William T. Sherman's army in Georgia.

The presence of the infantry altered Price's short-term objective, but it did not shake his belief that he could yet spark a popular uprising in the state. After a disastrous attempt to reduce an isolated Union garrison located at Pilot Knob, about ninety miles southeast of St. Louis, Price marched for central Missouri and its wildly pro-Confederate Boonslick counties, which ran along the Missouri River all the way to Kansas City. Once in the Boonslick, Price believed that he could absorb the recruits necessary to reverse his course and eject all Yankees from St. Louis and the state. Price reached Jefferson City on October 7 only to skirt the capital and head further up the river to Boonville. Price had finally made it to the heart of Missouri's pro-Confederate population. It was also a critical period in the campaign.

For the next ten days, Price lingered in the Boonslick. More than 8,000 recruits bolstered Price's ranks, but it was hardly the 50,000 men that Price had anticipated—and needed—to make his dream of redeeming Missouri for the Confederacy a reality. Not only had Price not achieved a critical mass of recruits, but he was now in great danger as the Union military had finally mobilized its forces in the departments of Kansas and Missouri. From the southeast and east, Union cavalry commanded by Major General Alfred Pleasonton began to press the Confederate rear. From the west and the Department of Kansas, Major General Samuel Curtis marched toward the front of Price's column. For reasons never explained, Price determined on October 19 to not flee to the southeast, which might have allowed him to more easily preserve his army and its precious new recruits. Instead, Price continued his march toward Kansas City, where he planned on pivoting to the south and dashing for the Arkansas border. This was a mistake. On October 23, the Union pincers finally caught up to Price in the suburbs of Kansas City.

At the Battle of Westport, Price received a stinging defeat, barely escaping with his cavalry and trains intact. Nearly seventy miles to the south along the banks of Mine Creek, the invaders were not so fortunate. Union cavalry annihilated one of Price's divisions. Union pursuit continued all the way through the Indian Territory and to the Arkansas River, forcing Price's army to hemorrhage hundreds of men on a daily basis. Even after the Yankee cavalry stopped the chase, Price plodded on with the remnant of his army to Laynesport in the southwestern corner in Arkansas. By December 1 it was all over. After a march of 1,400 miles, Price had lost nearly 7,000 troops of all types and with them all hope of conquering Missouri.

Adapting to a Changed Mission

In order to fight Price, William Rosecrans's first concern was manpower. He had few troops, and what he did have was scattered about the state. He needed reinforcements if he was ever going to actually confront Price on a battlefield. Fortunately for Rosecrans, the Union army possessed great flexibility in the deployment of its troops. Steamboats and railroads were the literal vehicles that drove this flexibility, and Rosecrans quickly exploited them as he sought reinforcements from outside his command jurisdiction.

Despite having a notoriously prickly personality, Rosecrans encountered no petty squabbles among the competing, or adjacent, department commanders in Tennessee and Illinois. They willingly provided the troops. Ironically, the greatest impediment to getting reinforcements came from Washington. Both the army chief of staff, Henry W. Halleck, and the commanding general, Ulysses S. Grant, distrusted Rosecrans greatly, and they saw his pleas for troops as a case of paranoia. Grant, in particular, thought Rosecrans's requests absurd, and at one point earlier in the summer he caustically informed Halleck that Rosecrans would scream for troops even if he "were stationed in Maine."³ Nevertheless, these same generals consented soon enough to transfers of soldiers from Cairo, Illinois and Memphis, Tennessee.

The troops from Cairo were the first, and the most important, to arrive at St. Louis. On September 10, with Price then just north of Little Rock and headed for Batesville, Arkansas, one division of A.J. Smith's XVI Corps loaded up on transports for the 170 mile journey along the Mississippi River to St. Louis. Just three days later the men began to disembark at the city's wharves. The citizens of St. Louis sensed the importance of the moment and treated Smith as the personal savior of their city. There was no exaggeration in this as Sterling Price would soon enough get word of Smith's arrival in the city. Consequently, Price decided

that his army of cavalry could not attack this infantry, and an assortment of militia gathered from Missouri and Illinois, in the city's extensive fortifications.⁴

Another two divisions of A.J. Smith's XVI Corps became the second set of troops to come to the rescue of the Department of Missouri. The entry of these troops into the department would eventually become the decisive factor in the final defeat of Price. Commanded by Joseph Mower, the two divisions had been chasing Price almost from the beginning of the expedition. In a more than roundabout fashion, Mower's troops had marched first from Memphis, Tennessee deep into the heart of Arkansas in search of Price. Price was, however, nowhere to be found. Union forces headquartered in Little Rock had long ago lost contact with Price, and they could relay no positive information regarding his location. Mower therefore missed Price's movement through the state by about four days. Undeterred, Mower marched to the north in pursuit of Price. Forever behind the Confederate, Mower eventually detoured east toward Cape Girardeau on the Mississippi River where he could pick up river transport to St. Louis.

Here, again, the Union's transport capabilities proved important. Upon their march into Cape Girardeau, Mower's troops were combat ineffective. Horses and men had been ridden to exhaustion. Many of the infantry had long since burned through their shoes on a 400-mile odyssey through swamps and rugged terrain. Critically, and as a testament to the Union's logistical abilities, these men would not remain combat ineffective for long. The soldiers arrived at Cape Girardeau on October 5, and two days later steamboats began ferrying them up the Mississippi River another 170 miles to St. Louis. By the 10th, all troops had landed safely ashore and had moved into Benton Barracks outside of the city. Shortly thereafter, the infantry and cavalry were almost completely refitted. Quartermasters issued new clothing and boots, and the cavalry, commanded by Edward Winslow, turned in over 500 unserviceable horses. No sooner did the troops get refitted than they were headed for Price, who was by this time beginning his sojourn in the Boonslick. Not surprisingly, the Union once again used its steamboat lift capacity to bring most of the troops 140 miles down the Missouri River to Jefferson City. Other troops went by railroad for at least part of the journey. By October 15, the cavalry, in particular, were in a position to start its close pursuit of the enemy. Union superiority in transportation had allowed Rosecrans to negate his initial weakness.⁵

In a similar fashion, Union forces could exploit other advantages as they rode to attack the enemy. In both firepower and intelligence gathering, the Union was able to adapt technologies and methods originally configured to counter-guerrilla operations for use in a maneuver campaign. In weaponry, the Union possessed a significant combat multiplier. While the average Confederate possessed some sort

of single-shot long rifle or pistol, it was not unusual to see repeating rifles among the Union troops. This advantage was not confined to the volunteer cavalry then flowing into Missouri. Numerous MSM companies, and an assortment of home guard militia, carried the rifles. For the militia, repeating rifles had become standard equipment in mounted anti-guerrilla operations. Indeed, the decentralized nature of counter-guerrilla operations in Missouri and Kansas contributed to the proliferation of repeating weapons. Companies and detachments were widely dispersed and small unit commanders simply took the initiative to buy the best weapons on the open market with money either privately raised or stolen from citizens deemed not loyal. In this fashion, seven-shot Spencer Carbines and fifteen-shot Henry Rifles became common place in units configured to fight in the bush or defend small towns against guerrilla raids. The decentralization of weapons adoption created no small headache for regimental commanders during Price's invasion. When they concentrated their dispersed companies, they then had to provide ammunition re-supply for different weapons requiring different calibers and types of cartridges. Ordnance officers nevertheless adapted to these conditions, and there were no reported cases of troops not having access to the proper ammunition on any of the battlefields of the campaign.⁶

Perhaps more important, regimental commanders were able to use the new repeating weapons to their advantage. Its appearance on the main line of battle gave an obvious edge to Union, but the new weaponry proved especially invaluable in the hands of soldiers fighting in an advanced line or in a rear guard action. The best example of this could be found at both the battles of Lexington and the Little Blue where the 11th Kansas Cavalry, and other supporting companies, fought rear guard actions against large portions of Price's army. The Spencer rifle allowed these rearguards on both occasions to delay Price several hours. Ultimately, these delaying actions allowed the further concentration of Federal troops arriving from the Department of Kansas.

With the telegraph, the Union had yet another device that could be adapted to serve troops fighting either guerrillas or larger armies. As it existed before Price's entry into the state, the telegraph system in the Department of Missouri was extensive. Although the system developed initially without a systematic plan, major lines generally followed the Missouri River and the North Missouri Railroad. Other lines branched off from the river and the railroad, leading to many of the larger cities and towns. Moreover, direct lines often ran between the towns, paralleling well traveled roads. Simply put, telegraphic communications united all major towns and military garrisons throughout the state. Military officials had been thus quick to seize upon the telegraph to aid their fight against the guerrillas. With companies and detachments of troops scattered about Missouri in fortified enclaves, commanders and scouts relayed near instantaneous intelligence con-

cerning guerrilla marches and attacks. Although far from perfect, the telegraph was the key to an early warning system that also enabled commanders to orchestrate pre-emptive strikes.

The benefits of the telegraph during Price's expedition have already been implied to some degree. It was through the telegraph that Rosecrans received information concerning Price's invasion of the state, and it was through the telegraph that Rosecrans requested and coordinated divisional size reinforcements from distant locations. Rosecrans was not, however, the only department commander to exploit the telegraph during Price's expedition. General Samuel Curtis in the Department of Kansas relied upon the device to not only mobilize his volunteer units, but he used the telegraph as a tool to energize popular support and persuade the Governor of Kansas to call out the militia. Throughout the summer of 1864, the militia in Kansas had been called repeatedly to the field to deal with guerrillas and Indians. More importantly, there was widespread disbelief that Price was actually headed for the state. With the fall elections looming, the governor did not want to mobilize the militia yet again and run a greater risk of not having them at the polling stations come Election Day. Consequently, General Curtis took the extraordinary step of passing on to the governor and the state's newspapers most telegraphic dispatches concerning Price's march. This measure was never fully appreciated by William Rosecrans, who was aghast when his confidential messages began appearing in the newspapers. Despite Rosecrans's protests, these communications proved vital in finally persuading the governor to muster his militia and send it into Missouri to meet the advancing Confederates.

On a tactical level, the telegraph had great potential to alter just how and when Union forces could bring Price to bay. Both Rosecrans and Curtis were not unmindful of this, and they sought to keep the wires open from St. Louis to Kansas City. They also tried repeatedly to attach telegraphic details to the various scouts that probed for Price's army.⁷ But it was here that the army's ability to adapt to a different mission began to break down. What went over the telegraph wires was entirely dependent upon what Union reconnaissance could provide the telegraph operator. In this matter, there was a frequent drop in the performance of Union officers, and it serves also to punctuate the biggest problem facing the Union as it tried to adapt its counter-guerrilla forces to larger-scale warfare. There were far too many officers who, while competent at fighting guerrillas, were less than stellar when it came to handling battalion-size, or larger, forces in the field. Waves of indecision and hesitation paralyzed numerous officers not trained or experienced in fighting a different kind of war.

This was particularly true of some field-grade officers fighting under Samuel Curtis in the vicinity of Kansas City. As Curtis collected his army, he tried to find

Price. By October 14, this meant concentrating two regiments of cavalry at Independence in order to conduct scouting missions in the area. One of the regiments, the 2nd Colorado, was an acclaimed unit in counter-guerrilla operations.⁸ Unfortunately, its consolidated scouting operations were fruitless as they moved in a great loop toward Lexington and then back to Independence via Lone Jack and Hickman Mills. Rarely did these large formations press eastward beyond Lexington and into the heart of the Boonslick. There was no better example of this than when Major Nelson Smith led a scout of 300 men and a detachment of telegraph operators toward Lexington on October 16. By the next morning, they were on the outskirts of the city. Believing Confederate guerrillas in Lexington, Smith charged into the city with his men yelling like fiends and brandishing their pistols. Unfortunately for Smith, the guerrillas had evacuated the city much earlier in the morning. Smith followed up his breathtaking charge not by trying to find the guerrillas or by pressing further east and making contact with Price, who was then about twenty-eight miles distant. Instead, Smith interviewed what he termed a “pretty reliable authority” who asserted that Price’s advance was eighteen miles away in Waverly. Believing this erroneous report, Smith telegraphed Curtis the news. He also claimed a shortage of rations and headed back to Independence, knowing little more about Price than when had started the scout.⁹

A similar situation, though on a much greater scale, took place among Rosecrans’s troops in the Department of Missouri. While Rosecrans painstakingly concentrated volunteer cavalry and infantry from outside his department, he was dependent upon the Missouri State Militia to maintain contact with Price and literally not lose him. Unfortunately, this is exactly what happened. Brigadier John B. Sanborn had the primary responsibility of keeping tabs on Price once he moved beyond Jefferson City and began his sojourn in the Boonslick. An infantryman by training and experience, Sanborn had assumed command of the District of Southwest Missouri in the fall of 1863 and had been relatively successful in coordinating counter-guerrilla operations. Nevertheless, until the time of Price’s expedition, he had not commanded anything as large as a company of cavalry in the field. Now, in October 1864, Sanborn commanded a makeshift brigade of 4,500 troopers that his immediate superior, Alfred Pleasonton, had christened a “corps of observation.”¹⁰

As Price skirted Jefferson City on October 9, Sanborn established contact with the enemy’s rearguard. By nightfall on the 9th, the two sides separated. Sanborn was able to regain contact on the afternoon of October 10, much to the surprise of Sterling Price who seemed to think the Yankees had long disappeared. However, whatever aggressiveness Sanborn may have had soon disappeared. After driving Price’s pickets upon the main body of the Confederate army, Sanborn not only disengaged, but he withdrew his corps of observation roughly thirty-six miles

to the south and completely out of the area of operations. Sanborn later tried to justify this abandonment of Price on logistical grounds. His brigade had little food and forage for the previous thirty-six hours, and Sanborn concluded that he needed to rest and re-supply before continuing the chase. This was, however, a weak argument. Price's men and animals were no less destitute than Sanborn's. More importantly, Union supply trains were en route to Sanborn and could have provided for all his needs in the forward area. It would take another ten days before Sanborn reestablished contact with Price's main body of troops. The intelligence blackout during that time allowed Price great freedom of movement. He was thus allowed to recruit thousands of men and destroy hundreds of thousands of dollars in public and private property. More importantly, General Samuel Curtis lacked the appropriate information to persuade the governor of Kansas to mobilize his militia and meet Price deeper in Missouri.¹¹

The big surprise in this episode was not so much that Sanborn had failed, but rather how his chain of command reacted to that failure. Alfred Pleasonton, who on October 19 assumed command of Sanborn's brigade and all other cavalry gathering against Price, shrugged off the performance with only a passing remonstrance that Sanborn should have resupplied in a more forward area. More to the point, Pleasonton would not be so tolerant with two other general officers and one colonel over the next few days. Pleasonton had arrived in the Department of Missouri after Price had actually entered the state. The one-time commanding general of all cavalry in the Army of the Potomac, Pleasonton was an aggressive and charismatic leader, who had transformed the cavalry of the Army of the Potomac into a force equal to that of the horsemen in the Confederacy's Army of Northern Virginia. Pleasonton was also petty and unscrupulous. Because of these character flaws, he was not long for the Army of the Potomac. With little debate, the War Department transferred him west to what many considered the great personnel junk yard of the Union army, the Department of Missouri.

With much to prove in the campaign against Price, Alfred Pleasonton charged forth to find and attack the Confederates on the road to Kansas City. Once he collided with Price's rearguard at the Little Blue River on October 22 he was unwilling to let go. Tellingly, Pleasonton's advance consisted of the cavalry that had marched and sailed with Joseph Mower all the way from Memphis. Now led by Colonel Edward F. Winslow, these troops dismounted and fought well, pressing the attack after darkness fell on the 22nd. That night, Pleasonton decided to replace Winslow's jaded troopers in the advance with a brigade of cavalry commanded by Brigadier Egbert Brown. Much like Sanborn, Brown was an infantryman who had never commanded anything more than a company of cavalry in combat. Brown possessed a wealth of small-unit experience and was well versed in orchestrating companies against guerrilla ambushes and raids. But at that mo-

ment in time, he was in over his head. When the sun rose on the 23rd, Brown was in no position to deliver the attack. Instead, he had failed to move forward during the night, claiming only that Winslow's men had blocked his advance down the only road available. Pleasonton promptly relieved Brown, who would later be court-martialed.¹²

Pleasonton was not through with underperforming officers. No sooner did he sack Brown than he determined that Colonel James McFerran, one of Brown's MSM regimental commanders, had been derelict in his duties. A sitting judge when he was not ordinarily chasing Confederate guerrillas, McFerran ran afoul of Pleasonton when the divisional commander concluded that McFerran's regiment, the 1st MSM, had almost decomposed during the fight of October 22. Stragglers were widespread, and rumors flowed that McFerran lurked in the rear with the horse holders. Pleasonton relieved McFerran and court-martialed him for good measure.¹³

One final example of a senior officer who did not adapt to different responsibilities was Brigadier General John McNeil. Yet another of Pleasonton's brigade commanders, McNeil was a hat maker before the war. Sharp-tongued and brusque, McNeil commanded various cavalry regiments between 1862 and 1864. It was, however, only on the rare occasion that McNeil led his entire force into the field: once to fight a guerrilla uprising in 1862 and again in 1863 when then Colonel Joseph Shelby raided the state with one brigade of cavalry. During Price's expedition, McNeil's difficulties, much like those of either Major Nelson Smith or General Brown, stemmed from indecisiveness. At almost the same time Pleasonton had directed Brown to move to the head of the attack on October 23, he also directed McNeil to take his brigade on a long march to the south that would completely turn Price's army and block any projected retreat in that direction. It would not be a difficult march. The objective was close, the road was good, and his troops would be masked by the terrain for most of the ride.¹⁴

McNeil, however, faltered badly. He paused at least two hours to feed his horses and then again when he heard gunfire paralleling his line of march. Daylight found him nowhere near his objective, and he compounded his error when he came upon the eastern flank of Price's combined support trains then marching to the south. Protected by one under-strength division and a horde of dismounted and unarmed recruits, Price's trains, which included about 1,000 head of cattle, were completely vulnerable. Not quite sure what to do, McNeil did next to nothing. Cowed by the presence of so many Confederates, he formed his men in a wooded ravine and ordered some long-range sniping and artillery fire. For the duration of the morning and afternoon, the Confederate army just marched past the befuddled McNeil. It took Alfred Pleasonton some time to understand what

exactly had happened. But when a captured Confederate general officer later informed Pleasonton that McNeil could have bagged his army's trains, the brigade commander's fate was sealed. As he had with Brown and McFerran, Pleasonton court martialed McNeil for disobeying orders.¹⁵

Sterling Price's expedition had precipitated a crisis within the Union army. Absent a modern staff system, or at least one resembling the German General Staff at mid-century, the army was totally unprepared to deal with the invasion. There was neither a contingency plan nor a special staff dedicated to considering how the army might transform its capabilities from counter-guerrilla operations to a more concentrated maneuver warfare. Any change or adaptation would occur on an ad hoc basis, and it would depend first upon the ability of the army to exploit its pre-existing advantages in communications and transportation. That the army could organize and transport large numbers of men more than justified the decision to strip Missouri of its troops in order to fight in other regions. Ironically, these same advantages enabled the army to import a set of troops into the theater of operations who were experienced and trained to fight large-scale maneuver battles. Although the historical record is replete with instances of the MSM performing well during the invasion, their ultimate contribution--or at least that of their commanders--pales in comparison to those units introduced from outside Missouri. Whether it was 11th Kansas Cavalry at the Little Blue River or Edward Winslow's brigade at either Westport or Mine Creek, the decisive moments in battle would be settled by newcomers to the Department of Missouri. The ability to fight in a new way, which Price's invasion dictated, could only come through training and experience, especially for its officers. To fight a new or different type of battle without an emphasis upon training was to invite difficulty. It was a lesson that John Sanborn, Egbert Brown, and John McNeil could readily appreciate.

Notes

1. For a sampling of the historiography and its interest in the Confederate side of the campaign, see Albert Castel, *General Sterling Price and the Civil War in the West* (Baton Rouge: LSU Press, 1968); Stephen B. Oates, *Confederate Cavalry West of the Mississippi River* (Austin: University of Texas Press, 1961); Richard S. Brownlee, "The Battle of Pilot Knob, Iron County, Missouri, September 27, 1864," *Missouri Historical Review* 69 (1964): 1-30 and Samuel Gill, "Liberator Unmercifully Hounded," *America's Civil War* 1 (1988): 34-41.
2. *The War of Rebellion: A Compilation of the Official Records of the Union and Confederate Armies* (Washington, DC: Government Printing Office, 1880-1901) (cited hereafter as *OR*), Series 1, Volume XXXIV, Part II, 202; William M. Lamers, *The Edge of Glory: A Biography of General William S. Rosecrans*, U.S.A (New York: Harcourt, Brace, and World, Inc, 1961), 416-417. *OR*, Series 1, Volume XLI, Part III, 527. Grant quoted in *OR*, Series 1, Volume XXXIV, Part IV, 527.
3. Grant quoted in *OR*, Series 1, Volume XXXIV, Part IV, 527.
4. *OR*, Series 1, Volume XLI, Part III, 224. Price's decision to abandon a march on St. Louis is discussed by one of his generals, Jo Shelby, in Shelby to C.C. Rainwater, January 5, 1888, typescript, F. 1, B. 6, Cyrus A. Peterson Collection, Missouri Historical Society, St. Louis.
5. *OR*, Series 1, Volume XLI, Part I, 320-322, 327-328; George P. Walmsley, Sr., *Experiences of a Civil War Horse-Soldier* (University Press of America, 1993), 108-110; Byron C. Bryner, *Bugle Echoes: The Story of the Illinois 47th* (Spring field, IL: Phillips Bros., Printers and Binders, 1905), 146.
6. Charles S. Grover, "The Price Campaign of 1864," *Missouri Historical Review* 7 (1912): 173-174; J.P. Randolph, et. al. to Louis Benecke, February 26, 1895, F. 2283, B. 86, Benecke Papers, Western Historical Manuscripts Collection, Columbia, Missouri; Lumir F. Buresh, *October 25th and the Battle of Mine Creek* (Kansas City, MO: The Lowell Press), 116.
7. *OR*, Series 1, Part I, 612-614; *St. Joseph Daily Herald*, December 17, 1882.
8. Douglas R. Cubbison, "Look Out for Hell Some Place Soon: The 2nd Colorado Cavalry in Missouri, February-September, 1864," *Military History of the West* 32 (2002): 1-6.
9. *OR*, Series 1, Part I, 606-607, 612-614; *St. Joseph Daily Herald*, December 17, 1882.
10. It should be noted that Sanborn did have extensive experience commanding large numbers of infantry. In the first half of 1863, he led a brigade of infantry during Ulysses

S. Grant's Vicksburg campaign. It was, nonetheless, an experience that did not prepare him to lead a brigade of cavalry on a reconnaissance in force.

11. John B. Sanborn, "The Campaign in Missouri in September and October, 1864," in *Glimpses of the Nation's Struggle*, Third Series, Papers Read Before the Minnesota Commandery of the Military Order of the Loyal Legion of the United States, 1889-1892, edited by Edward D. Neill (New York: D.D. Merrill Company, 1893), 163-166; *OR*, Series 1, Volume XLI, Part I, 387-388, 674 and Part III, 817; *The National Tribune* (Washington), December 31, 1925.

12. *OR*, Series 1, Part I, 336-337.

13. *OR*, Series 1, Part I, 336-337; Proceedings of a General Court Martial held at St. Louis, Mo., In the Case of Colonel James M. McFerran, File # LL 2942, RG 153, NARA.

14. Richard J. Hinton, *Rebel Invasion....* (Chicago: Church and Goodman, 1865), 345-348; *OR*, Series 1, Part I, 336-337, 372; Proceedings of a General Court Martial in the Case of United States vs. Brig. Gen. John McNeil, File # NN 3336, RG 153, NARA.

15. *OR*, Series 1, Part I, 336-337, 372; Proceedings of a General Court Martial in the Case of United States vs. Brig. Gen. John McNeil, File # NN 3336, RG 153, NARA.

**Sinisi Slide Addendum:
Adopting to Maneuver Warfare in a Civil War Campaign: Union
Reactions to Sterling Price's Missouri Expedition of 1864**

- ## **OUTLINE**

 - **Introduction**
 - **Brief outline**
 - **Historiography**
 - **Problems facing Union command**
 - **Adapting to a changed mission, or not**
 - **Conclusion**

Figure 1

- ## **BRIEF OUTLINE OF THE CAMPAIGN**

 - **Mission**
 - **Popular uprising**
 - **Re-conquest of state**
 - **Initial strength of 12,000 cavalry and 14 pieces of artillery**
 - **Month-long sojourn in Missouri**
 - **Recruiting**
 - **The Boonslick**
 - **Concentration of opposition**
 - **Westport, Mine Creek and beyond**

Figure 2

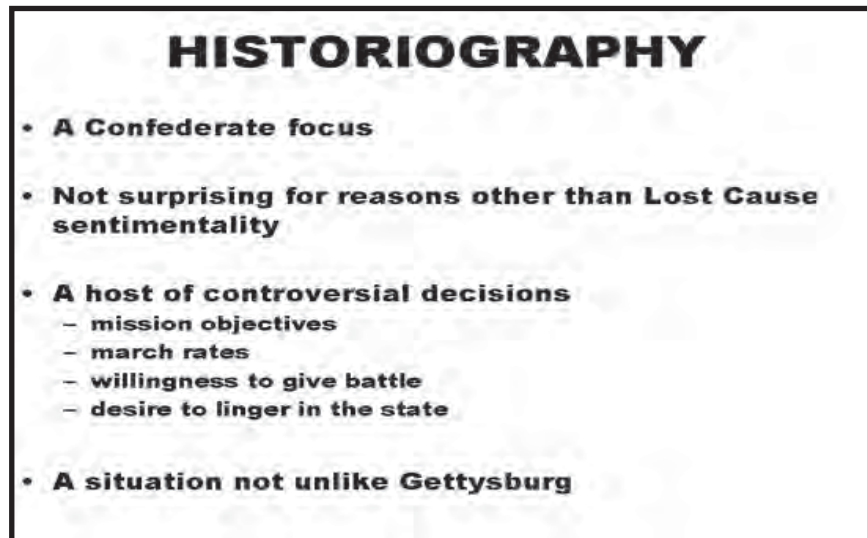


Figure 3

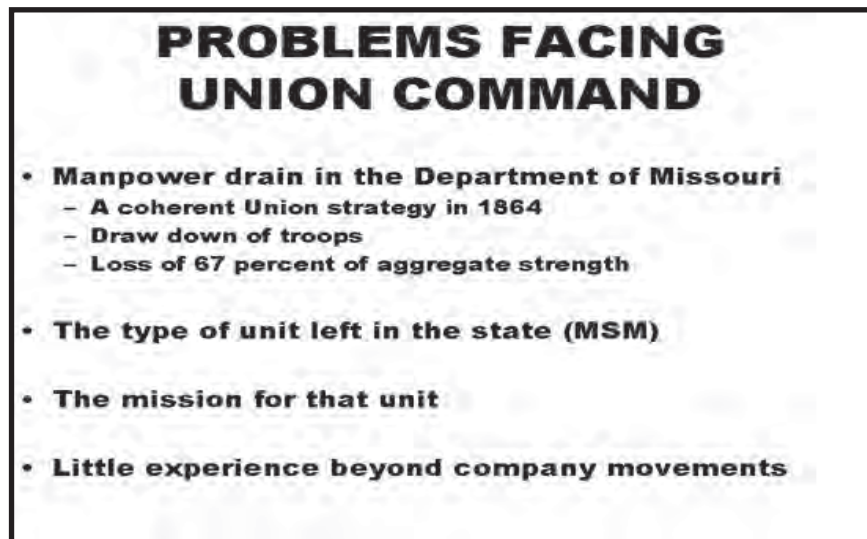


Figure 4

HOW THEN DOES THE DEPARTMENT ADAPT TO CHANGING REQUIREMENTS?

- **Adapted pre-existing technical advantages to larger-scale maneuver warfare**
 - transportation
 - small arms
 - communications
- **What could not be adapted was training**

Figure 5

TRANSPORTATION FLEXIBILITY

- **Railroads and steamboats drove this flexibility**
- **Could exploit to bring troops from outside Department of Missouri**

Figure 6

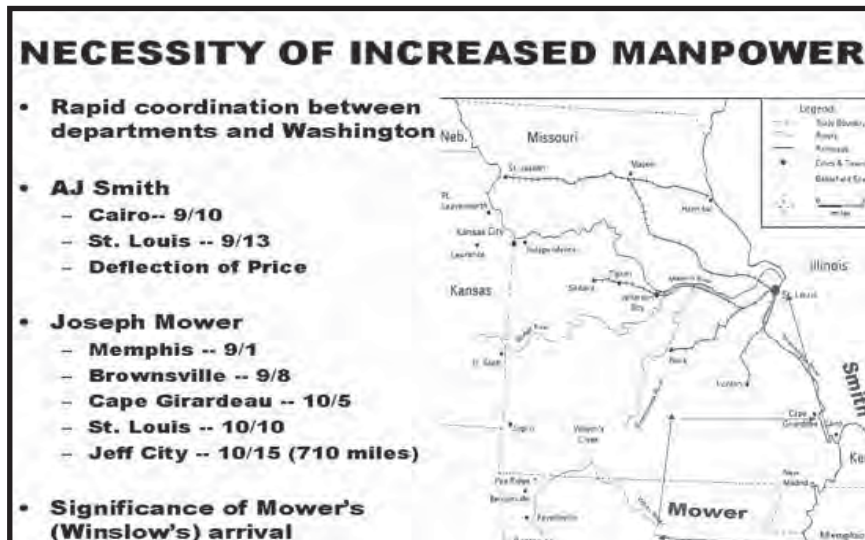


Figure 7



Figure 8

TELEGRAPH

- **3rd technological advantage to be exploited**
- **An extensive pre-existing system**
 - Network to higher and adjacent headquarters
 - Network within state
- **Perhaps the most important tool in counter-guerrilla warfare**
- **In the maneuver campaign**
 - Inter-departmental reinforcements
 - Civil-Military relations
 - Re-application of previous tactical usage

Figure 9

TRAINING AND EXPERIENCE

- **The problem of over-generalization**
- **Nonetheless, significant anecdotal problems**
- **For senior leadership and field-grade officers difficulty in adapting**
- **Lack of experience with units in the field**

Figure 10

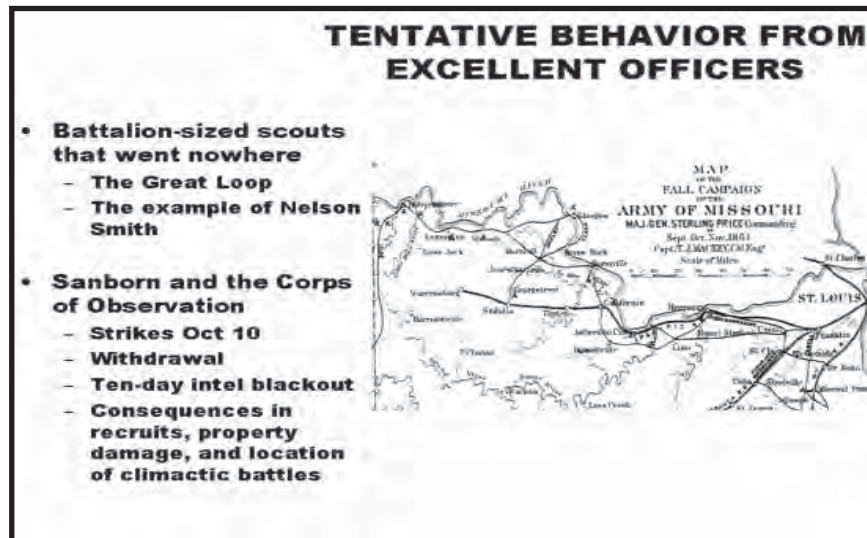


Figure 11

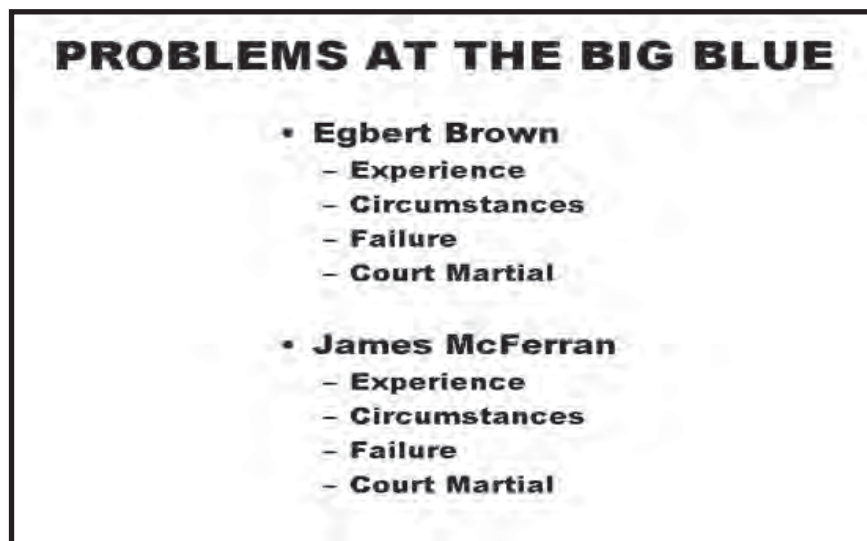


Figure 12

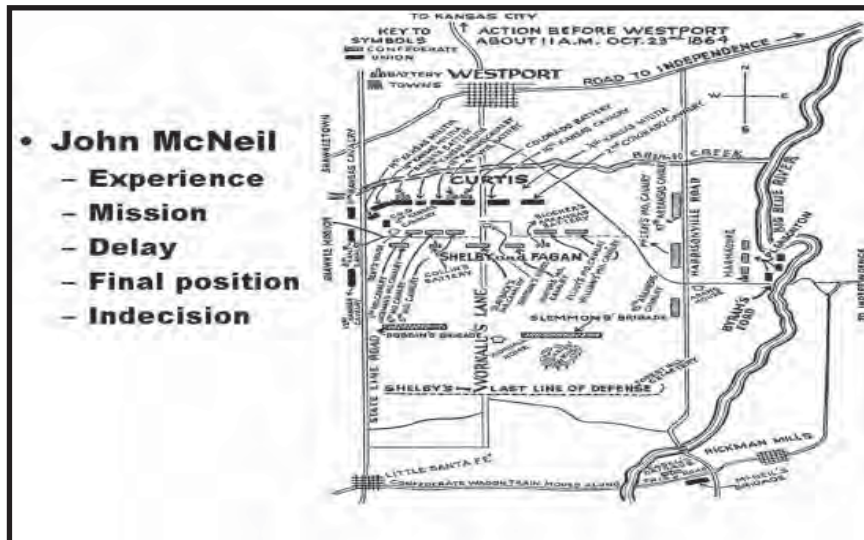


Figure 13

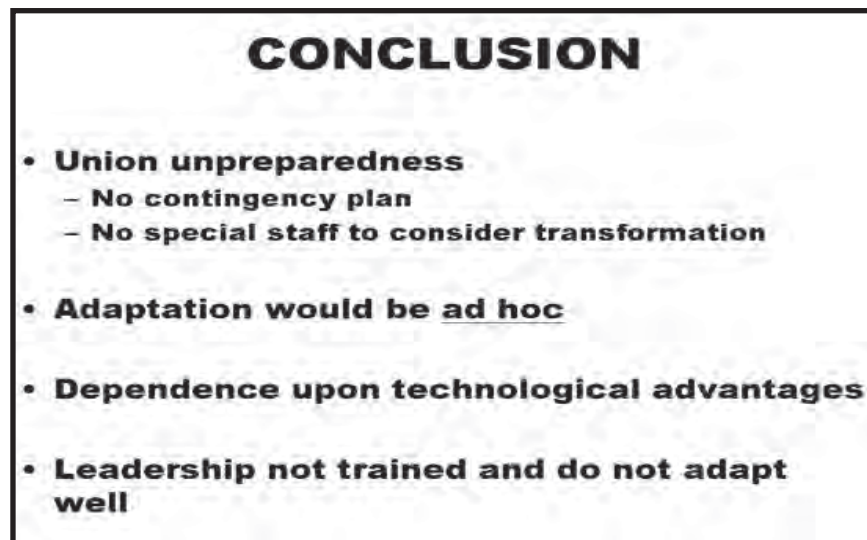


Figure 14

Day 1, Session 3 Question and Answers

Moderated by
Professor John A Lynn - University of Illinois

Professor Lynn

I want to leave some time for discussion, so I'm going to cut my comments pretty much to the bone. But there are a few points I really would like to throw out.

We've got three different discussions here, and our last presenter, Adam, could have said more from his paper—his paper was 70-some pages long; I was amazed at the brevity here. And I'm going to make some comments based on parts of his paper that he didn't present, because I think they need to be made.

In the first case we looked at, the real change in the midst of war, when you come down to it, was changing the personnel—some of the personnel at the top, and bringing in regular federal troops from Illinois and from Tennessee, bringing them up to actually do the main part of the fighting. There were good counter-guerilla troops in Missouri, but there weren't enough, and they didn't know how to deal with a conventional enemy.

In the second case, where we talked about adaptation in Chinese Farm—again, the paper's really excellent, and the oral presentation has to do a lot of pruning—but the point is that the Israelis really are pretty amazing in this, because they developed a kind of arrogance towards Arab armies in general. Then, they developed an arrogance towards tank warfare, and then found that the tank, unsupported by infantry, is suddenly going to get cut apart, because what is not brought out here is the Egyptians went through a major military reform of themselves, which is even more miraculous, in a sense. It's limited, but what they did is they decided, "We can't play the tank mobile warfare game with the Israelis. But what's really good for us is our infantry—they're brave, they obey orders; they will fight resolutely. So let's base it on the infantry." Then if you do that, how do you remove the tank forces and how do you remove the air forces? You do it with new weapons technology.

Then, because the Egyptian forces has not shown a lot of ability to, as it were, adapt on the fly, then you rehearse and you rehearse and you rehearse. The Sagger crews spent hundreds of hours—each crew—practicing in simulators on the Sagers. There were 32 simulated crossings of the canal by the Egyptian Army—they practiced it till they knew it by heart. But it is fair to say they only knew it by heart—they could not improvise once the Israelis upset that plan.

But this new Egyptian Army chewed up the Israelis on the 8th of October. The amazing thing to me is that the Israelis could rethink and reorganize that fast. But again, it was within the context of a conventional war. It's a step beyond, then, our example coming from the Civil War.

Some of the comments that Adam makes in his paper are kind of lessons learned from looking at the literature on asymmetrical war. I think there what we have to think is you're not just talking about taking the same troops immediately and having them do something else; you're really talking about a different psychology. Now here, General Brown and I will disagree—and I have immense respect for General Brown; he's just a fine historian and a fine man—but I disagree that one size fits all.

One size may fit all—you may be able to get a single unit to cover the whole realm of response, if they are carefully trained from A to Z, but you can't do that, in reality. I talked to General Zinni once—of course, again, the Marine's feel that a Marine can do absolutely anything; I mean, they practically come with capes, okay? [Laughter] I said, "Okay, your guys could do anything. How long will it take you to train from a conventional mission to a counterinsurgency?" "Oh, six months." Well, good; if you've got six months, great. Otherwise, you better have people who know what they're doing when they go in.

We also get the example that, "Well, the British do it so well." Yeah, well, they did it really well on Bloody Sunday, because you took in troops who weren't in a counterinsurgency or crowd control men—the paras—and they blew people away. Now, the British did show a great ability to train regular troops for constabulary roles, and did a wonderful job. But that takes not just one size fits all—it takes recutting the cloth, and make something else.

I would argue that the greatest change in the midst of war isn't bringing in other troops, or staying in the realm of conventional war, as the Israelis did, and did marvelously in '73; it's just incredible. I mean, compare that to the French in 1940, and you know, it practically hits you between the eyes. But it's that change in psychology, from war fighting to constabulary, and the kinds of skills and trainings and restraints needed in one, but you're out of place in the other—that, to me, is the greatest change on the fly, and I'm afraid that's the one we're going to have to be faced with.

At any rate, I will now cease my comments and open the floor for discussion and comments for the next ten minutes. I'm going to go back and sit over with the first team over here, and we'll get our questions.

Questions? Comments?

Audience Member

I've been through all this business with asymmetrical warfare for a long time, and it strikes me that at times we define the word asymmetric a little too narrowly. I mean, would you agree, for example, that from 1805-1807, the corps d'armée system gave Napoleon an asymmetric advantage over his European opponents?

Professor Lowther

As I said, I'd like to talk about theory and not facts. So when you offer Napoleon's corps d'armée system, I have no idea what you're talking about.

Professor Lynn

I really regard asymmetrical as being a radical change between the level of warfare through methods, sizes of units, etc., but through different people. Consequently, an advantage in the field for one over another of a conventional army is not asymmetrical, and neither is one army that decides it's going to harass as opposed to attack—that isn't asymmetrical; that's a different choice of tactics within one symmetry, so to speak. Other comments?

Professor Lowther

I would say that there are probably two things relating Eastern and Western warfare, and that for quite some time, the West has maintained a technological superiority over the East. So therefore, much like the Hungarians when they were a part of the Imperial Armies, they tended to be skirmishers because they tended to be technologically less adept than the Austrians. Therefore, when the East is fighting the West, you're going to adapt; and when you adapt, if you're the weaker, you're going to tend to say, "Well, I'm not going to stand and get annihilated; so therefore, I'll find another way to fight."

Then also, there's a cultural aspect to it going back when there was parity, and in particular, when the Parthians and the Turks moved in from the step, moved into the Persian and Arab lands, you know, they were cavalry, they didn't stand and fight; they brought the Parthian shot to the civilized world, in that area. Historically, there is somewhat of a culture—I would say—of this style of warfare. Their crusaders would go before huge Arab armies, with 5,000 to 10,000 knights, and win some and lose some, but they believed that their heavy infantry could always win. So there has been a distinct cultural difference in preference.

Audience Member

I just think that your point, sir, is well taken on military theory. Any of you who happen to know about asymmetric warfare—it's embedded in most American history from 1754-1783. How do we know this? Because Mel Gibson tells us so.

[Laughter]

As a spiritual guide, he's certainly the source of great theory. But on a more serious note, I have a question for Dr. Sinisi. Why didn't the grand, total impact lesson of the Civil War not make it to Europe? You don't see that that much recognizable, in the Civil War, you have everything from positional and methodical to deep battle—God knows we have deep battle, long before [inaudible]. Why didn't it make it? Why didn't it make a transatlantic hop?

Dr. Sinisi

I'm tempted to say cultural arrogance is part of it, because Europeans did have many observers here. As Jay Luvaas pointed out many years ago, they did take something from our war; what they took, however, had very little to do with operations. They were very much into the technical aspect—they were interested in the types of ordnance, they were interested in the mines—but again, you get back to, I guess, was his comment, that it's just two mobs running around the wilderness, shooting at each other. So, I mean, why didn't they take anything from it? I don't know.

Audience Member

Malkin never said that. It's never showed up in any of his writings, and I actually have that in documentary form, in a letter, which I'll tell you about later. The most important thing, though, as to why the American Civil War never made it to Europe was that from 1864 to 1866 to 1870 the Europeans had actual experience in Europe to really go on.

Dr. Sinisi

Point well taken. Yeah.

Audience Member

And then, of course, where they spend their time, you know, kind of looking at what the next war's going to look like from 1875 to 1914, and by and large—and here's where anticipating the future is important; this is where I think everybody in Europe missed it—and that is the issue of scale. Everybody knew artillery was going to be lethal, but they didn't realize on what scale it was going to be— For example, the Germans realized that something major had happened when in the first five months of combat in 1914, they fired more artillery shells than they had during the entire Franco-Prussian War. It's the issue of scale that, very often, people will get wrong.

Dr. Sinisi

Yeah. I would agree with you. But on the other hand, I love that article by Michael Howard on Men Against Fire, where it makes it clear that the Europeans knew this was going to be an awful, bloody war. They had figured out what modern weapons would do—although, yes, short on scale—and then went ahead and said things like, “Maud”—you know, “Show me men who know how to die!” Oh, God, what a great way to lead an army! In which you were going to have to ante up to be a great power, and the ante-up was going to be giving away your young men’s lives, to solve this terrible problem of getting over to the other side, in the context of modern weaponry.

I don’t think they were as naïve as Americans like to think that the Europeans were.

Audience Member

But the expectation was that the war would have to be short, because the industrialized economy was considered to be so fragile that it could not withstand the constraints of a prolonged and bloody war.

Dr. Sinisi

Agreed. They were wrong on that part; they were right on the killing.

Audience Member

I’ve got a question. My name’s Ted Thomas; I’m an instructor here on the post, on the leadership. It’s to Mr. McGrath. You made a comment that in ‘73, that the Israelis were a modular unit with brigades. Is that correct?

John McGrath

Well, I was speaking a little prosaically, maybe.

Audience Member

Then you said after the war, they went to a more fixed division structure. Is that correct?

John McGrath

Their divisions in ‘73 were really just glorified task forces. After that, they made it into a formal type unit, permanent unit; then they even came up with a corps.

Audience Member

Well, my question reflects on our briefing this morning on the UA and the UEx and the UEy, because it sounds like what you’re describing is they had more of a modular structure like we want to go to, and then they went back to a more fixed

structure, like we're coming from. Is that true, or is there some lessons we can learn there, or what?

John McGrath

Well, they had a brigade-based army. It would be like if we had just the brigades without anything above it. Even in our new modular army, we're going to have higher units above that they really didn't have that.

Audience Member

They've always been a brigade—modular brigade army. The divisions will always administer the [inaudible], and they still are, and that has to do with—

John McGrath

Well, before the—after 1973, their divisions were really just task forces that were—they had one regular division and they had a bunch of mobilization ones in reserve. For example, Adan's division, the headquarters was supposed to come from the Armored Corps headquarters, which is kind of like the Fort Knox of the Israeli Army, and when the war started, the Armored Force headquarters ended up spending most of its time processing recruits and making new units and stuff. So he had to make up his own headquarters; he took a couple of guys from there, and left most of them behind. So it wasn't a permanent organization, and similar things happened in the other divisions that were reserve organizations.

Professor Lynn

We are reaching, and in fact have somewhat passed the limit of our talk today, so to keep things on schedule, I'm going to cut it short now, and thank our presenters.

[Applause]

A “Red Team” Perspective on the Insurgency in Iraq

Colonel Derek J. Harvey - US Army

I’m glad to be here. I always like to talk about what we’re doing in Iraq, because there are a lot of misperceptions. I should say right up front that these are my views. They do not necessarily reflect the views of the US Army nor the Joint Staff, et cetera. But take the ideas I’ll present here, take the concepts, take the points, run with them, use them, integrate them into your thinking if you find them valuable.

As Dr. Yates said, I was in Iraq for a long time, and I continue to focus on it. I’ve been working Iraq off and on either in policy or on the intelligence side since 1989. When I went up to Iraq this last time—for the long duration—it was in the summer of 2003, to help Lieutenant General Ricardo Sanchez (US Army), and then Major General Barbara Fast (US Army), to try and figure out more about the enemy—who they are, what their capabilities are, what their vulnerabilities are, what’s motivating them, what they’re trying to do. As we moved along, the process of trying to understand the insurgency became more complicated and more complex.

I’m going to talk here mainly about the Sunni Arab phenomenon and not the Shi’a uprisings we had in 2004, or the continuing problems we have with some of the Shi’a extremist groups. Also, the focus here is not on Sunni religious extremists, and I’ll tell you why, and also not on Abu Musab al-Zarqawi, and I’ll also explain that too.

The key to supporting our policymakers and commanders is to take data and all the information that we collect in intelligence, through operations and other ways of collecting knowledge and information—taking that information and analyzing it, and then making some knowledge out of it that will increase our understanding, and then making from this knowledge something meaningful for our policy makers or commanders; for example, figuring out what the vulnerabilities are of the enemy, so that we can exploit them, and what the strengths are, so that we can mitigate those strengths, and advance our cause.

Now, there are some common misperceptions about the nature of the insurgency and other things that are going on in Iraq. I’m not going to go through each one of these (**Figure 1**), but I’d like you to read them, and think about them, as we go through this briefing. We’ve heard, for example, that there’s only a small number of insurgents. Well, maybe I will disabuse you of that; maybe the definition of what “small” is will be different after this.

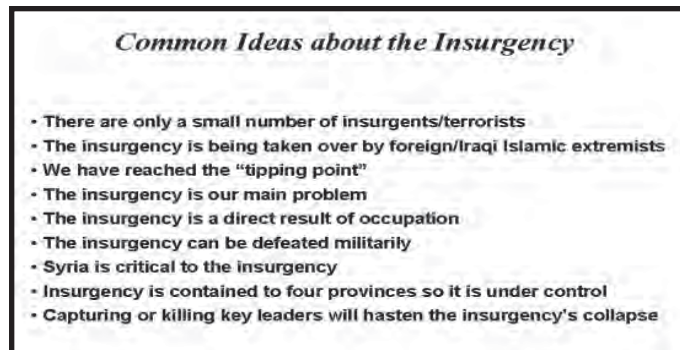


Figure 1

We’ve constantly heard that we’ve “reached a tipping point,” or we’ve “broken the back of the insurgency,” or we’ve heard things similar to “There’s light at the end of the tunnel,” which harkens back to Vietnam, if you will. Dates and things that are important for us—for example, getting through a transition to an Iraqi interim government—are not as important to them. Squashing the insurgents in Fallujah and eliminating the city as a sanctuary is a very important event for us, but maybe not as critical to them operationally and definitely not strategically. So these are just some things to think about as we go through this presentation.

Now, I’d like to begin with bounding the problem, because the insurgency in Iraq is largely a Sunni Arab phenomenon. We often hear that the insurgency is contained—and it is. We hear that we have things going well in 14 out of 18 provinces, and that’s true. But what I’m highlighting here in the shaded grey areas (**Figure 2**) are in fact where you see the violence. And violence, in relation-



Figure 2

ship to the insurgency, is only one part of the problem. There's a whole other dynamic that's going on here that involves the political conditions, the building of organizations, infiltration, and expanding the political reach or the influence of those who are linked to the insurgency in the Sunni Arab resistance. And this dynamic goes beyond the shaded areas. But the violence really is bounded within the shaded areas.

Now when you say problems are contained and that things are going well in 14 out of 18 provinces, that's an absolute fact. But it's like saying things are going well in Arizona, except in Phoenix and Tucson. Baghdad and Mosul—two of Iraq's three largest cities, including the seat of government—dominate the country and are very important from an Information Operations [IO] perspective. This is where most of the population is, and it happens to be where the Sunni Arab population mainly resides—along these two corridors, one from Baghdad to Al Qaim, and from Baghdad north to Mosul. These corridors are along major rivers. So that's where the problem is. We also have other actors, of course, coming in from outside the country, but that orange area is where the problem really is— and it's a Sunni Arab phenomenon.

Now this is just an overview slide (**Figure 3**), to give you some highlights of what we're talking about. Now, when we went into Iraq, we flipped the social, economic, and political order on its head. We flipped it, and the Sunni Arabs—for the most part the old oligarchy, the old leadership, the clerics, tribal leaders, and others—are focused on regaining their power, influence, and authority in whatever form that is relevant for different groups that are there. Some Sunni groups are more religious in orientation, some are pure Ba'athists, some are just interested in power, and some are simply businessmen focused on economic matters and their place in the future of Iraq, economically and in terms of having influence.

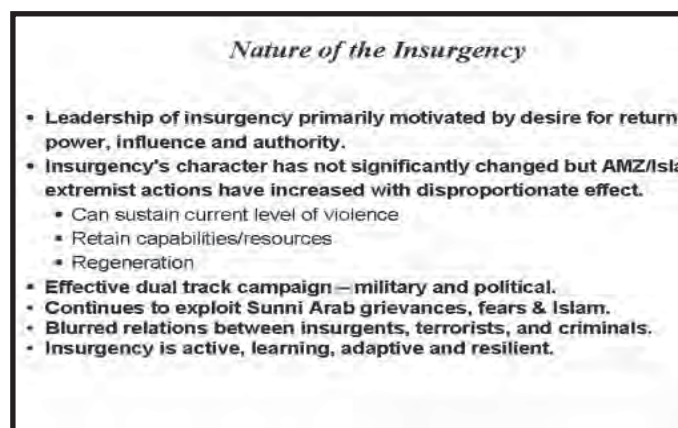


Figure 3

The character of the insurgency has not really changed much over the last two years. The insurgency has grown, it has evolved, but the fundamental character has not changed. What has changed is that we've seen a natural growth of the Zarqawi element—Al Qaeda in Iraq—which is what one would expect after almost two plus years of fighting in Iraq—we should expect that Al Qaeda would build a capability there over time.

But when one looks at the dynamics of attack metrics—who's involved, what the composition is of the different insurgent groups in the different towns, and how they collaborate and overlap—one sees that foreign fighters and Zarqawi remain a very small part of the actual numbers. But they have a disproportionate impact because of the types of attacks they conduct. The vehicle bombs, the suicide bombers, and suicide bombers wearing vests create mass casualties and have an IO impact that is significant—not only in the region, but also in Europe, and also affecting our will here at home—because when you look at the newspaper, you look at a magazine, the focus tends to be on these high-profile types of attacks.

But, the overwhelming majority of vehicle bombs are not conducted as suicide attacks. Non suicide vehicle bombs are the majority of the vehicle bombs. Overall, when one looks at all attacks, the overwhelming number of other attacks—95 percent or so—are conducted by Sunni Arab insurgents across a wide spectrum. These are not the Zarqawis nor indigenous religious extremists.

Now these insurgents can sustain the current level of violence for a long time. In two years and three months, we have not seen any real decrease in the insurgents' access to weapons and munitions. And they have more than enough recruits to regenerate their ranks. A retired general made a statement here last week that was picked up in the Washington press about coalition and Iraqi forces having killed, captured, and wounded over 50,000 insurgents since January '05. He misspoke; he really meant to say since January 2004—a time at which we were saying that there were only 5,000 dead-enders fighting in the insurgency. Since then, we have captured, killed, or wounded—according to the information that's been made public—over 50,000 insurgents, and it may be well beyond that. Those numbers, when you start to drill down, are still somewhat suspect. Regarding insurgent capabilities and resources—they have more than enough weapons, munitions. We continue to find arms cache after arms cache after arms cache, and one indicator that they have plenty of weapons and munitions is that the price of weapons doesn't seem to be going up, nor does it seem to be going up for munitions. There are localized shortages and distribution problems if you will, that cause some spikes in prices but overall the point is there are plenty of weapons.

They have more than enough of the right skill sets of their people—bomb makers and the like. So they seem to have capabilities to sustain this for some time.

Effective dual track campaign. For over two years, they have understood—when I say they, I mean a collaborative, cooperative group of Sunni Arab leaders that represent religious as well as Ba’athists and other elements—they have understood that the military violence is directed at establishing political conditions favorable to them in the long run. And they’re leveraging fears and grievances quite adroitly.

Then one other thing—this is probably the most significant change we’ve seen—is that the overlap of collusion, of transactional relationships, if you will, between terrorists, Zarqawi, insurgents, and criminals seems to be becoming more and more blurred.

Now, I always think it’s important to understand who the insurgents are and what motivates them (**Figure 4**). It is difficult to try to think and feel, and understand your opponent. I talked about power, influence, and authority, and it being flipped. Now think about what if your life, your future, the future of your grandchildren and your children, your place in society, your wealth, even your homes, your jobs, your careers were suddenly taken from you—if the whole world as you knew it was gone, and the future looked bleak because it looked like it was going to be dominated by outsiders, as well as by those that you had fought once before—say the SCIRI and the Badr Corps, along with Iran—and it looked like the Shi’a theocratic movement was in the ascendancy, linked to Jaafari and Dawah, the political group representing the Shi’a. So think about it from the perspective of many of the Sunnis—it does make a difference when you do that.



Figure 4

Political and economic sources of discontent. You know, the Sunnis have seen these Iraqi outsiders come in—first as part of the Iraqi Governing Council (IGC), then part of the Iraqi Interim Government, then the Iraqi Transitional Government—and it looks to the Sunnis like it's nonrepresentative and they see the “outsiders” as pawns of the Iranians or pawns of the West. And who represents the Sunnis in this process? From the Sunni Arab perspective, especially when you go back to May and June of 2003 when we had the general orders directing de-Ba'athification and demilitarization, a growing sense of marginalization and fear of the future. The effect of these measures on the Sunni Arab community was significant as to how the Sunnis perceived their role in the future. And, of course, the many of the Sunnis view the people who are now in charge as corrupt and nonrepresentative.

Now, there's a conviction among many of the Sunnis—and this goes counter to prevailing wisdom—that Sunnis represent the majority in Iraq. They believe it. You talk to them, they believe it. Every census that they've ever read or seen says that they are the majority. Now, they link Sunni Kurds in that group too, and they see the Shi'a as a minority. Then, we came in, and we apportioned 65 percent or more positions in the IGC to those associated with the Shi'a faith. That's something to think about when you're looking at how this plays out. In fact, when you look at everything we've learned over the last two years and three months, the Shi'a probably are closer to 55 or 53 percent of the population, and not 65 percent.

I already mentioned de-Ba'athification. It resonates to them as de-Sunnification—that's just how they look at it. This has an impact. We can rationalize what we did but the effect on the Sunni Arab community is real...and what matters is their perception.

Then there's economic deprivation. Relatively, they look at their life as being worse off—unemployment in many areas is much worse. Those of you from the 82nd and other units that have been in Ramadi, et cetera, where you have unemployment at 70, 80 percent. We might have official numbers that talk 25, 28 percent unemployment, but what is the real unemployment? It is often much higher than the official numbers, and this has disproportionately impacted the Sunni areas.

Then you look at things like the Sunnis' perceptions of distribution of electricity and benefits, and where the financing and the construction projects are going. It looks to many of the Sunnis like it's disproportionately favoring Kurds and the Shi'a south, and not benefiting any of the Sunnis. Again, this feeds into a Sunni sense of victimization.

If you go to the coffee shops, the Sunnis believe that Basra has 24 hours of power a day, and they, the Sunnis, are getting 7, and this just feeds into this sense of victimization, which motivates people at the grassroots level. It doesn't matter whether it's true or not. There are people that know how to exploit those types of themes, and because there's a predisposition to believing them the insurgent leaders can more effectively exploit these themes.

Then, of course, you all know about the anger about our actions, and anti-Western beliefs. We can't understate the 30 years of xenophobia and anti-Western attitudes that were created because of Saddam. The xenophobia and anti-Western attitudes provide fertile ground for what is in effect an enemy IO campaign.

Then, lastly, religious nationalism. For a long time, Saddam and the Ba'ath Party focused on building up religious credentials. The insurgents of all stripes – hard corps Ba'athists to religious nationalists decided early on they were going to use the mosque and religious themes to fight us, and they've been doing that quite well.

So our challenge here, as one looks at the environment is, why are people on the fence? (**Figure 5**) Well, first of all, I'm only talking here about the Sunni Arab community. Our challenge is to make this group at the bottom of the chart larger (those supporting the Iraqi Government) and decrease the number of those Iraqis who are on the fence. And we need to contain, kill, co-opt or coerce those that are insurgents, and limit their effectiveness.

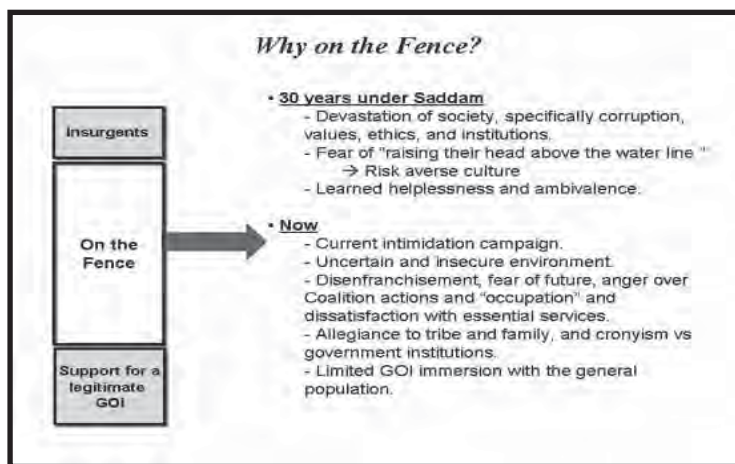


Figure 5

But we underestimated the impact of 30 years of Saddam's rule on that society, as far as undercutting basic values and the willingness of people to step up and try to make a change.

Also, we in the United States think of individuals and individual guilt and accountability. In much of Arab society in countries from Iraq to Morocco, there is very much a sense of communal or family or tribal guilt and accountability for the actions of individuals. So in Morocco, when General Oufkir tried a coup against King Hassan in the early 1970s and it failed, he died, and his daughter, who was just an infant, spent almost three decades of her life in prison, an extreme example of communal or family guilt for the actions of individuals. It is not an aberration when you look at that phenomenon in Iraqi society.

When one looks at what Saddam did to punish people when there were suspicions of treachery, or when some individuals just did not play ball with extortion or corruption schemes, or did not give what was asked to Uday, his son, the people who resisted that paid a price. Over time, this creates an atmosphere and a psychological outlook that keeps one from raising their head above the parapet, if you will.

Another factor is that we have an insurgent intimidation campaign that's very effective. Then you throw in the other factors of society that are highlighted there, and it's no wonder that there are many Sunni Arabs that are fence-sitters. So our challenge is to change that dynamic. The insurgents are working in their own way with intimidation, using tribal and family and cultural issues, and religion to keep people on the fence or encourage them to support the insurgents, and we're trying to work with the Iraqis and the government to reduce the number of insurgents and to increase the number of supporters for the government. We're using the military to this end, but we're more or less in a stalemate, because neither side can win militarily. But we're using other means as well as the military to achieve our goals.

I have seen Sunday news show hosts as the question, "So who are we fighting? Who are the bad guys?" (**Figure 6**) Well, there's a circle in the middle there representing former regime types, the old oligarchy—not necessarily Ba'athists by ideology, but associated with the old regime, beneficiaries of the old regime—and they're leveraging what we call the POIs and the rest of that opaque circle there—the unemployed, the angry. (POIs are short for Pissed Off Iraqis, okay?) [Laughter] So they leverage that, and they're very good at it, because they know their own human terrain better than we do.

Then there are some other groups at large here. For example, there's a smaller number of what we would call Iraqi Islamic extremists. This is something that if you're a soldier on the ground, you're in a battalion or brigade, you're civil

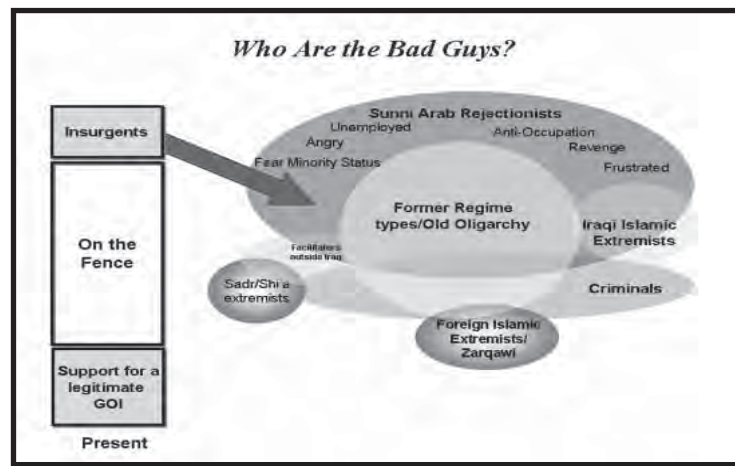


Figure 6

affairs, and you're fighting someone who self-identifies as a mujahideen—a fighter—fighting the Jihad, wearing the dishdash, and is being motivated and exhorted by religious tracts, some even written by Izzat al-Douri, you get an impression that you're fighting religious extremism. But most of the guys in that larger circle are just generic religious nationalists, or from my point of view many are not even very religious. Those that really believe, say, in Salafism, or Takfiris or Wahhabis, are really a much smaller number—a very small number—There really are not many who are clamoring for an Islamic state for the Sunni Arab community. In fact, the religious extremists do not really have any reach in the broader Sunni Arab community, because it's not reflective of what that community really wants.

Then there is smaller number of others that are involved in violence—foreign Islamic extremists, like Zarqawi; I talked a little bit about him already. Just remember that this is a smaller number—very small—of people who are nevertheless very effective, and very good at the use of IO. And our own focus on Zarqawi has enlarged his caricature, if you will—made him more important than he really is, in some ways.

I would say that the anxiety of the Iraqis has gone up, not so much because of the violence, but because of the randomness of the violence. There was probably more violence—if you talk to them—in the days of Saddam; more people disappearing or getting killed. But many of the Iraqi people could generally associate a cause and effect during the Saddam era. For example, as I was saying, if someone disappeared it was generally thought they were not playing ball with the regime in criminality, or maybe there was anti-regime talk or suspicions that brought the secret police to their door.

That's the dynamic at large, if you will, as simple as one can make it. In the insurgency, you have Sunni Arabs, and then you have Islamic extremists, along with Zarqawi—basically, two groups. So, this slide (**Figure 7**) summarizes that, and I can't emphasize enough that those from the old regime, or associates of it, who are driving the insurgency aren't necessarily driven by Ba'athism. That's not a driving force. It's a multigroup insurgency; it's relying heavily on these personal relationships—professional, business, tribal and family—because everything in this society is really fundamentally about relationships and trust factors. These

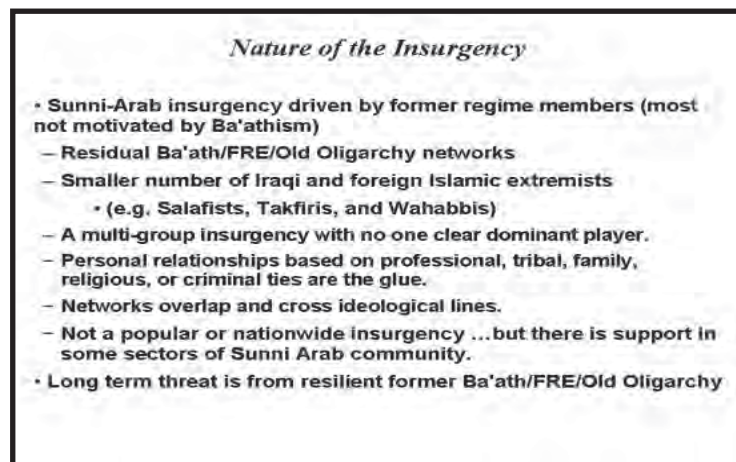


Figure 7

networks in this community overlap, cross ideological lines, but we're right when we say to the press that this is not a popular insurgency—it is a resistance. It's not nationally popular insurgency because it's not in the Kurdish area, and it's not in the Shi'a south. The insurgency is based on a minority of a minority in the Sunni Arab community, with a large number of fence sitters, waiting to see which way the wind really is going to blow. The long-term threat really is not Zarqawi or religious extremists, but these former regime types and their friends who understand how to network, infiltrate, coerce, co-opt, and undermine the emerging Iraqi institutions, so that they can eventually subvert them, somewhere down the line.

So I've talked about relationships, and they are fundamental to understanding what's going on (**Figure 8**). You have to look at these relationships and understand them to be an effective analyst looking at what's going on in Ramadi or Samarra. You have to understand the nature of these relationships and how they influence the power structure in each of those places.

Now, if you think about it just from a comparative perspective, it's like trying to understand Cedar Rapids or Kansas City, politically. Who are the movers and

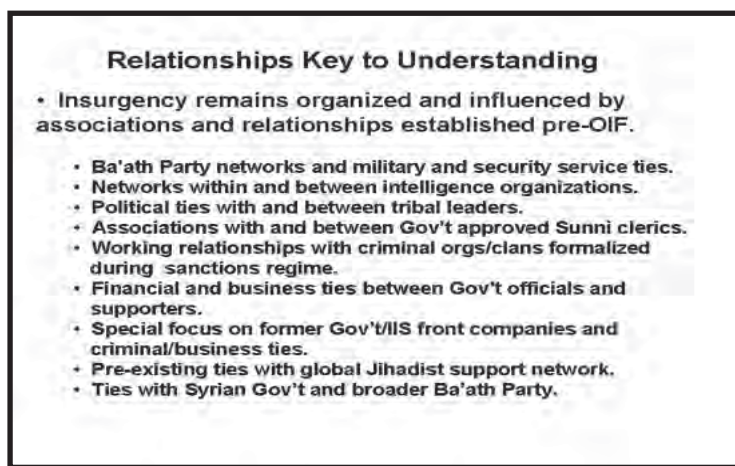


Figure 8

the shakers? Who are they related to? Businessmen, politicians, religious leaders—they have their own “tribes,” if you will. But you have to change paradigms from ours to theirs, and then understand the cultural subtext of all of this. Lets talk about pre-existing ties between the Saddam regime and the global Jihadist network which I find to be very important. If Saddam’s regime was recruiting and training foreign Jihadists in 2001 and 2002—and the Regime had certain elements of the security forces and intelligence service responsible for doing just that, and many of these jihadists were going back to their countries afterwards while some stayed in Iraq—I suggest that those networks, those relationships continue to inform and shape the contours of the insurgency, and how the Jihadist transregional network continues to support in some ways, the native insurgency. You can have former Ba’athist secular-oriented bomb makers, in vehicle bomb-making factories building these things, large vehicle bombs, and then linking them up with folks from the Zarqawi network. For the insurgents, the vehicle bomb and suicide driver is just considered a tool or another weapon system.

So, in order to understand some of these relationships, you look at a situation and you see something like this: the police chief in town was one of these trainers of the foreign Jihadists in 2002; his cousin is in the AMZ network; the mayor was a senior Ba’athist and was the boss of the trainer prewar; and they’re all from the same local tribe. You look at these relationships, and you build intelligence in bits and pieces, and you start to build the network to show how this is working.

But a key is that analysts have to go back and learn about the history and past relationships that in some ways inform us about the contours of what we are facing today.

These are just some of the relationships or trust networks that, when you're looking at this society, you have to factor in—peer mates from school, mosque relationships, village et cetera (**Figure 9**).

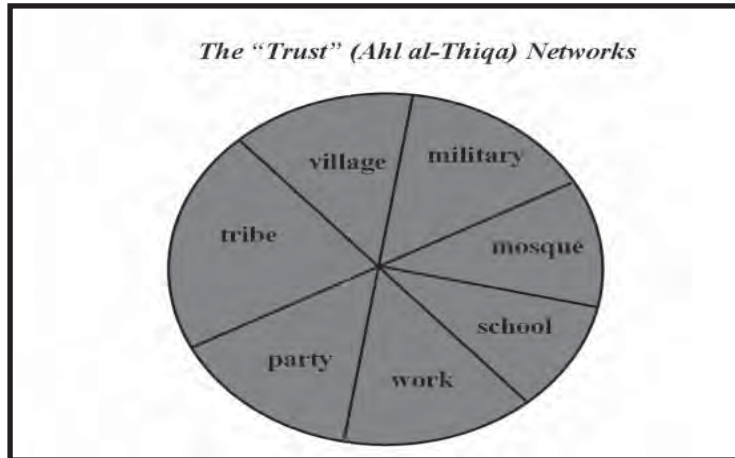


Figure 9

When Saddam staffed his inner security, for example, he drew on key loyal tribes. If I look at who's really involved in the insurgency, and who staffed the key positions in the security services that were the most loyal to the regime, one sees that the regime relied on about six tribes and 18 clans. So who are they? Where are they from? What towns? Which people are we talking about? At least it gives you a direction and azimuth, if you will, to lead you to better understanding and perhaps some insights on current networks (**Figure 10**).

Not counting the Republican guard, and not counting the regular army, and not counting the 1.1 million people of the Ba'ath Party, if one just looked at this

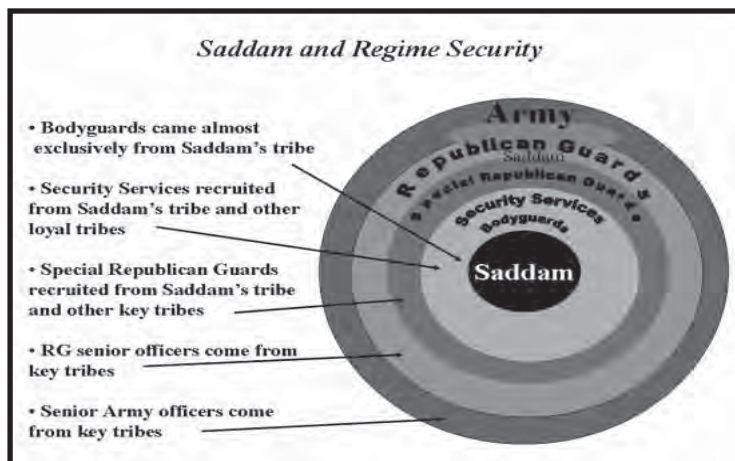


Figure 10

recruiting base—special Republican guard, military bureau, presidential security, Saddam-Fedayeen, on down the line—it’s about 120,000 people. These provided a key element of support to the old regime and we still see remnants from these organizations providing a base of support to the insurgency. Lets not forget that these same organizations were staffed with people from loyal tribes (**Figure 11**).



Figure 11

For the most part, the people from these organizations don’t have a future. I’ll give you two examples here. Ba’ath Party militias—there was one battalion in every province. These were the headhunters, these were the enforcers, these were the guys that threw Shi’a off of the tops of buildings to their deaths in concrete parking lots. These guys have no future. Saddam-Fedayeen, likewise. Both of these organizations were created in the mid-1990s to focus on regime survival, and they had aspects of paramilitary capabilities, and they were designed for regime survival—to be a counter-coup force, to help one put down an uprising, if the Kurds had another uprising, or if the Shi’a had another uprising. They took lessons from 1991 and said, “What do we need to do differently?”

The regime was focused on survival. It was worried about uprisings and losing control. It was in that environment that many measures were implemented. So, for example, if you were from the directorate of general security, you put 18 safe houses into a large city and you grab a few mosques to use covertly too. Then you store weapons there, and you put in a hundred base documents that will give you the ability to change identification or forge documents. Basically, you put in equipment and capabilities so that you can operate covertly in the event you lose control, or in the event that there is a contested environment. The regime did these kinds of things over a decade to put a capability in place. They also created city defense plans while maintaining security and compartmentalizing activities.

How they did this under the old regime and what they did is important to understanding what's going on today. And if you don't understand it, you're not going to understand how to attack it today, because you're going to see something that you're going to misinterpret. These safe houses, the city defense plans—those who were involved in the city defense plans under the old regime quite often have overlapped with those that we identify as being in the current insurgency.

So if one looks at the Ba'ath Party today with its one million members, these relationships—the model of behavior, the knowledge of how to work clandestinely in your own community, how to operate in an environment covertly—are all important. These relationships have continued in many cases to this day. Some of the former regime have been slowly trying to rebuild these networks and relationships over these last two years and three months (**Figure 12**).

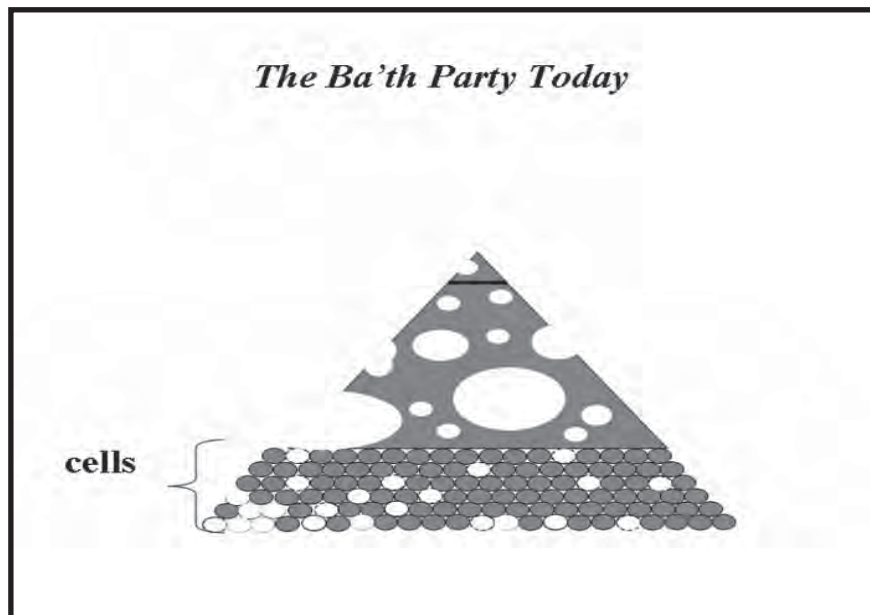


Figure 12

Now this slide (**Figure 13**) lists some people that are still key insurgents and most were in the Top 55 Black List. Except for Sabawi who was turned over by Syria, these guys are still on the loose. What's interesting about them is that they

<i>FRE Leaders</i>	
Izzat Ibrahim al-Duri (62): Saddam's deputy...ran the Ba'ath Party for Saddam...assumed Saddam's duties ...key party figure since 1968	LTG Sayf al-Din al-Rawi: former Republican Guard Chief of Staff...from western Iraq/Ramadi area
Muhammad Yunis Ahmad (63): Old guard Ba'hist...Military Bureau...came out of retirement to lead resistance ops.	Rafis Abd al-Latif Tilfah: Former General Security Directorate Chief...Saddam's maternal cousin
Abd al-Baqi Abd al-Karim: Former party chief for Baghdad west and then Diyala	Hani Abd al-Latif Tilfah: Former SSO Chief...Saddam's maternal cousin
Rashid Ta'an Kadhim: former top party official; from Diyala Governorate	Tahir Jalil Habbush: former Intelligence Chief...from Tikrit...top party official
Yahya Abdullah al-Abbudi Former top party official in Basra	Sabawi Ibrahim al-Hasan: former Intelligence Chief...Saddam's half-brother...captured earlier this year.

Figure 13

were all involved in the security services. We easily rolled up guys from foreign ministry, doctors, and others. But the guys that really knew the business, had the trade craft down, for the most part, they're still running around, and I believe that they are involved in the insurgency. One could talk at great length about the networks and how they're involved, but I can't do that here.

Besides these relationships in the Ba'ath Party, one can also go and look at other things (**Figure 14**). Over the decade of the 1990s, for example, I mentioned the building of covert capabilities—stay behind, support to the military forces,

<i>Pre-OIF Planning/Capabilities Shape Today's Insurgency</i>
<ul style="list-style-type: none"> • Internal Security Forces and Ba'ath Party developed paramilitary and irregular options for defense. <ul style="list-style-type: none"> – Paramilitary planning and preparation for disloyalty – Regime Collapse Scenarios – Stay Behind, Counter SOF and indigenous revolts – Dispersal and placement of key resources • Expanded and exploited religious ties and networks in mid 90's. • Foreign/terrorist ties expanded; cooperation and participation increased as OIF became imminent. <ul style="list-style-type: none"> – IIS and RGSF • Iraq's in-depth defense plan failed but provided relational framework for insurgency organization and capabilities.

Figure 14

paramilitary training, dispersal capabilities—that could be employed in the event of a threat of regime collapse. These are things that were done for regime survival, and these things were accelerated in the late 1990s, as it looked like tensions were increasing, and they really accelerated in 2002.

Starting somewhat before the 1990s, they also expanded ties to religious organizations, using groups like what is today the Muslim Ulema Council—previously, it was the Society of Islamic Scholars—and others, to expand relationships, just so they could be aware of what the threat was, because they thought an Islamic-driven Jihadist coup or threat might be something they needed to worry about. So they decided they needed to penetrate and understand the broader Muslim brotherhood community, as well as the domestic religious threat. So the Regime expanded its infiltration of these groups. Later the Regime decided to start using these relationships with transregional terrorists to their advantage so they started to work with the Sudanese Islamic Army, the Egyptian Islamic Jihad, and others, in addition to training some of these people in their own country. So these ties increased in the 1990s, and you had the Iraqi Intelligence Services (IIS) and the Republican Special Forces involved in this extensive training. It's probably the most unappreciated fact that we underestimated the extent and breadth of this relationship, as we focused on WMD and other things.

This relationship continues to remain a very unappreciated and unreported element of the insurgency, and I believe that these past relationships inform and shape the current insurgency. Some people look at the past relationships as being just history. But I suggest to you that if you know that people from the Iraqi Intelligence Service were involved in training and had relationships with the Sudanese Islamic Army, and they had these relationships for over a decade, then it is likely that those relationships and networks are still manifesting themselves today. The Iraqis that are likely still involved in this are no longer IIS after the regime collapse, but they're the same individuals.

In the prewar period, you had car dealerships and stolen car rings bringing stolen vehicles in from Europe through ports of entry in Syria or in Jordan, in order to raise money tied into international crime, and to make a profit. Some of these vehicles also went into the Gulf. This arrangement transitioned after OIF into a means to make money for the insurgency, to provide vehicles for vehicle bombs, as well as providing assets like mechanics and machine shops that you can use to make your vehicle bombs. These pre-war relationships, networks and patterns morphed over time so you need to understand the past to understand the future. I'm not saying there was a prewar plan for an insurgency; I'm just relating to you that there are historical relationships, capabilities and patterns that provided a framework for today's insurgency and makes it very hard for us to root it out.

I'll touch on Islam here again (**Figure 15**). We have had senior analysts in Iraq say a Ba'athist can't be a Jihadist because Ba'athists are secular. I just suggest to you that people can have multiple identities, and that many Ba'athists were and are very religious, like Izzat al-Douri. There are others, like Saddam, who decided to exploit religion in order to bolster weakening foundations of the regime. We have noted that as sanctions and the UN role concerning Iraq advanced, the regime leveraged Islam even more. Beginning in 1994, there was the revival campaign, in which Saddam required Ba'athists to go through training on the Qur'an for six weeks each year. It doesn't sound to me like a secular regime—it was bolstering its foundations by using Islam.

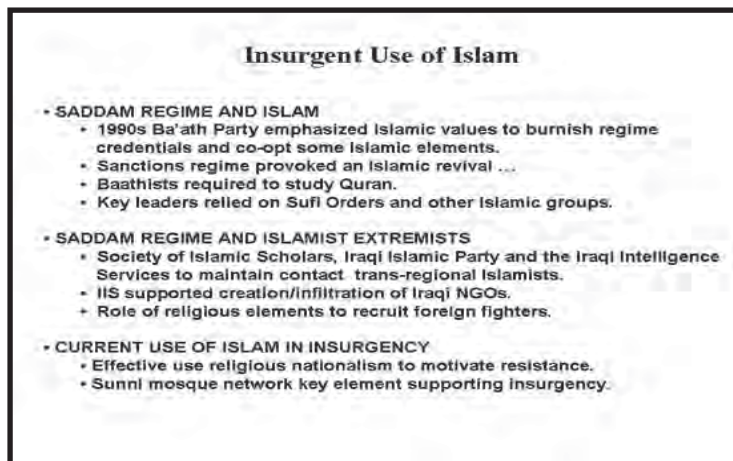


Figure 15

I want to say something about the Society of Islamic Scholars, the Iraqi Islamic Party (IIP), and the IIS, because those three entities were used in some ways by the old regime in order to have these connections and relationships with the broader regional Muslim Brotherhood community. It's those same entities that, in the prewar period, helped recruit foreign fighters and Jihadists, especially as we walked up to the beginning of OIF. The foreign fighters and Jihadists were brought into the country, they were trained, they were linked up with the mosques, and given housing through these organizations. Since the war, the IIP has been a member of the Iraqi Governing Council and continues to play a legitimate political role. The Society of Islamic Scholars is now the Muslim Ulema Council and has continued to play both sides of the fence—a political role, while being involved, in some ways, in the violent insurgency. We have had a heavy use of the mosques and religion to underpin this insurgency.

Now I'll just talk here a little bit about some of the Islamists (**Figure 16**), because there are very few true Salafists. We consistently label someone like

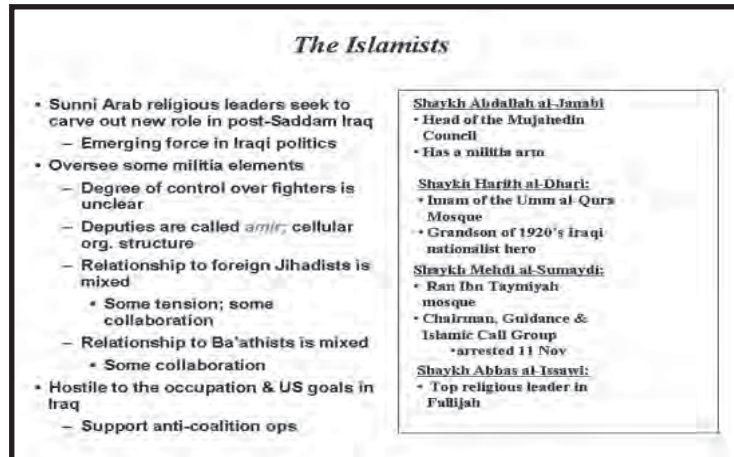


Figure 16

Sheikh from Fallujah as a Salafist extremist. I suggest that, when you give a label to a group or a person, it carries a lot of baggage, and it will cause policy makers and commanders to shape their response accordingly. So if you label a sheik as Salafist extremist, you're putting him in a box of people with whom you really don't think you can negotiate or deal. But who is this sheik? He's from Fallujah; he's led insurgent groups there. He imposed Islamic Law there in the summer of 2004. That's further evidence that he's an extremist—involved in violence, linked to bad guys, and imposing Islamic Law. But he's not a Salafist—he's a Sufi. He's not an extremist—he might use violence as an extremist means, but his goals are not extremist, because I believe that he's more interested in power and authority and protecting his people; he's interested in advancing his people's rights at the expense of the Shi'a, because he really doesn't see the Shi'a as equal at all; he sees himself in the dominant role.

As a matter of fact, it was when I was talking with him that a light bulb went on: it reminded me of talking to someone probably in the 1950s in Mississippi who was a KKK member. He had a sense of entitlement and rationalized everything, and did not see the world changing. Well, that's this sheik. But he's not an extremist; he's not seeking a caliphate. I just think we have to be careful about labels, because we do want to put labels on things.

Regarding leadership, there is no unified leadership of the insurgency (**Figure 17**). We, as Americans, are looking for a hierarchy; we want to see a line in a wire diagram. What we're fighting against, however, is very Arab in context. It's culturally applicable. It's effective. They're collaborating, and they're cooperating across multiple networks. They know each other—the networks are built upon past relationships. They're leveraging these things—family and tribe. They're building legitimate political parties, and they're infiltrating others. And they have transnational access to sanctuary and financing—that's key. Most people focus on the role of Syria, but there are other dynamics too.



Figure 17

So in early 2003, I said, if I could draw the insurgent relationships, I would like to have a 3-D, multidimensional, cross-cutting way of showing the groups involved. But I can't, because I'm not that good with PowerPoint. [Laughter] But this slide is good enough (**Figure 18**). We have three tiers here—strategic, operational, and tactical. It's not cut and dried like that; there's some bleeding through. But you have tribal leaders and local leaders—very important. Still, we have had leaders early on say, "We are not going to deal with tribes, because they're a vestige of the past, and we're building a new Iraq." In saying that, they were discounting 2000 years of history. The tribes are involved in many aspects of the insurgency. One can talk about the importance of the different tribes or a clan from Samarra, or the larger confederations. Or you can look at the dynamics of groups wrestling for control of Ramadi. Tribal and cultural issues are very important dynamics, and you've got to know these people, and what drives them.

You can't get that understanding when you rotate analysts through Iraq every six months or a year because its incredibly complex and difficult human terrain to analyze. They can't get this cultural-level appreciation—understanding

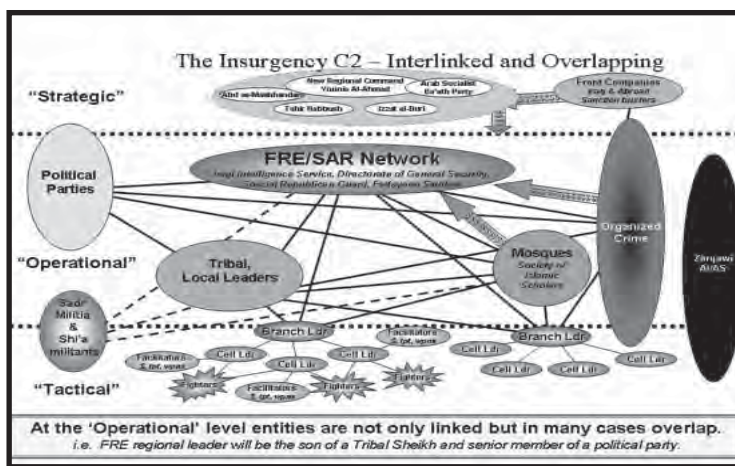


Figure 18

the language or the perceptions that manifest themselves in these people when they look at their own world. And it's their world we're talking about, and we're coming at it from a very skewed perspective. Our prism is way off-center on this. Excuse me for editorializing. The role of mosques and religious organizations – endowments, religious associations like the Muslim Ulema Council are very important. It is possible for a person to have multiple identities but we too easily label people. We will label a religious cleric an extremist, that is simple, but this “extremist” is not an “extremist;” is from a traditional religious family and a very important tribe; had family members in the Intelligence Service; is a former Ba’athist himself and maintains close ties to former senior Ba’athists. Who and what is he? My point is that these people can have multiple identities. Our desire for simplicity and labeling in some ways undermines our ability to really understand this difficult and complex insurgency.

Political parties—not just the parties that are underground—the Ba’ath Party, the New Iraqi Ba’ath Party, or Party of Return—but others that are being infiltrated or co-opted, or just set up as stalking horses on their own.

There are former regime elements that are still free—the security service types. Also, organized crime permeates this whole thing, because the higher you moved up in the regime, the more likely you were involved in party, security, and organized crime—it was a kleptocracy.

Then, you have some other overlaying activities here. So you can have multiple branch leaders from different groups—Syrial Jihad, Iraqi Islamic Army, et cetera—meeting in a mosque, and talking, and saying, “What are we going to do next?” and their boss will say, “We’re going to keep doing what we doing until we hear from Higher.” Well, who’s Higher?

There's an inference here that this is some sort of a collaborative, cooperative network—a network of networks is a term that some use, and I think Admiral Cebrowski might be pleased when he looks at this. [Laughter]

I'll move forward here—some other issues. You have outside influences providing funding from other countries, you've got individuals providing money, but my focus here is on that block on the top of the slide (**Figure 19**), because the key here is to figure out where we need to drive the wedge between those. On the one hand we can engage, co-opt, and coerce into coming into the system, in a critical mass, that enables you to take the wind out of the sails of the insurgency, and those. On the other hand, that you need to identify with specificity that you can't make a deal with, that you need to just contain, kill, capture, or neutralize them by putting them in exile—the extremists, Saddam loyalists, maybe the war criminals.

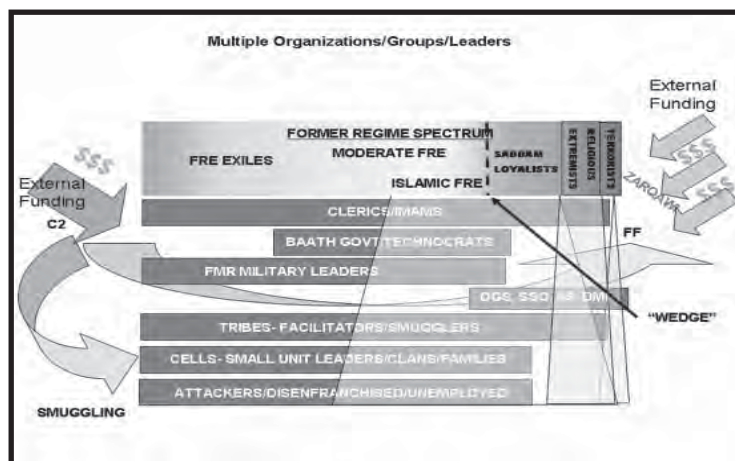


Figure 19

What is on the menu for reconciliation? Let's think this through, because if you don't get at the political solutions here, this can go on and on. So, ultimately, you have to figure out, What's the deal? What is the deal? How do you bring them in? Then how do you make it acceptable to the Shi'a, who have an attitude of—in some circles—"never again," hearkening back to the Jewish experience after World War II; these Shi's don't ever want to be dominated by the Sunnis again; they are deathly afraid of this.

Another cultural aspect is, in this society, the idea of compromise—I challenge you to find the word compromise in your Arabic dictionary, okay? [Laughter] There are words that might come close to it. But in the cultural context, you're either a winner or you're a loser, and when you're a loser, you're a loser for a long

time. That impacts their thinking. So how do you put together a menu, a package that addresses driving that wedge?

I mentioned the dual track earlier (**Figure 20**), and the first of the two tracks is the military campaign, or violence. But this military campaign, my personal view is, it's about 25 or 30 percent of their effort. That's all. And that 25 or 30 percent gets most of our attention, and we're drawn—just like we're drawn to Zarqawi, because of the type of violence—we're also drawn to the violence, and we're



Figure 20

drawn like moths to a flame, okay, and we're missing what's going on in the rest of the room.

But they do have a military campaign, and it's sustaining levels of violence adequate to achieve their political conditions. The war is sustaining, according to the Washington Institute of Near East Policy (because I'm not going to go into our numbers), nearly 500 attacks a week. That computes to 70-75 attacks a day, according to the way they're tracking it. So, if you go to last year, to February 2004, Brigadier General Mark Kimmitt was saying we were down to 20-22 attacks a day. We were very worried in February of 2004; yet we're substantially above that level of attacks today, and we've had elections on January 30 of this year, and we're moving forward through a constitutional process.

I just ask this question: How many attacks are enough, and what kinds of attacks do they have to be, to set the conditions for their success? Just something to think about. When one thinks about a vehicle bomb, and one uses metrics that are based upon battle damage, we need to think about the way we use metrics. A vehicle bomb went off, and there were 26 killed and 60 wounded, and 12 cars were

burned, and there was damage to a house, and that's what gets reported. I suggest to you that the metric we should be trying to measure is something different—it concerns the effect. What is the effect on the local police? What's the effect on the psychology and atmospherics in the community? How does that effect enable coercion or infiltration? How does that effect expand the insurgents' freedom of maneuver or movement? How does that effect undermine investment? How does that effect undermine the activity of NGOs?

Those are the effects that the insurgents are after, and those effects are hard to measure, even though we want to be able to quantify things. It's an American tradition—we want measurables—so we're going to measure what we can and report it, even if it doesn't really tell us what we need to know. Measuring the effects of a bombing gets subjective, it's very hard to do, but those are the effects you need to be concerned about, because the insurgents are maintaining a nonpermissive environment with this violence. For example, reconstruction costs are being enhanced—30 percent, according to the press—because of security concerns.

Electricity fluctuates. How do you create jobs when you don't have enough electricity to keep the concrete factory going? Or you can't keep your shop going? What does the lack of electricity in the heat of the summer in August do to morale? What does that do to support for the ITG, and what does it do for tolerance of our presence?

These are things we need to think about. The enemy certainly does, because they look at this as a long-term effort. Early on, they said that they could exhaust us. It might take them five, seven years, but they could exhaust us, because we would not have the national will to sustain the course.

Then, there's the insurgents' campaign against collaborators, the assassination campaign, co-option, infiltration—it's been ongoing, and they're building capabilities into other parts of the country, not just the Sunni Arab area. So there's a military campaign.

Now just to talk a little bit about IEDs—the number one killer for Americans in Iraq, and it maims even more Americans (**Figure 21**). VBIEDS tend to be more directed at trying to breach our bases, maybe driving into a convoy, but more directed at Iraqi and ISF at this point in time. Also, small-arms fire, stand-off attacks.

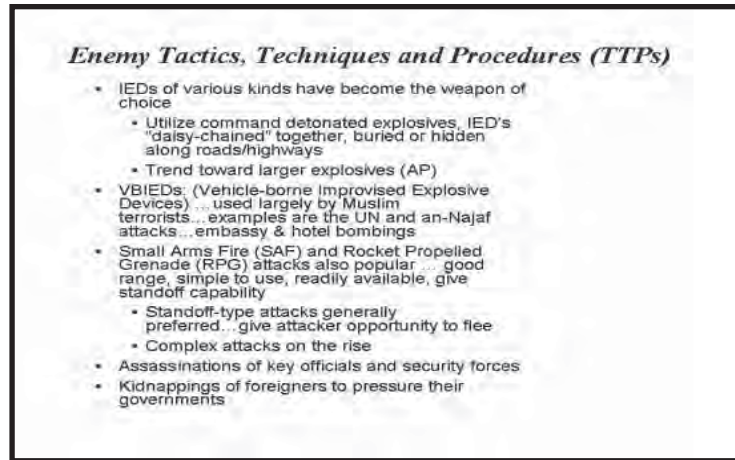


Figure 21

But most of this is focused on what? Survival by them. They don't want to engage our full combat power, but they want to inflict violence and create this atmosphere of an insecure, unstable environment. I'm going to click through, just to give you an idea of what an IED sort of looks like here, taken from a Jihadist site (**Figures 22 through 28**).

So that's what we're facing, and there's a give-and-take—we make improvements technologically; they come back and make adjustments themselves. The only way to really get after this is to get after the root causes—that's one, motivation; two, go after the networks that support it. Point defense is not the long-term solution; it can mitigate the violence, but you need to get at it in a different way.



Figure 22



Figure 23



Figure 24



Figure 25



Figure 26



Figure 27



Figure 28

Kidnappings, mass casualties—they contribute to that atmosphere of an unstable environment (**Figure 29**). It doesn't matter if we can go wherever we want, if we can get in an armored Humvee and drive wherever we want. Where can that NGO go? Where can that contractor go? Where can that Iraqi go? And what does the international community think about that? How does that undermine investment, for example? If you look at the metrics for numbers and types of attacks, the trend lines are for the most part negative for us.

Kidnappings and Mass Civilian Casualties

- Intended to shock and Intimidate
- Beheadings are the "legal" way to execute under Islam
- The blood of non-believers who subvert Islam can be shed with impunity.
- Mass casualty attacks against civilians are permissible in time of war
- However, such tactics are alienating others in the insurgency
 - Civilian casualties undermining insurgent unity

Figure 29

The numbers game. Well, most things are based upon SIGACTs, which only collect and report a certain part of the data (**Figure 30**). It doesn't collect everything that's going on against the Iraqis. So relying on just our metrics of attack data can be skewed.

The Numbers Game

- Number of attacks per week X assumed number of insurgents per operational cell. What is the formula?
 - One attack per week per cell
 - 400 attacks per week X 10 insurgents per cell = 4,000 total insurgents
 - 400 attacks per week X 20 insurgents per cell = 8,000 total
- What percentage of prime military age (15-25) Sunni Arab males (est. 650,000) are actively opposed to the Coalition?
 - 10% = 65,000
 - ...but insurgents range from teens to men in mid-40s
- Arrests and KIAs have not reduced attacks, suggesting larger recruitment pool
- INIS Director suggested 200,000 Sunni Arabs associated with the insurgency last year

Figure 30

Politically, what are they doing? They are building entities that play both sides. They're penetrating existing entities. In some cases, we identify it; in some cases, we don't identify. We don't know what we don't know, in this regard. They are trying to undermine the regime, make it Weimar-like, so they can subvert it. They are keeping the Sunni Arab heartland supportive and committed. They have tacit support, at least (**Figure 31**).



Figure 31

A couple of other things going on here, but I think that they're doing okay in preventing alternative leadership from emerging. For example, if you're a Governor in Al Anbar Province and you start to play too much of a game that's cooperative with the coalition. So, you get your five sons kidnapped, you resign, and someone else comes in and plays ball a little bit differently.

That's the dynamic. That's intimidation. It's very real. These are the types of people who will kidnap your daughter, cut off her fingers, and send them to you. It's a criminal enterprise. It's Mafia-like—it's cruel, but effective.

So how are they doing (**Figure 32**)? They are a force in that Sunni area, that area that I showed you on the map. They are to a degree preventing alternative voices. They do have effective IO. Most important, with most resistance movements they are maintaining their own viability. We cannot defeat them militarily at this point. They have freedom of movement, probably better intelligence than us, and they're not defeated.

A couple concluding things here. We have an excellent strategy. It is a great strategy. In execution, it has to be DIME—Diplomatic, Information, Military, and Economic—but execution in some domains is not where it should be. We've had opportunities before, but we haven't seized them very well because of a lack of ability in some of these other lines of operation. Military options are only part of



Figure 32

the answer. Political processes and decisions are key: the constitutional process, elections, hopefully unifying the Sunni vote, and hopefully some reconciliation, so you can bring in more of the critical mass of the traditional leaders (**Figure 33**).

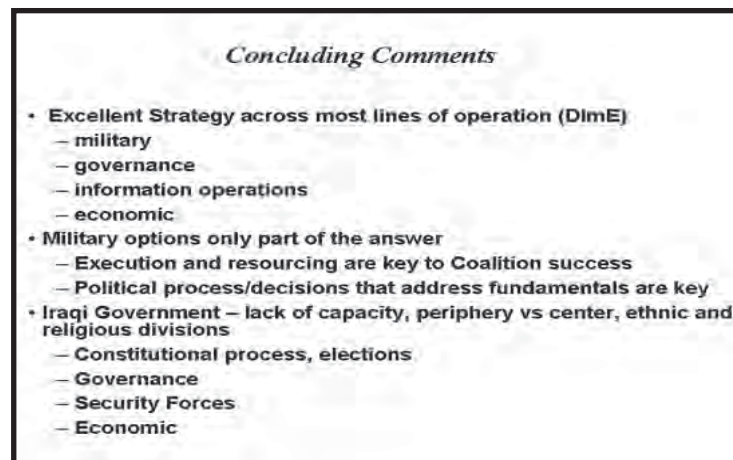


Figure 33

Iraqi government truly lacks capacity, even today. How do you get a well-rooted government with capacity, when you’ve toppled a regime that didn’t have much ruling authority anyway, except through the barrel of a gun? You replace it with an IGC of ex-patriots, then an IIG, and then an ITG, and you rotate through. The center never really builds anything robust. There’s competition, rivalries between ethnic groups. Then you have the issues of periphery versus center,

meaning Baghdad versus the provinces. Then the other divisions. So you have some real challenges.

In brief, I wanted to give you a quick overview about some dynamics and ways to think about them, to try and understand maybe a little bit of the Sunni Arab phenomenon, and how the Sunnis might look at things, and how some of our metrics might not be quite right for measuring what's happening. If you have any questions, I'll be glad to take them.

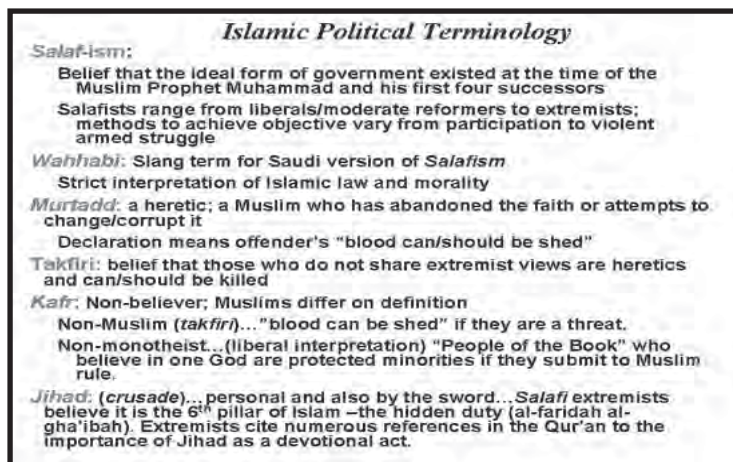


Figure 34

Day 1, Session 4 Question and Answers

Moderated by
Dr. Lawrence Yates - Combat Studies Institute

Audience Member

It's a fascinating presentation you made, and you're not mirror imaging, which is great. You're looking at the society the way it is, and you're looking at it from the perspective of the Sunni Arabs. Of course, it gets a lot more complicated if you throw in also the Shi'a perspective, and then the Kurdish perspective, and that would just be extremely more complicated.

Colonel Harvey

Yes, we need to understand the environment and the players that are involved in that environment. Again, we tend to label the Kurds only as Kurds. I had many discussions with our leadership in Baghdad, because we tend to look at the Kurds and maybe we'll go down and think PUK-Talabani, and KDP-Barzani, and that's the level of analysis. And we're very comfortable with these leaders because, like Barham Salah, they speak excellent English, and so we communicate very well, and they become our interlocutors. If you travel the region up there, however, you'll find a lot of animosity and resentment toward the PUK and the KDP on the part of many, many tribal leaders and communities who themselves believe that they've been victims of these two entities. Not that it's true, but one tribal leader up there said, "You know, Barzani is just our Little Saddam." That's a reflection of how they think about the situation. So even within a given community, you have to appreciate those dynamics.

We mislabel someone like Sadr; we're very comfortable with saying Sadr's a religious guy and he's fanatic and he's this and he's that. Is he really a religious leader? He's from a religious family. What's his major orientation? Is it really religious? Theocratic? Or is he really more of an Arab nationalist? Does he have more in common with other Arab nationalists, be they Sunni or Shi'a? If that is the case, what does that mean for your choices, and how you engage him, and how you shape your IO directed at his community? If you're going to be good at "Red Teaming"—and I use Red Teaming as a means of bridging traditional intelligence, which is very descriptive and historical, traditionally, and avoids being prescriptive or predictive. So you try to bridge that traditional intelligence; you want to take that intelligence information and knowledge and awareness of the community that you're dealing with, and make it valuable and meaningful information, to support the IO, so when you have a crisis, you can provide context and meaning to help shape that IO message—substantively, as well as the mediums that it goes into.

So who's going to help the IO folks do that when they are absolutely afraid of dealing with cultural or religious issues, because of lack of understanding, so who helps do that? Who helps shape things beyond targeting, in the kinetic sense, to co-option, or building the network, so you understand the tribal fissure, so you can exploit some of these differences? Who brings that sort of meaning? Especially when you're rotating commands, and you're rotating analysts, and they arrive on the ground, unfortunately, not knowing the difference between a Shi'a and a Sunni, and you call someone a Salafist extremist when he's a Sufi. You're absolutely right—you have to have understanding—but we have major challenges.

Audience Member

What are the prospects, in your view, of federalism, and of trying to expect just a little less of the central government, and to try to help keep the Shi'a and Sunni out of each other's way a little more?

Colonel Harvey

Well, in the constitutional process, they've kept consideration of the major issues until last, and the federalism issue is a major one, and not just for the Kurds. To a degree, some elements of the Shi'a are thinking more in terms of wanting greater autonomy and control of the resources. The Sunni Arabs are against this; they want to focus on the center.

How is this going to play out? Or how does one reconcile these differences when you have all these other issues that play too? What sort of horse trading is there going to be? And can you have horse trading over such fundamental issues as federalism, resources, the role of religion, when you have elements that see this as black and white? Not that they all do, but there's enough of them in that constitutional committee. And then it has to get passed by the parliament, and then passed by provinces, and if three provinces reject it, then we're back to square one.

Audience Member

I come from an academic community, and what my colleagues are always saying, "Save our troops. Just get them out." They want to abandon it. We had someone here last year, and he said the same thing, "Just get out." He said, "Well, people said it'll be chaotic; well, what do you think we got now?" I know this is asking you to predict, and that's hard, but what would you see as the consequences if we just got out?

Colonel Harvey

Well, first of all, I want to challenge the statement that it's chaotic. Again, when one looks at the picture that I drew, one could walk away and say, "Oh, my God, I didn't think it was that bad." On the other hand, having been there and traveled a lot, and put almost thousands of miles on my SUV just driving around the country, I didn't find the country that chaotic. There's a tremendous amount of normality and prosperity and growth. Sure, they want us to leave, but most of them don't want us to leave just yet. Even a lot of the Sunni Arabs don't want us to leave just yet, as they start to recalibrate some of their calculations here.

If one was to pull out, what happens? If you just pulled out, it would be a recipe for disaster, in my mind, and you would have extreme violence, possibly leading to civil war. We could see this devolve into a fractured state that would be a sanctuary for terrorists. If you pull out more gradually, but in an accelerated way—gradually, meaning controlled, some conditions—but accelerated, so that you force their hand to take some serious decisions—because right now, they can sort of lean back and know that we're backing them up, and they're not able to stand on their own feet. So maybe we need to take the training wheels off a little more quickly to force some of these issues to come to resolution.

I am concerned that this is morphing into a general Sunni Arab insurrection, as opposed to just a minority of a minority. The firing the head of the religious endowment here the day before yesterday, or the bringing into government those few Sunnis who have no gravitas, no base of support in the Sunni Arab community, who are just a fig leaf—these actions show to some in the Sunni community that the Shi'a are not serious.

Those fence-sitters can start to go either way, and they're fearful. You could have elections and a large participation in elections, and still have an insurgency. As a matter of fact, the insurgency could move to another level.

Audience Member

I'd like to follow up, in a sense, on two things. It seems to me that the thing that underlies all of this is our desire for a unitary state in Iraq. How does the dynamic of what's going on now, what you just described, how would that change if we give up that particular sacred cow, and say, "Have three countries instead of one"?

Colonel Harvey

The way I see the future, it's best for the Sunni Arab community to have a partnership, outreach, inclusion with Shi'a Arabs like Iyad Allawi, Sadr—Sadr is an Arab nationalist, —and tribal leaders in the Shi'a community, and build the bridge based upon Arab Islamic nationalism, but not of a theocratic orientation.

But what are we offering the Sunni Arab community? We're offering them a market economy. We're telling them that they could pay for their own electricity, that they've never paid for. We're not offering them much, when you look at it from their perspective, because these are things that are alien to them, and that will cause a fundamental shift in their thinking and way of life.

Take Iyad Allawai, many of the Sunni Arab leaders that are involved in the insurgency, and those that are not but who are fence-sitters, the Sadrites, and the Kurds, the Barham Salahs, the Barzanis—there is, in some ways, a lot of room for bridging there. But then you look at who we've empowered in Baghdad. We have Dawah—with its religious orientation linked to Iran a great deal; SCIRI, underpinned by the Badr Corps militia. You have some other religious elements tied into the United Iraqi Alliance. Then you have Chalabi, okay, who's a wild card and will go in any number of directions. But he is very anti-Ba'athist. So how do you build this bridge based upon Arab Islamic nationalism that can also have outreach to the Kurds when you've got this entity empowered in Baghdad that represents, in my mind, about 15 to 20 percent of the Shia, meaning that minority of the Shia who are deeply religious, fundamentalists. Yes, Sistani has great sway and influence, and has kept this coalition together, but there's a lot of room for maneuver between the groups if we can break down some of the barriers. We need to build a bridge between the Arab nationalist elements.

Audience Member

What lessons have we learned from Iraq that would make things better the next time.

Colonel Harvey

Everyone talks about planning for postwar operations. What have we learned about that? And what have we learned about maintaining presence? I'll highlight just one issue. I was a member of Coalition Forces Land Component Command (CFLCC), that's the component that was responsible for land operations going into Iraq and OIF. That command departed, got its orders to leave, at the end of May 2003, and in my view, we spent the next 18 months trying to rebuild that command and control capability that we already had there with the CFLCC command. We tried to rebuild an intelligence capability. Under CFLCC, we had 780 people in the intelligence division; we had people focused on tribal issues, and we had expertise already developed—they were all sent home. We then overlaid the responsibility for this tactical, operational, strategic fight on a tired V Corps that had a country to rebuild the size of California, with no Iraqi military, no party apparatus, and no institutions—a shell of a government in place, with no architecture, no communications, no staff practices, and people that were inex-

perienced and didn't understand the interagency, didn't even know in some cases what interagency was.

So in some ways we had the wrong people, the wrong place, the wrong time. Many of the people that understood it were sent home, and we spent 18 months trying to rebuild that capability, and we didn't get it until General Casey and Multinational Forces-Iraq. I don't understand the decision—it's not for me to second guess; it's just an observation—that if you would have had better command and control, better ability to orchestrate and manage, and people that were already thinking about these things there, rather than sending them home, we might have had an ability to mitigate some of this stuff, so it didn't get out of hand. That's just one observation; take that for what it's worth.

Audience Member

So if the Iraqi army would have been kept together, would it have made a difference?

Colonel Harvey

It's not an either/or. There are many people in the regime's army that had to go. You could have done it incrementally. You could have said we're going to keep the army together, but we're not going to keep the presidential security, or the IIS. Maybe that would have worked. There are a number of different ways one could have done it, but if you're going to come in with an approach that is perceived by the Sunni Arabs as marginalizing and victimizing them, whether you meant to or not, you set conditions that others then can exploit. So would keeping the Iraqi army together have made a difference. Yes. Might we have had more difficult problems, as Mr. [Paul] Wolfowitz once said? He might very well have been right—we could have had more difficult problems. I don't know. I don't have a crystal ball. There's so many variables at work that you just don't know how any one thing done differently would have played out.

Audience Member

Communism in Eastern Europe worked for as long as it did because the communist leaders were able to politicize all aspects of life, and to get enough people to buy into communist ideology so that they either accepted it or tolerated it or whatever, and it worked, and it enabled a bad system to survive 75 years. So what are we doing to be commissars of democracy and free markets and everything that it takes to get the Iraqi people to buy into the idea of this new system is going to work, it's going to be good, they're going to benefit from it—especially the Sunnis, who are the major problem area? How are we politicizing these folks to buy into what we're trying to offer?

We have mixed results, but again, it's how do you package what you do, and then how do you sell it? We've got a willing and supportive population that has a lot of tolerance for us in a good portion of the country. Baghdad and some other areas are very problematic, in some ways. But if you succeed in Sadr City, an area of 2.5 million people, and you finally get their sewage system running for the first time ever, and if you've hooked it up to treatment plants, and if you've done that, how does one leverage a fundamentally good act like that to our gain? Does one put it out in city newspapers, flyers? Do you pay for that information to go out? Do you get Arabic spokesmen to get out and highlight it? Do you have events to highlight it? Do you get it on TV? Do you get Al Jazeera in? What do you do, and what is the message?

Maybe you want to be careful about the message, because you don't want it to look like the Shi'a are benefiting even more, because it happens to be a Shi'a area where you had a success. Or maybe you want to do that. You reinforce success by convincing the Sunnis that if they start playing ball and start coming on board, we can start investing in their area. How do you get that message out? You don't do it by having an American spokesman get up at the end of the day and say, "This is what we did." In English! You just don't get any traction that way. So much good for so little gain, in so many ways, in so much of the country. And that's for FA30 class here, the IO folks. They have the challenge, because you have to get leadership to think in those terms, and you've got to integrate it across the staff, in an effective, synchronized planning process that looks out and then figures out how to leverage information and get it into the right mediums.

Audience Member

So are we doing it successfully?

We're having success in a lot of areas. But again, it's hard to measure—it's just like it's hard to measure the effectiveness of a bomb. Now, if you look at the latest Pew research results regarding attitudes towards us in Iraq, in the Muslim community, and in North Africa and elsewhere, you know that the numbers have improved since last year. Those are fundamentally good numbers. And support for Osama bin Laden and his goals has gone down by a corresponding number.

But if you still have 36 percent of the North African Muslim community supporting Osama bin Laden, that's far too many, and how many does it take to contribute to these types of attacks like they had in London? Not very many. Still, good progress—a lot of progress in a lot of the country.

Has anybody read John Nagl's book, *Learning to Eat Soup with a Knife*? John Nagl, a US Army lieutenant colonel, wrote a book on insurgency lessons from Malaya and Vietnam. He took a phrase from T.E. Lawrence, "Fighting an insur-

gency is like eating soup with a knife—slow, messy, . . .” et cetera. Well, fundamentally, that’s what you have with any insurgency—it’s a slow, messy, difficult process. It’s harder for us because of the cultural barriers, and the changeover we have. I’m not even going to talk about how do we get our government to function on all cylinders, so that in Washington, D.C., you have an interagency process that clicks—that you get all the other elements of national power focused. Because it can’t be won on the military side. General Sanchez understood that. He gets a real bad rap by people, because they think he was just focused on the military “whack ‘em all”—they pop up, you whack ‘em. No. He understood the broader perspective, but he only had certain resources at his disposal, and it skewed the picture of what he was doing. He understood it, he got it—but you still need all the elements synchronized.

Thank you very much. I greatly appreciate it.

[Applause]

The Roots of Responsive Logistics: Trails and Tails in Vietnam

LTC Marian E. Vlasak—US Army

In keeping with this session's theme of "incorporating changes in asymmetrical operations," it appears that logistical experiences from both sides of the Vietnam War suggest some perspectives worthy of reconsideration in light of ongoing asymmetrical operations. Currently, the Army is seeking new ways to not only provide responsive logistics to our own forces in austere environments far from home, but also seeking to devise effective methods of countering insurgent activities.

The title of this presentation attempts to capture what I see as an interesting and timely need with some important implications for modern military logisticians as well as strategists and tacticians. While this lecture has been billed as the "logistics of insurgencies" my intent is to not only "get to know the enemy" in the Vietnam conflict but to also juxtapose their evolving practices against then concurrent developments and changes in American and allied practices. Through this analysis of each side's ability to adapt and change over the course of the war I hope to finally suggest some insights of relevance for contemporary logistics operations in asymmetrical environments.

Historically, examinations of this type of warfare and the effectiveness of insurgent activities and changing practices have been approached from tactical or ideological perspectives—less so from the nuts and bolts of how such movements are materially sustained.

This brings us to my favorite question about military logistics in asymmetrical warfare—Why is it that historically, insurgents are able to "make a little bit of materiel go a long way"? How come with seemingly minimal logistical support and resources, insurgents can achieve effects that are disproportionate to the level of "logistical effort" put into their enterprises? I suspect that the answer cannot be simply chalked up to "tactics." Conversely, why is it that counterinsurgency efforts seem to consume unending amounts of materiel? Even so, much of it often seems to be "wasted"? What is going here?

During this past year as the Combat Studies Institute's Arthur L. Wagner Fellow, I examined methods of critical supply with a focus on the American experience from the Second World War to the present. So it is with the 20th century's defining conflict, that I will begin because the *roots of both sides' logistic practices* in Vietnam stem most notably from that conflict—though I fully acknowledge that insurgent or guerrilla warfare certainly has a much longer history.

World War II Roots

In the aftermath of World War II, there was an explosive proliferation and widespread dispersion of vast quantities of mass produced weapons and materiel produced for that conflict. A similar, and arguable greater proliferation occurred again in the aftermath of the Cold War that followed, presenting us with many of our current difficulties. This development certainly put a new spin on guerrilla or insurgent logistical practices.

While the Second World War provided plenty of large conventional force invasions sustained by industrial scale materiel might, it also provided plenty of incentives for aggrieved locals to resist under variety nationalist and ideological banners. One particular resistor showed that he had an especially keen grasp, *logistically*, of what he was up against, and I'll give you a moment to consider this (**Figure 1**).

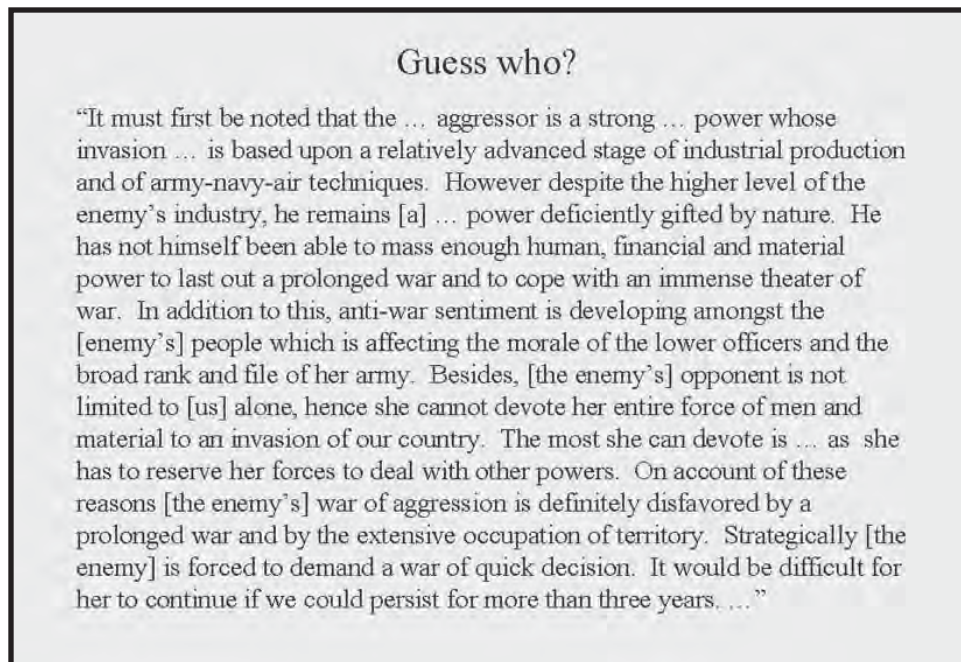


Figure 1

This quotation, as presented on this slide, has a presciently contemporary quality and with a little filling in of the blanks could be easily borrowed by many of the asymmetric challengers we currently face, but it was in fact penned by that master of 20th century insurgent warfare—Mao Tse Tung (**Figure 2**). The context was the Chinese struggle against the Japanese occupation.

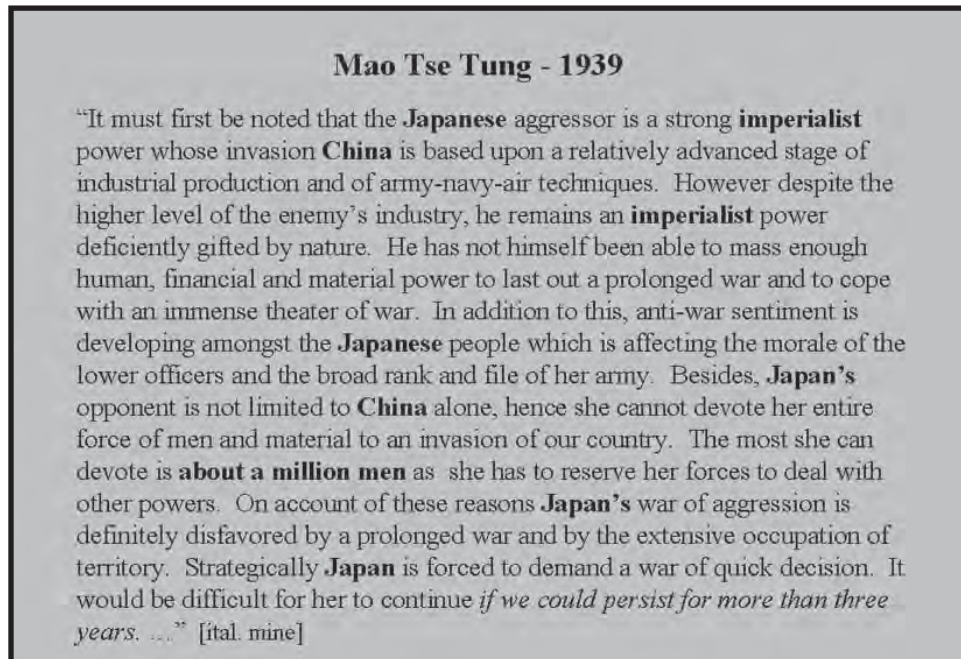


Figure 2

But what’s notable here, at least from a logistics standpoint, is that this is an insurgent’s avowed recognition of his inferior position with regard to access to modern materiel and it *implies* that other methods of sustainment would have to be found; *sustainable and suitable* for a long war, a war that would outlast the resources, capabilities and will of the enemy. More significant for our discussion here today, Mao’s prescription also implies that a high degree of *logistical adaptability and creativity* was required to meet ever evolving conditions.

Mao left it to one of his lieutenants to articulate more specifically just what these other methods were to be. Chu Te,¹ in his work *On Guerrilla Warfare*, in the section detailing the “Most Important Factors in the Guerrilla War of Resistance,” (**Figure 3**) noted that right after “#1 Political Warfare” (understandably a point of primacy for ideologically driven communists) came “#2 Economic Warfare,” “#3 Warfare in Human Material” and “#4 the War of Armaments” and finally “#5 the War of Transportation and Communications.”

Chu Te's *On Guerrilla Warfare*. Shanghai, 1938.

“The Most Important Factors in the Guerrilla War of Resistance”

1. Political Warfare
2. Economic Warfare
3. Warfare in Human Material
- 4. The War of Armaments**
- 5. The War of Transportation and Communication**

Figure 3

For our purposes, sections four, and five get at the heart of insurgent logistical issues and methods and the need for adaptability.²

In section 4, on “The War of Armaments,” Te noted, *“the enemy is well armed and we [the guerrillas] are not. ...Yet, armament is not an all-powerful factor in warfare. Every weapon loses its effectiveness under certain conditions. For instance, planes, armor, and heavy weapons lose much of their effectiveness at night [at least they did in 1938 when Te was writing this]. Furthermore cutting the enemy’s supplies and communications will largely neutralize this superiority in armament. ...Our basic aim in reference to arms and equipment is to capture from the enemy as many new weapons as possible and to learn how to use them against the enemy himself.”*³

For Section 5, “The War of Transportation and Communications,”—*“The front and rear in modern war are of equal importance. The requirements of food, arms, ammunition, gasoline, and other supplies, all indispensable for motorized forces, are increasing tremendously. The severance of the front from the rear in any modern war can mean the difference between defeat and victory for a whole army.”*

“This is why modern army contact is a decisive condition for victory. Armor, complex weapons, and planes all require the utmost of highly developed and

smoothly flowing communications. For this reason guerrillas should concentrate upon this potential weakness of the enemy. ...”

*“Guerrillas must be resourceful in the extreme, endeavoring to achieve victory by any and all methods and situations at their disposal. ...”*⁴

Te and Mao were not alone in advocating extreme resourcefulness and adaptable approaches.

Ming Fan, another comrade of Mao and Te’s was even more specific about the role and supply of “Weapons and Ammunition for Guerrillas” in his companion “*Textbook on Guerrilla Warfare*.” In it, he noted that even though the weapons of the enemy may be “far superior” in “scope and effectiveness,” because of the guerrilla methods, they are not as decisive “as in regular warfare.”⁵

Furthermore, the text noted that “weapons are not difficult to obtain. They can be purchased from the people’s ‘self preservation corps.’ Almost every home has some sort of weapon that can be put to use. Local governments and police headquarters usually have weapons. Furthermore, pistols, carbines, and ‘blunderbusses’ can usually be manufactured in local guerrilla established plants.”

“Ammunition can be obtained in the following ways: ... given by friendly troops [ie. Subverted by sympathizers from the government the insurgents are fighting against]; purchased or appropriated from the people; captured by ambushing enemy supply columns; purchased under cover from the enemy army; from salvage in combat areas, from the field of battle; self made [or adapted] by guerrilla organization especially items such as grenades...” and presumably mines and bombs.⁶

Another section of the “textbook” was devoted to “Supply and Hygiene for Guerrillas,” which noted that, “Of the various essential needs ... only supply and hygiene are absolute necessities.” “Problems of food and water and medical attention ... must be solved ...”⁷ Larger units were viewed as logistical liabilities, because of the difficulties of obtaining larger amounts of supplies. Since guerrillas had to rely on popular support for foodstuffs and supplies, they had to be sensitive to not unduly burden the masses in their areas of operation, lest they turn against them. In the guerrilla’s view, it was better to take advantage of the “clumsiness” of the large occupying conventional forces, insensitively tramping through the populace, stirring up alienation and sympathy for the insurgent cause, and having that sentiment expressed as wide-spread low-level “penny packet” logistical support.

In terms of supply and support, the textbook further advocated that, “Guerrillas should also divide their units according to age and sex. Young women can be organized into “Women’s Vanguard,” older and weaker females into “Mending

and Cleaning Units,” ... and “the aged assigned to routine warning and sentry duties.”⁸ This division of labor was seen as a method of most efficiently taking advantage of every potential means of production—something of logistical significance in the relative poverty of a guerrilla economy.

As detailed and effective as Mao and his comrade’s logistical “doctrine” was, it was left to another disciple of communism to take and refine this guerrilla logistics doctrine and adapt it to a style of insurgent warfare that effectively blended and evolved guerrilla and conventional methods as required. This time though, instead of the Japanese, it was the French and then the Americans who were slow to appreciate the significance of this logistical symbiosis and their doctrinal and ideological emphasis on the change and adaptability as required in this style of warfare.

Vietnam

Under the direction of Ho Chi Minh and General Giap—who had both spent substantial formative periods with Mao and his Chinese guerrillas⁹—*logistically* everything that Te advocated in *On Guerrilla Warfare* was put into practice. In the hands of Ho and Giap though, guerrilla or insurgent logistics practices as described by Mao and his comrades became something of an interim logistical “underpinning” while more conventional or industrial sources of supply and methods of delivery—in other words logistical infrastructure were cultivated or developed.

In the early years of the conflict, reliance on Mao and Te’s methods were particularly significant. Mao inspired Vietnamese guerrillas were particularly impressed by and willing to take advantage of female labor, either in the form of unexpected combatants, or overt or surreptitious logistic support. One example from the previously discussed Maoist doctrine will suffice—that of obtaining weapons and ammunition. While resisting the French, the indigenous Vietnamese communist insurgent movement developed quite a record of capturing and co-opting French supplies (**Figure 4**). In May of 1953, the Vietminh, organized into roughly three companies, “attacked a training school for potential leaders at Namh Dinh.” All 600 trainees and the complete account of weapons and ammunition for the school “were captured—without the loss of a single Vietminh soldier.”¹⁰ No doubt, that experience provided a most enduring lesson about the viability of Vietminh logistics methods!

The Vietnamese evolution or maturation of insurgent logistical methods played out in a particularly noteworthy form on the Ho Chi Minh Trail. Discussion of insurgent/guerrilla use of the trail as a line of communication and supply (LOC) is especially interesting when it is compared to the LOCs employed by American,

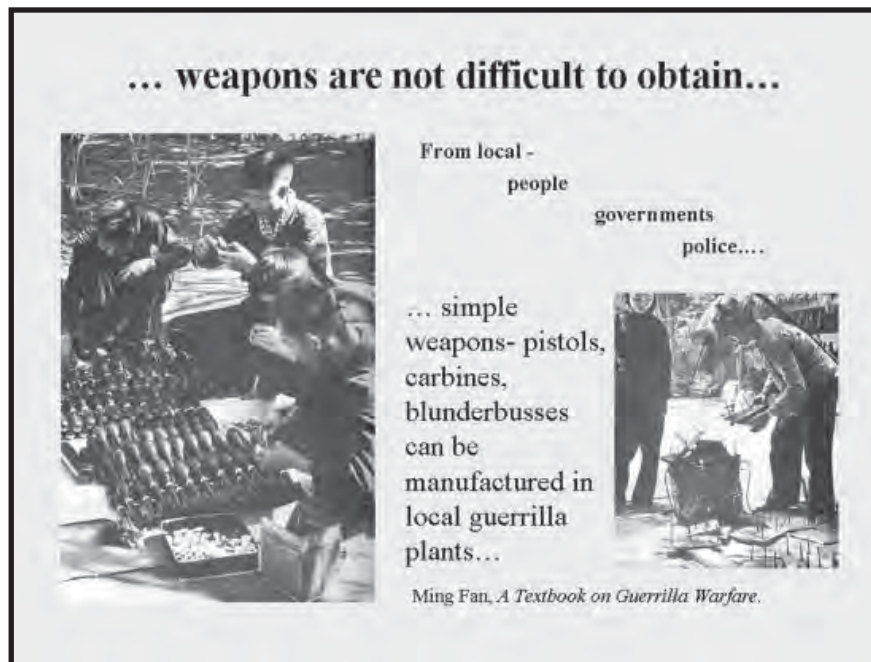


Figure 4

South Vietnamese, and other allied Free World Forces operating in South Vietnam. American popular conceptions of “the trail” are usually based on maps such as this one (**Figure 5**). They are linear simple and direct, and made comparative and understandable to our own LOC mapping practices. The reality though was much more complex.

From the late 1950s on—due in part to the political terms dictated by the Geneva accords that prohibited military buildups by either regime in either’s zone—the Communists were anxious to “foster the impression” they “were in total adherence” with the terms of the agreement. Therefore they explored various alternate means of covertly pursuing these prohibited activities.

In May 1959, the North Vietnamese leadership created a logistics unit called Group 559 for the purpose of beginning expanding the traditional infiltration route to the south—the Ho Chi Minh Trail.¹¹ The trail—or rather *trails* (here the common use of the singular form for a plural entity made for a problematic verbal-mental construct) were in reality “a network of thousands of paths” existing for generations and beaten by the feet of “countless ... highland tribesmen, rebels, outlaws, opium smugglers”¹² and others who thrived on its covert nature—generously made possible by the rugged terrain and tall dense vegetation, much of reaching to heights of over 200 feet (**Figure 6**).

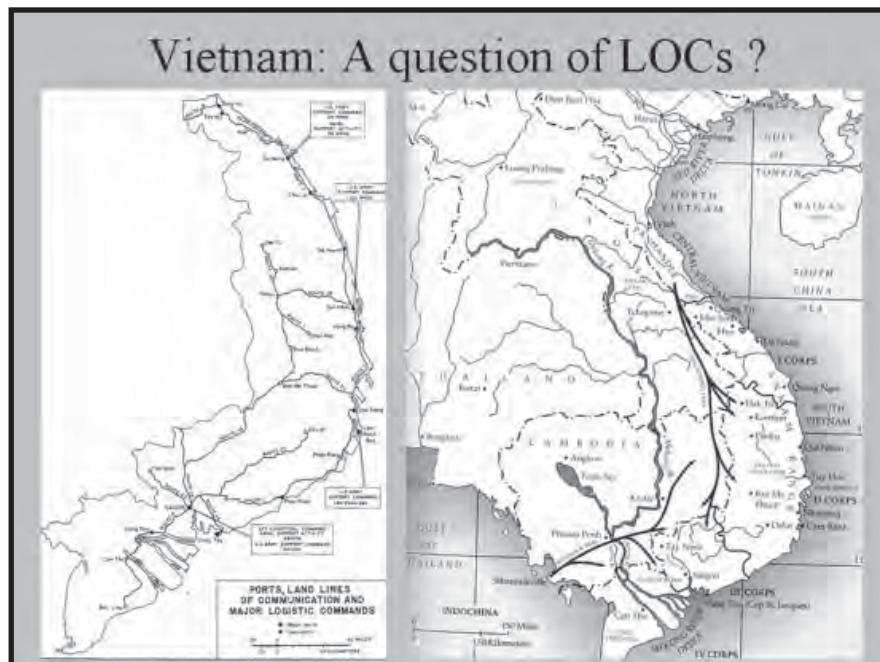


Figure 5

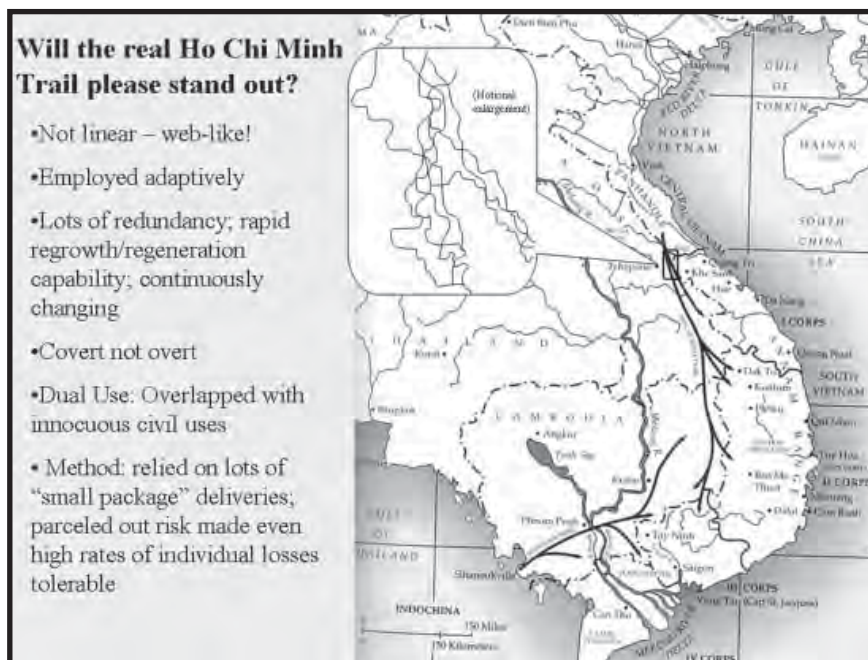


Figure 6

To western eyes as late as the mid 1960s, the existence of such a robust trail seemed an “impossibility” or the stuff of myth and legends; but by 1967, it had become in fact an “massive maze of roads, bridges, waterways and paths.” The US Special Operators who encountered it described it as a “spider web... on top of a web... on top of web”, or “a guerrilla’s Appian Way.” Others claimed a map of it would have looked like a “rye grass root, an ancient family tree, a dendritic river, or the human nervous or cardiovascular system...” Its extent, or length, was also the subject of much conjecture. In 1967, US estimates placed it at 200 miles, by 1969 that figure was revised to 2,000 miles, and by 1971, still another revision placed it at 4,000 miles.¹³

Post war revelations by Hanoi placed the expanse of the trail at easily twice what the Americans were tracking; between 8,500 and 12,500 miles, hence prodigious quantities of material still managed to get through¹⁵ despite American claims that they had covered every inch of it with electronic sensors—spending almost a billion dollars a year doing so with the most “most efficient electronic system ever devised” and managed with state-of-the-art computers in *Operation Igloo White* (**Figure 7**).¹⁴ This program was linked to other technological and scientific efforts to eliminate the obscuring foliage by any means possible in any place that the problematic tentacles were thought to pass.

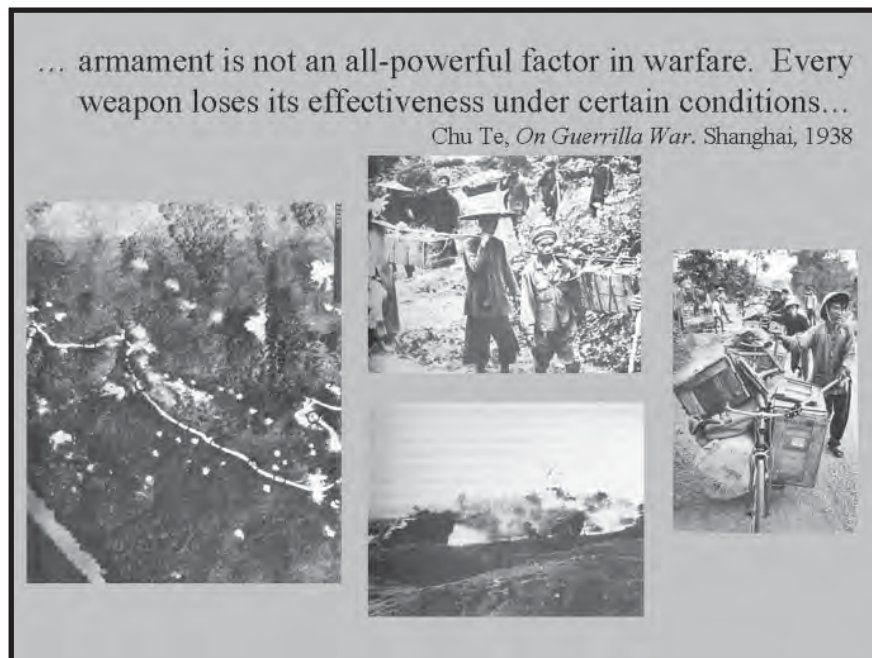


Figure 7

As the war continued into the early 1970s, the trail continued to be progressively and amazingly improved—thanks in part to its covert characteristics and its continuous relocation into sanctuary areas of Cambodia and Laos.¹⁶ By the mid 1970s, the trail had improved to such an extent that much of it could routinely accommodate increasing numbers of motor trucks, which more and more came to replace earlier methods of porters and bicycles.

Efforts to map the trail were frustrating at best. For American operators trying to interdict it, their first problem for much of the war was just trying to locate “it,” even with their tremendous technological sophistication. “It” was a moving target. It did not relocate in any mathematically predictable or programmable way. Its veiled random resilience was maddening, despite bold claims to the contrary.¹⁷

In contrast, American logistical methods in Vietnam were pure conventional brute force logistics. For the most part, there was nothing surreptitious or small scale about American LOCs, the log bases that they ran between, and logistics practices. Because this was a new style of war without fronts, with no truly secure rear areas, and the technology being brought to bear in it was increasingly dependent on a sophisticated support infrastructure. Base camps and log bases were created to provide relatively secure places where such logistical requirements could be performed. Logistical islands in a sea of insecurity (**Figure 8**).¹⁸



Figure 8

Theoretically, the creation of such logistics or operational support bases provided other advantages, including:

1. Establishing a government presence in the area of operations,
2. Aided in limiting guerrilla mobility in the immediate vicinity, and
3. Provided a measure of security to populated areas close by. At no time were these functions supposed to overtake their primary function of providing logistical support to combat units.¹⁹

Again, the reality though proved to be somewhat more complex. While combat commanders liked having the relatively reliable and assured support such island-like logistical launching pads provided, they did not like the fact that these bases “tended to devour their combat resources and became ‘the tail that wagged the dog’.”²⁰ By 1968, their complaints had arrived at DA and the “solution” was to “approve a personnel increase for base camps,” complete with further increases in logistical requirements, anything to insure the invaluable bases’ reliable administration and support.²¹

For the guerrillas, in keeping Mao and Te’s prescriptions for guerrilla logistics, the American’s adoption of the base camp method of logistical support proved to be something of a dream come true. Not only did the bases provide fat juicy

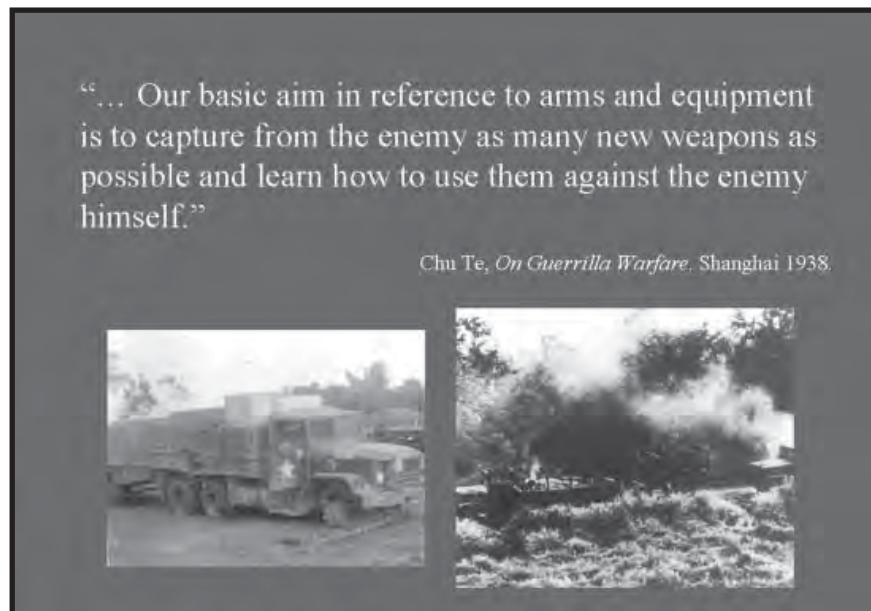


Figure 9

targets that didn't move much—even more enticing was the high volume of rich logistic traffic that flowed between them (**Figure 9**). Despite the increasing use of tactical and in-theater air for resupply, the primary method of resupply for most of the war remained overland and by road.

The bases supporting the 25th Infantry Division at and surrounding Cu Chi provides a good example of this. By the summer of 1968, the Cu Chi bases were being supported by four convoys a day, totaling over 268 vehicles, being pushed out from the Long Binh depot complex. Despite taking all the “usual precautions,” including well placed artillery support, patrols, ambushes, search and destroy ops along the route, out posts at critical junctions etc., problems with guerrilla attacks persisted.²²

Frustrations with recurring losses, rose to such a level that in August 1968 the 25th Division “developed new aggressive convoy procedures.”²³ “Convoys were divided into smaller, self-sufficient march units. Ammunition and fuel vehicles were placed at the rear to prevent an entire convoy from being blocked with burning vehicles, wreckers and spare vehicles were added... a major innovation was having the convoy commander airborne from where he directed march units and security forces... gunship cover was arranged ahead of time,” particularly for sensitive passages. Convoy personnel were retrained on the new robust procedures. It did not take long for these new methods to reap results.²⁴

Insurgent attacks on convoys soon had very different endings. Instead of being a source of insurgent supply, US forces began to kill substantial numbers of enemy attackers and capture their weapons! By taking this approach, “the division had turned a defensive situation into a highly profitable offensive maneuver.”²⁵ Besides limiting the insurgents resupply capacity, this practice had a positive effect on the surrounding civilian communities—through the regular employment of these practices, the roads also became safer for civilian commerce and agricultural activity.²⁶ By taking this approach, the US forces finally effectively addressed one of the operational tenets of Mao inspired communist insurgents(**Figure 10**). As such this case serves as a nice example of the importance of understanding the linkages, such that they are, between your own logistics practices, those of your enemy's, particularly in an insurgent environment, and your possibilities for delivering—literally—desired stability outcomes supportive of civil life.

But there are a few more loose threads I'd like to tie up here, though I do not have a slide to address this. While in Vietnam, the American Army did its best to not only arm the ARVN with modern American materiel, but to inculcate the ARVN with American-style, technology-driven, big Army logistics methods required to sustain such materiel. As part of our assistance to the Republic of South

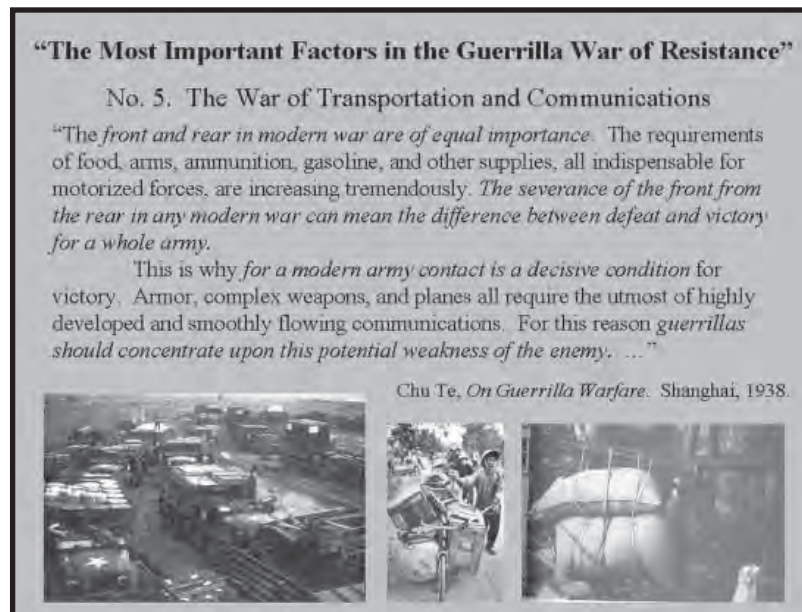


Figure 10

Vietnam, the US sold or gave to them millions of dollars of materiel and sent hundred of South Vietnamese to school to maintain it.

In the US effort to build up the ARVN, it seems that incomplete consideration was given to not only the logistical *suitability* but also the long-term *sustainability* of high-tech, logistics-intensive equipment given the cultural and economic liabilities endemic in South Vietnamese society at the time and the inevitability of a comprehensive American pullout.

In this regard, the NVA’s more gradual adoption of modern “big Army logistics methods” was *more enduring because it was accomplished at a pace sustainable by the North Vietnamese themselves* and was not overly reliant upon the overwhelming beneficence of any one foreign national benefactor (all Soviet block countries were contributors of industrially produced material, as was China).

Furthermore, the North Vietnamese logistics modernization effort was also accomplished “on top of” an indigenous guerrilla logistics base that never really went away. While it is true guerrilla logistics methods are often primitive and slow to regenerate combat power—particularly in the face of overwhelming strikes—the retention of this “reserve” capability and this way of flexible thinking about sustainment kept the proverbial logistics rug from ever being completely pulled out from under the Vietnamese communist forces.

The result was that just as the NVA completed their modernization and logistics transformation on their own terms and was ready for the final push into Saigon, the ARVN was increasingly forced to sustain its new high-tech equipment itself.²⁷ This was something the ARVN was ill equipped to do because such logistic capability was artificially grafted onto it. Furthermore, ARVN capabilities had virtually no linkage either materielly or ideologically to any indigenous or locally sustainable logistic capability. In contrast, the NVA's logistics capabilities were more suitable and sustainable because they were authentically homegrown.

From this conflict one can see that the ability to rapidly change logistical practices as required in an asymmetrical environment is of great significance and cannot be ignored. In this case the Communist forces' deeply rooted willingness to change and leverage every logistically advantageous development, whether or not it was in the form of a technological advance, setback, or simplification was instrumental in keeping them in the fight for the duration necessary for victory.

In contrast, US efforts to change logistical practices often appear cumbersome and slow because of their inextricable linkages to complex technological solutions, and undying faith in the principle of bulk.

In conclusion, I'd like to leave you with a few parting points to ponder about insurgent and counterinsurgency logistics as I see them revealed during this last large-scale American experience fighting an insurgency during the Vietnam War (Figure 11).

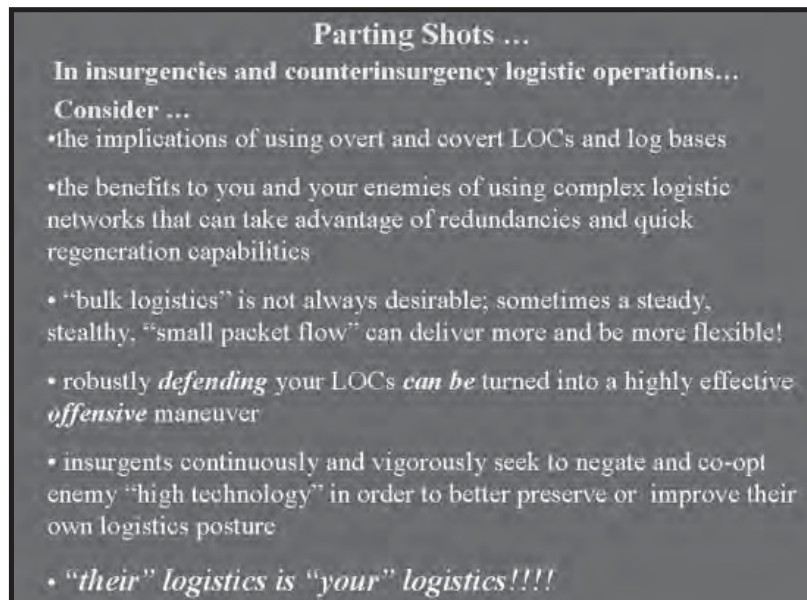


Figure 11

In insurgencies and counter-insurgency logistic operations, operators at all levels of war must be mindful of the implications of using overt and covert LOCs and logistics bases. Direct or linear LOCs are not always the most effective. There are benefits for both insurgents and counter-insurgents to using complex logistics networks that can take advantage of redundancies and quick regeneration capabilities. Bulk logistics have liabilities too. Sometimes a steady, stealthy, “small packet flow” can deliver more! Robustly defending your LOCs can be turned into a highly effective form of offensive maneuver against insurgents. Based on the Vietnam experience, it should come as no surprise that insurgents continuously and vigorously seek to negate and co-opt counter-insurgency higher-technology, in order to better preserve or improve their own logistics posture; it is a tenet of existing insurgent logistics doctrine. Lastly, one should never forget that in insurgencies, “their” logistics, is “your” logistics!

Notes

1. Chu Te (a.k.a. “Teh” or “Geh”) Chu Te went on in the 1950s to become the Commander in Chief of the “People’s Liberation Army,” also known as the Chinese Red Army. Chu Te, “On Guerrilla Warfare,” translated and edited by Gene Z. Hanrahan, ed. *Chinese Communist Guerrilla Warfare Tactics* (Boulder, Colorado: Paladin Press, 1974), 3, 63-74.
2. Ibid., 66-69.
3. Ibid., 69.
4. Ibid.
5. Ming Fan, “A Textbook on Guerrilla Warfare,” translated by and reprinted in Gene Z. Hanrahan, ed. *Chinese Communist Guerrilla Warfare Tactics* (Boulder, Colo.: Paladin Press, 1974), 76-78.
6. Ibid., 76-77.
7. Ibid., 77.
8. Ibid.
9. Julian Thompson, *The Lifeblood of War: Logistics in Armed Conflict* (New York: Brassey’s, 1991), 134-135; Charles R. Shrader, *Logistics in the First Indochina War, 1945-1954: Volume I: The Logistical Environment* (Carlisle, Pa., 1994), 122, 128. While Dr. Shrader does not specifically identify Te’s writing as an influence on Giap or Ho, he does extensively detail the influence of Chinese communists on the development of Viet Minh logistics infrastructure and practices.
10. Ibid., 162.
11. Stanley Karnow, *Vietnam: A History* (New York: Penguin Books, 1983), 253-254.
12. Richard L. Stevens, *The Trail: A History of the Ho Chi Minh Trail and the Role of Nature in the War in Vietnam* (New York: Garland Publishing, 1993), x.
13. Ibid., x-xi citing “The Special War,” *Time*, May 19, 1967, p. 34; Michael Maclear, *The Ten Thousand Day War: Vietnam, 1945-1975* (New York: St Martin’s Press, 1981), 151, 172-173, 182; “The Indispensable Lifeline,” *Time*, February 15, 1971, p. 28; “Untold Story of the Ho Chi Minh Trail,” *U.S. News and World Report*, February 15, 1971, p. 23.
14. Paul N. Edwards, *The Closed World: Computers and the Politics of Discourse in Cold War America* (Cambridge, Mass.: MIT Press, 1996), 3-7; George L. Weiss, “Battle for Control of the Ho Chi Minh Trail,” *Armed Forces Journal* (February 15, 1972), 19.
15. Stevens, xi.
16. Ibid., x-xi.
17. Weiss, 19.

18. Thomas J. McDonald, "Logistics in the Republic of Vietnam," *Army Logistician* January-February 1970, 10.
19. Department of the Army, *U.S. Army Counterinsurgency Operations Handbook* Reprint edition. (Guilford, Conn.: Lyons Press, 2004), 7-1—7-2. This source is not Vietnam era doctrine, it remains reflective of the thinking in that period about logistics bases.
20. John H. Hay, Jr., *Vietnam Studies: Tactical and Materiel Innovations* (Washington, D.C.: Department of the Army, 1989), 151.
21. *Ibid.*, 151-152.
22. *Ibid.*, 154.
23. *Ibid.*
24. *Ibid.*, 154-155.
25. *Ibid.*
26. *Ibid.*
27. Thompson, 217-218.

MACV's Dilemma: Changes for the United States and the Conduct of the War on the Ground in Vietnam in 1968

By John R. McQueney, Jr.

"It is not the purpose of war to annihilate those who provoke it, but to cause them to mend their ways."

General Maxwell Taylor before the Fulbright committee in 1966 quoting the Greek Historian Polybius

I. 1968-the War and America in Transition

1968 was a watershed year in Vietnam and in America. Three things happened in that year that served to change the direction of the war and the Rules of Engagement or ROE. Prior to 1968, Military Assistance Command, Vietnam (MACV) and most Americans believed there really was "light at the end of the tunnel" in this war as General Westmoreland, Commander, MACV (COMUSMACV), had confidently announced to the public in November of 1967 during a tour in Washington.¹ The tactic of attrition had worn down the Viet Cong in South Vietnam and MACV would soon be able to mop up what few enemy remained. By and large, General Westmoreland and the staff of MACV felt confident that the war, as it was being waged, was succeeding and the ROE were effective in controlling civilian losses. The events of 1968 served to alter that view, and the war and rules for fighting the war would change. This paper will examine these critical events in light of how they influenced changes in the ROE used to control the war in Vietnam and the new ROE for MACV in 1968.

The first key event that occurred in 1968 was the famous Tet Offensive conducted by the Peoples Army Vietnam (PAVN) that began on 31 January 1968 and sputtered on until March in some areas, though the major fighting was over by mid February. The North Vietnamese had hoped and planned for a general uprising of the population in the South and had ordered the Viet Cong to initiate guerrilla attacks across the country. Especially brutal was the fighting in the large urban areas of Saigon and the old imperial capitol of Hue. In these cities, thousands of civilians perished and scores of buildings were destroyed in the fierce fighting. These guerilla attacks against the cities were to be supported by a general offensive by PAVN regular forces in the South that never materialized. Now considered a significant tactical defeat for the PAVN, the Viet Cong in the South suffered by far the most and were by and large, rendered ineffective. The offensive did, however, have a major impact on the US home front. More and more people became disillusioned with the United States involvement in Vietnam and especially with the tactic of attrition in Vietnam.²

After Tet many more Americans began to question if the US could win the war as it was being fought. These questions included doubts about the ROE. The offensive included large scale fighting in urban areas, most notably in the old imperial capitol of Hue and in the capital city of South Vietnam, Saigon. This fighting in the cities was a first in the war and the resulting civilian casualties and destruction of civilian buildings caused concern among observers at home and in MACV. The ROE had not addressed this type of fighting for MACV's plan had long been to avoid fighting in cities and towns and MACV had been successful in avoiding large scale fighting in populated areas before Tet. Now MACV would have to consider specific instructions on the use of firepower in urban areas. The wide spread destruction caused by American firepower in the areas of Hue and Saigon could not be repeated; the political fall-out in America would be too great. As a result of the Tet offensive and the increase in fighting for the year, the number of civilian casualties almost doubled from 1967 to 1968. This is partially because one of the stated purposes of the operation by the PAVN was to bring the war to the people of Vietnam in an effort to convince them that the government of South Viet Nam was incapable of protecting them. This brought the war to populated areas where civilians were the victims of attacks by both sides. Whether caused by Viet Cong or MACV action, critics of the war and of the ROE saw this increase in civilian casualties as being unacceptable.³ By bringing the war into the cities and towns of the Republic of Vietnam and by shaking the American public's confidence in current tactics, the Tet offensive would help change the direction of the war and the ROE.

Another key event of 1968 that would impact ROE was the revelation of how United States Army discipline had broken down during an operation conducted on 16 March 1968 in Quang Ngai province centering on the village of Son My and in the hamlet of My Lai.⁴ Exact numbers are hard to determine, but roughly 500 Vietnamese civilians were killed during the operation, many of them women, children, and old people. The concerted effort of several senior commanders to conceal the incident only added to the growing perception that the war and its methods were immoral. The events became public more than a year after the operation after a discharged veteran wrote a letter and sent it to congressmen and to the Army asking them to investigate something "very dark indeed."⁵ Lieutenant General William R. Peers led the exhaustive investigation and produced a detailed report on the incident. His recommendations contained in the report included re-looking the ROE and increasing the restrictions on the use of firepower.⁶ More and more Americans began to believe that My Lai was not an isolated incident and the rules the United States forces were using to conduct the war were not working.

As the news of the incident and subsequent inquiry spread, the staff of MACV realized that the ROE, as formulated, had not worked as planned and the ROE were not consistent with a new approach to the war. By October of 1968 MACV approved completely revised ROE. The revelations of the My Lai incident inspired several changes in the ROE. Perhaps most significant was that MACV would direct that combat operations were to be closely monitored for enforcement of the ROE. In addition, as will be seen, subsequent editions of MACV's ROE would be more detailed in scope and less open to interpretation by subordinate commanders. This creative interpretation of limits on firepower had led in some ways to the plan for the attack on My Lai in the first place. The unit involved in the attack had suffered casualties caused by land mines and booby traps in the area. The unit suspected the village harbored Viet Cong guerrillas, but had been unable to find or attack any Viet Cong to retaliate for the loss of Americans to booby traps. The unit attacked with vengeance on their minds. Attacking a village in retaliation for setting out land mines had not been directly addressed in previous ROE. It had been left to the discretion of ground unit commanders to determine if the attack was warranted. In some ways this discretion given to the ground commanders had worked against the enforcement of the ROE. Now, the new ROE would place further restrictions on ground and air attacks on populated areas. Retaliation for booby traps would not be justification for attacking a village after the new ROE went into effect. Finally, the ROE would be combined into one document, making it easier to understand thereby increasing control of operations. In a large measure, what occurred at My Lai in 1968 can be blamed on a loss of command and control of an operation on the ground. Any tightening of the ROE that increased command and control of units engaged in combat operations on the ground would by default serve the political, military as well as the humanitarian goals of the commander of MACV of limiting civilian losses. As will be seen, changes in the ROE after 1968 served to limit the discretion of ground commanders, reflecting concerns, arising from the My Lai incident, that command and control of MACV units was sometimes at fault for civilian losses.

Exceeding both Tet and My Lai in importance, the most critical change in the war and for the ROE occurred on 1 July 1968 as General Creighton Abrams took over as COMUSMACV from General Westmoreland. He would bring a new way of fighting the war, a method that was, by and large, a repudiation of General Westmoreland's "big unit war." President Johnson had first considered Abrams for the job in 1964, along with Generals Westmoreland, Palmer and Johnson. LBJ chose Westmoreland and Abrams would have to wait. In the late spring of 1967, President Johnson sent Abrams to MACV as deputy commander. Apparently, LBJ's original intent was to replace Westmoreland that summer. However, the President changed his mind and Westmoreland stayed on though the year until

the summer of 1968. Assistant Secretary of Defense Cyrus Vance later confirmed this change of heart by the President and it was Westmoreland himself who said after Tet that he was now going to be blamed for losing the war even though he was supposed to be out of command before 1967 was over.⁷

Once in command, General Abrams re-examined how well MACV had executed its mission of preserving the independence of the Republic of Vietnam. He noted that MACV had succeeded in limiting the ability of the PAVN to mount large-scale operations in the Republic of Vietnam. MACV had not, however, succeeded in providing peace and security to the population. The chief result of his review was the development of the One War concept that provided a fundamental change in the way the war would be fought. Previously, MACV had aimed at fighting the PAVN in the ever elusive “big unit war” or “war of the big battalions” and had left the goal of pacification of the Vietnamese countryside pretty much to the South Vietnamese Army. Abrams, as COMUSMACV, would redirect United States’ efforts to focus on controlling what he saw as the center of gravity in the war, the population of South Vietnam.⁸ This redirection and refocusing of the war would entail changes in the ROE as well.

The American effort under General Abrams would focus on the goal of pacification. While serving as the Deputy Chief of Staff for Operations under Army Chief of Staff Harold K. Johnson, Abrams had been strongly influenced by a study done by the Department of the Army staff in 1966 called the Program for the Pacification and Long-Term Development of Vietnam (PROVN). American military strategists had been examining the notion of counter-insurgency warfare since the 1950’s. The experience of men such as British army Colonel Richard Cutterbuck fighting the Malaysian civil war had convinced them that control of the population was the key to victory in this type of war. Forward thinking theorists also noted that firepower, indiscriminately applied, tended to lessen one’s control of the population. General Johnson, the Army Chief of Staff from 1964 through 1968, had worked with Colonel Cutterbuck in the early 1960’s and strongly agreed with his approach to counter-insurgency warfare. General Johnson had directed the Army staff to begin what became the PROVN study in 1965 to determine the best approach to fighting the war in Vietnam.⁹ He published the study on 1 March 1966 to a less than enthusiastic response from the members of the Joint Chiefs of Staff and from General Westmoreland. The Air Force and Navy were much more concerned with what they viewed as an artificial limitation on bombing than with counterinsurgency war on the ground, and Westmoreland could hardly have embraced a study condemning his approach to the war. Implementing the study would require the appointment of a commander who supported its findings.¹⁰

The main point of the PROVN study was that in Vietnam the United States should focus its efforts on securing the population from attacks from the Viet Cong.¹¹ It advocated pursuing the “pacification” of the hamlets, villages, and districts previously controlled by the Viet Cong as opposed to focusing on killing the enemy. Pacification aimed to bring control of an area to the South Vietnamese government by rooting out Viet Cong insurgents and political cadre. Importantly for the ROE, the PROVN study had questioned the utility of the application of firepower to gain an impressive body count of enemy killed. The study indicated that the use of excessive force in many ways negatively influenced how the people viewed the South Vietnamese government (GVN) and the Americans sent to assist the GVN. It recommended less use of firepower to combat the insurgency. The program also advocated equipping and training the Armed Forces of the Republic of Vietnam (AFRVN) to take over a larger share of the fighting in South Vietnam.¹² General Westmoreland could not implement the changes recommended in this study without admitting that his tactic of attrition was wrong and not working. He did not change the way the war was being fought. General Abrams, however, would use the PROVN study as the basis for his new approach to the war and ROE. This would fundamentally change the focus of the war and the ROE.

“Where Westmoreland was a search-and-destroy and count-the-bodies man, Abrams proved to be an interdict-and-weigh-the-rice man,” according to an anonymous journalist quoted by Sorley. Along with Krepinevich and Lewy, Sorley noted that the “body count” as a measure of success was perhaps the most corrupting measure of progress in the whole war.¹³ “The body count does not have much to do with the outcome of the war”, and “is sort of a treadmill” Abrams said.¹⁴ Abrams would no longer measure success with a body count but by areas secured or “pacified.” This new war would be a “clear and hold” war not a “search and destroy war.”¹⁵ General Abrams also recognized that the enemy’s supply system or (in military terms), his logistics effort was critical to his war effort or, (in short), his center of gravity as Clausewitz would describe it. Abrams’ new war would aim to cut the enemy’s supply line that focused on concentrating supplies in the South in advance of any operation. This supply line consisted of supplies garnered from the countryside as well as supplies ferried in along the “Ho Chi Minh Trail” and from the Cambodian port of Sihanoukville.¹⁶ For General Abrams, a focus on cutting the enemy’s supply lines and prepositioned stocks would remove previous emphasis on killing enemy soldiers. The lessening of importance of the body count under Abrams would assist American commanders and units in executing operations in accordance with the ROE. They would no longer feel it necessary to ring up impressive body counts as a measure of progress while disregarding, or at least marginalizing, concern for civilian

losses; this problem had been the crux of the dilemma. The new One War would solve the dilemma.

Such redirection of the war takes time, however, and certain United States commanders and units continued to wage the war using the old style Army Concept until 1970 when too few American combat troops remained to conduct large-scale operations. The 9th Infantry Division's Operation SPEEDY EX-PRESS lasting from 1 December 1968-1 June 1969 in the Mekong Delta area is a good example of some commanders continued obsession with attrition.¹⁷ The commander of the operation later complimented himself for his unit's large body count. Other observers felt the large count to be dubious. Sorley cites an April 1969 comment General Abrams made about the 4th Infantry Division (then still conducting Operation MACARTHUR) to demonstrate this point. He called the division's operations "ponderous" and said, "they haven't been smart, haven't been skillful." Later, in 1969, General Abrams would still be complaining about the 4th Division's penchant for running multi-battalion operations. He had visited the division and they had told him their frustration at being unable to locate any PAVN battalions and "really chop them up." Abrams explained to the division that these operations wasted time and manpower and were not in keeping with his vision of the war.¹⁸ An argument can be made that General Abrams should have cashiered the responsible commanders for if they did not directly violate his orders on ROE they may have paid them only lip service. Abrams overall command style dictated a different tact; he would bring the commanders to his point of view by convincing them of the usefulness of his new approach and that is what he did as fewer commanders conducted operations that relied on body counts to measure progress.

Why did some commanders continue to wage war in Vietnam with the old methods? Several explanations are possible. Military commanders and units are creatures of habit. The stresses of combat tend to reinforce continued use of proven methods, lest any change invite disaster. Commanders in MACV had learned their craft using firepower to overwhelm the enemy in World War II and in Korea. Years of experience in Vietnam had also taught them that this was the way to fight a war. General Abrams' new methods were untried and came with no guarantee of success. American military commanders had been reared to expect victory through firepower and were not prepared to risk losing on untried methods. Cultural factors enter into the equation as well. Some American commanders were frankly not convinced that the AFRVN could be made into an effective force and therefore, by default, Americans had to fight the war for them using tried and true methods. Finally, simply put, some commanders were stubborn and did not wish to change their way of war and resisted the One War concept.

In addition to possessing a cultural resistance to change, the military is not a top-down driven as some might think. Casual observers often assume military commanders have absolute control over the actions of their subordinates. In reality subordinate leaders can violate the spirit, if not the letter of a command. In addition, commanders are often loath to personally direct and oversee the operations of subordinate commanders; this type of scrutiny rarely produces successful and aggressive units. In many ways this explains why some commanders continued to conduct big unit war type operations even after Abrams directed a change in the war's focus. In the end, General Abrams would have to overcome this inertia to change. This he would do, but change came too late to alter the outcome of the war.

In 1968 General Abrams became the commander of MACV and instituted a new way of fighting the war. This One War concept, based in large part on recommendations made in the PROVN study directed by Army Chief of Staff General Johnson in 1966 would place more emphasis on pacification of the countryside and less on large unit operations in the remote jungles and mountains. The aim of American war efforts would be now to control the population. The new indicator of progress would be the number of villages under GVN control, and not the number of enemy killed the infamous body count. In addition, more and more of the fighting was to be done by the ARVN. This new approach would also influence the ROE. More restrictions on the application of firepower would be placed on commanders on the ground. As is typical with military operations, change takes time and some commanders still conducted operations in the now discarded "big unit" war mode. Abrams would have to change not only his concept and ROE, but also the attitudes and behaviors of some of his subordinates.

II. The New ROE-1968

A new way of war with new tactics called for a re-examination of the rules of engagement. General Abrams talked to his Inspector General, Colonel Robert M. Cook and told him, "Cook, rewrite the rules of engagement." Several factors drove Abrams to order the rules be rewritten. First and foremost, the rules had to reflect MACV's reworked priorities; priorities that were based on Abrams views. The older ROE were designed for Westmoreland's attrition-based strategy, a strategy based on using firepower to kill enough of the enemy to force his surrender. The new rules, however, would have to directly support the pacification efforts.

These rewritten rules would place greater emphasis on controlling firepower and limiting civilian casualties. They would follow the recommendations made in the PROVN study, recommendations to place greater limits on the use of fire-

power. Among these limits would be increasing the participation of GVN authorities in approving Specified Strike Zones (SSZs) and the application of firepower. This would serve the new goals of pacification and bolstering the confidence of the people of the RVN in the government. An argument might be made that this simply placed the burden of approving firepower attacks on a still developing and largely compliant RVN government. This misses a main point of the rewritten rules, however, for in the previous rules, American commanders did not even have to contact RVN officials before applying firepower. Now, they would have to consult local RVN officials. Cook's new rules changed how American firepower was used in Vietnam.¹⁹ The directives now changed as conditions had changed, becoming more restrictive on the use of fire power; much to the chagrin of some American field commanders who would later complain of fighting the war with "one hand tied behind their backs." Of course, a strategy based on controlling the population and a closer cooperation with the ARVN would require greater restrictions on ground commanders and place less emphasis on killing an ever-elusive enemy with massive firepower. As discussed above, not all commanders agreed with this new approach, and General Abrams would work to assert his command and influence to alter their approach. Without a doubt, the driving force behind changes to the approach to the war and the ROE was General Abrams and his ideas of how to fight the war.

The chief tangible result of General Abrams' call for a re-examination of MACV's conduct of the war was a new directive, which replaced both 525-18 for artillery, and 95-4 for air delivered firepower. The new directive, 525-13 *Combat Operations: Rules of Engagement for the Use of Artillery, Tanks, Mortars, Naval Gunfire, and Air and Armed Helicopter Support* dated 12 October 1968 combined the two previous directives into one all-encompassing work.

One of MACV's intentions in publishing the new ROE was to simplify field commanders' understanding of the ROE by combining directives covering ROE into one document and to ensure compliance with the stated intent of the ROE. The introduction to the directive states, "[All] practicable means will be employed to limit the risk to lives and property of friendly forces and civilians." This statement was an amplification of the statements made in the MACV Directives 525-3 and 525-4 of 1965 and 1966. What is significant in this directive is that the statement leads off the directive covering actual ROE for use of weapons. In previous editions of the ROE these sorts of statements were found only in directives covering general tactics and techniques—this was a significant change. As such the order to limit civilian casualties is more specific and less likely to be misinterpreted or ignored by ground commanders. This is in keeping with the overall trend of Abrams' One War concept to limit firepower and control the civilian population. In an effort to further curb creative interpretation of the

rules it added, “This directive will not be modified by subordinate commanders, nor will directives modifying or interpreting substantive rules in the directive be published by subordinate commands.” The directive noted that it was not the intent of the directive to unnecessarily restrict subordinate commanders, but that all commanders remained responsible for their actions and orders.²⁰ General Abrams was going to hold commanders responsible for adhering to the ROE. This lack of concern by the chain-of-command in the 23d Division for adhering to the ROE and reporting the My Lai incident would be later noted in the Peer’s report on the incident.²¹

A key change to the ROE was that MACV now defined some common terms. In doing so, General Abrams increased his control over the actions of the commanders in the field. Key to this was defining what exactly a specified strike zone (SSZ) was, who could authorize one, for how long, and who could authorize fire into the zone. Previous editions of the ROE had not defined these terms and this had led to differing interpretations of the meaning of the terms. Previous directives had not been as clear about definitions of key terms and MACV addressed this concern. An SSZ was now defined as an area designated for a specific period of time by the government of South Vietnam as containing no friendly forces or civilians. In previous editions of the ROE, American commanders could approve the establishment of an SSZ and then only had to inform the GVN representatives. The addition of the time factor was also a new limitation in response to some confusion concerning SSZs. This confusion had arisen earlier in the war as United States commanders began to consider SSZs as more or less permanent in nature.

Previous ROE had not defined exactly what an urban area was. The large-scale fighting in Saigon and Hue during Tet in January had caused MACV to consider the rules needed for this type of fighting. Urban areas were now defined as areas containing a high density of population, and Saigon and Da Nang were given as examples. This loophole had allowed some commanders to claim their fire was not directed at what they had considered an urban area. Finally, an airstrike was defined as an attack on specific objectives by fighter-bomber or attack aircraft. By precisely defining terms and being specific as to who could authorize what types of fire, General Abrams was asserting greater control of his forces to limit the application of firepower, and to further the stated aims of the new One War concept.

Beyond defining common terms, the new ROE further detailed the specifics of artillery and air delivered firepower. Previously, Directives 525-18 and 95-4 controlled artillery and air delivered firepower. Now, these types of firepower were addressed in two annexes of a single directive. Annex A covered the rules for the use of artillery, mortar, tank, riverine and naval gunfire.²² Continuing the

theme developed in 525-18, the new directive placed considerable emphasis on the “exercise of sound judgement” in delivering this type of fire and preventing casualties amongst civilians.²³ A major change occurred in the control measures for unobserved fire into SSZs. Previously, unobserved fire could be directed into a SSZ without informing the chain-of-command. Partially in reaction to charges that the SSZs were an excuse for United States units to fire indiscriminately and without limits, MACV and Abrams tightened the rules and required notification of the appropriate clearance authority before the fire mission. For unobserved fire into uninhabited areas outside of SSZs the directive required units to obtain approval for the mission from the MACV Province Chief Advisor or District Advisor as well as from the United States forces commander. The advisor’s permission was also required for observed fire on targets of opportunity not clearly identified as hostile.²⁴ This requirement to obtain permission for the attack from the MACV advisor to the ARVN units was an attempt by MACV to prevent United States forces from firing on South Vietnamese forces and civilians by mistake. It is also reflective of General Abrams’ One War concept that aimed to more closely integrate the operations of United States and South Vietnamese forces.

The directive retained the control measures for fire into villages and hamlets laid out in 525-18 and added still more restrictions. This was further demonstration of General Abrams’ intent to more fully control the application of MACV firepower. Chiefly, all such fires were now to be controlled by an observer and executed only after obtaining approval from the United States advisor to ARVN unit in the area. The new directive tightened the requirement for firing on villages by now requiring approval for the mission from a battalion or higher-level unit commander. MACV added a new paragraph addressing the special issue of fire into urban areas. All such fires “must preclude unnecessary destruction of civilian property and must by nature require greater restrictions than the rules of engagement for less populated areas.” All such missions were to be controlled by an observer and required the approval of a corps (South Vietnamese) or field force, or Naval Force, Vietnam (a US three star general officer) commander.²⁵ Prior to the mission, MACV units were to warn and secure the cooperation of the inhabitants by using loudspeakers or leaflets, even if United States forces were receiving fire from the area. The directive added that riot control agents, or tear gas was to be used to “maximum extent possible.” MACV’s intent in pushing the use of tear gas was to limit the use of artillery in urban areas and the leadership of MACV believed the use of tear gas to be a viable alternative method for rooting out an enemy in urban areas without destroying civilian property or killing civilians.²⁶ The widespread destruction caused by indiscriminate firing on urban areas during the Tet offensive was to be limited by the new ROE. As with fire into SSZs, these

more restrictive measures for fire into populated areas were designed to better control the use of artillery and promote the new way of war for MACV.

Addressing the concerns raised by critics of the war over the destruction of religious monuments by American forces, especially during the Tet offensive, MACV added a paragraph controlling attacks on these areas. MACV noted that the enemy took advantage of these areas to provide cover, and the ROE would need to address how to engage the enemy who chose to fight from religious monuments or shrines. The Hague and Geneva Conventions had forbidden the use of religious monuments for military purposes, or as targets.²⁷ Fire on religious monuments and other public buildings henceforth required the approval of brigade or higher level commanders. “Weapons and forces used will be those which ensure prompt defeat of enemy forces with minimum damage to structures in the area.” MACV added a specific addition to this requirement for the palace grounds of the Hue Citadel. During the Tet offensive PAVN units had barricaded themselves in this ancient compound and United States forces had used firepower to force them out. The Citadel was partially destroyed as a result. The directive urged commanders “to consider the employment of massive quantities of chemical smoke (CS) crystal [a solid form of tear gas] in shrines and religious and cultural monuments.”²⁸ The directive retained similar restrictions on fire near the Cambodian border as were found in 525-18. All firing within 2000 meters of the border were to be observed and all other applicable restrictions were to apply as well.²⁹ MACV did not yet have the authority to widen the war into the well know PAVN sanctuaries inside Cambodia.

Continued concerns with the use of air-delivered firepower caused MACV to place greater restrictions on this type of firepower as it had with artillery. Annex B controlled the use of air-delivered firepower minus the ARCLIGHT strikes of B-52's. These strikes were now controlled in a separate directive discussed below. As with 95-2/4, the new directive stated, “All pilots will endeavor to minimize noncombatant casualties and civilian property damage.”³⁰ In keeping in line with the new restrictions on artillery fire into SSZs, air attacks into these designated areas now required the pilots obtain clearance from MACV authorities before beginning the attack. All air attacks were to be controlled by an airborne Forward Air Controller (FAC.) Specific emergency exceptions to this requirement were spelled out. At the very least, in such emergencies, attacking pilots needed to be in radio contact with the American commander on the ground. Units assigned armed helicopters and strike aircraft were now required to maintain records indicating types of targets attacked as well as the amount and type of ordnance expended on targets.³¹ General Abrams imposed this requirement in an attempt to document how much ordnance was being expending on each target.

Critics of the war had been charging that the armed helicopters were the greatest offenders when it came to attacking noncombatants.

Much like with artillery, growing concerns with the overuse of attacks on populated areas from the air were addressed. Annex B covered the use of air attacks on villages and hamlets, as had 95-2 and 95-4. The same restrictions applied, however, approval for such strikes now needed to come from a higher level commander. The new directive required the approval from the attacking American ground task force (battalion level) or higher commander for the attack where the old directives had not specified the command level needed for approval.³² Such areas were to be warned of the pending attack by speakers or leaflets, if the attack was not in conjunction with a ground attack. Attacks into urban areas were also addressed. Such attacks “must preclude unnecessary destruction of civilian property and must by nature require greater restrictions than the Rules of Engagement for less populated areas.”³³ Such attacks always required a FAC to be in control of the strike. Approval for such attacks needed to be obtained from both the Corps and Field Force commander (three star general level). This was the same level of command needed for approval for using artillery fire in urban areas. Even when MACV units were receiving fire from an area, residents of the area were always to be given warning of the attack in order to obtain their cooperation and support. Again, similar restrictions were now in place for artillery fire.

The new ROE contained similar restrictions on the use of aircraft near the borders of the RVN as had been in previous ROE. United States aircraft were not to cross the demilitarized zone or the border with Cambodia without the approval of COMUSMACV, General Abrams. Attacks within 5,000 meters of the Cambodian border required a FAC to control the strike and only General Abrams could waive this requirement. Following similar restrictions now in place for artillery attacks on religious shrines and monuments, air attacks required the approval of a brigade or higher level commander. The commander also needed to positively identify hostile enemy action and ensure the destruction of civilian structures was kept to a minimum.³⁴ Aircraft that had not dropped their bombs on a target typically jettisoned their bombs before landing. This was done for the safety of the aircraft and crew. Pilots, sensibly enough, have an aversion to landing aircraft loaded with bombs. As with Directives 95-2 and 95-4, the jettisoning of ordnance was to only be into designated areas and such jettisoning was to be monitored by ground air control radar. Aircraft were authorized to jettison bombs in other areas only during an in-flight emergency when there an immediate threat existed to the aircraft and crew. The directive concluded, “Every effort will be made to insure that munitions are not jettisoned so that they impact into or near inhabited areas.”³⁵

Critics of the United States' prosecution of the war had zeroed in on the use of armed helicopters to attack ground targets. In particular, the critics charged that the helicopters were one of the greatest offenders of the rule of proportionality or military necessity. This generally accepted limit on warfare rule directed that belligerents not use excessive force to attack an enemy.³⁶ One charge leveled was that American forces commonly used armed helicopters to attack villages and small bands of guerrillas on the ground. Whether the charges were true or not, such tactics were addressed in the rules covering the use of armed helicopters. First, armed helicopters were now defined as those being armed with automatic weapons or rockets. Armed helicopters could fire only when the helicopter was in direct radio contact with the supported ground force commander; the target or target marker was visually identified; and friendly and civilian positions were positively identified. In urban areas, only point targets could be attacked. The helicopters could not fire on area targets in cities.³⁷ This restriction came about as a result of MACV's recognition that during the Tet offensive helicopters had caused civilian losses in urban areas. Another restriction added that door gunners could not fire without the permission of the aircraft commander. Helicopters could fire in self-defense only when the source of the fire could be visually identified, the attack could be positively directed against the source of the fire, and that the ground fire was of such intensity that counter-action was necessary.³⁸ The proscriptions on self-defense fire were aimed at curbing the image of the "trigger happy" gunship pilot.

Addressing growing concern from critics of the war, as well clarifying the previous series of messages from MACV covering the use of the mighty B-52 bomber in support of ground operations in South Vietnam, MACV published directive 95-14 *Aviation: ARCLIGHT Operations* on 3 July 1968. This directive detailed the special procedures for the use of this type of firepower in South Vietnam. It is important to recall that the Commander, MACV did not directly control these assets. General Westmoreland would note that the commander of the strategic air command controlled those bombers and targets in South Vietnam had to be approved by authorities in Washington.³⁹ The directive specified the objectives for the use of ARCLIGHT forces that included destroying enemy defensive works, stockpiles, command and control facilities, interdiction of enemy lines of communication, and troop concentrations. The directive noted the well-understood "psychological effect of heavy bombardment to harrass[sic] the enemy and destroy his will to fight."⁴⁰ General Westmoreland quoted the Major General Tompkins, commander of the 3d Marine Division who witnessed ARCLIGHT strikes in support of the Khe Sanh base in February and March of 1968. General Tompkins said after a strike that, "It was as if a little part of the world suddenly blew up for no apparent cause."⁴¹ Such bombing required careful controls to

preclude causing non-combatant casualties and MACV placed these controls in this directive.

As for the specifics, the directive stated that MACV was responsible for nominating targets for the bombers. Strategic Air Command, based in the United States, controlled the bombers and executed the strikes once targets had been approved in Washington D.C. The targets were normally nominated and preplanned two days in advance of the strike. Ground units in contact could request diversion of the bombers to another target if it was approved by MACV.⁴² A key to controlling the use of the bombers was that MACV now required specific, written requests for strikes. These requests had to include a statement that there were no non-combatants within one kilometer of the target box. The statement also needed to state that there were no dwellings in the target box, and if there were any, all had to be certified as being used by PAVN forces. No national monuments, shrines, temples, or places of worship could be located within the target area.⁴³ All of these restrictions are similar to restriction imposed by directive 525-13 concerning non-combatants, shrines and temples, and inhabited areas. The directive aimed to clarify lingering confusion over what could or could not be struck by an ARCLIGHT strike by the big bombers. In clarifying how and when the B-52s could be used, General Abrams furthered his goal of limiting the use of firepower. With clarified restrictions on the use of the bombers in RVN he also furthered the aims of the One War concept by limiting where and when targets could be struck.

How did commanders in the field receive the new restrictions? General Rosson, serving as General Abrams' deputy commander in 1969, related that he did not recall the field commanders having related unfavorably to the greater restrictions. He felt this was due to the fact they all had a chance to review the changes and had been given the chance to express their view of the changes, "and once the decision had been made, were expected to carry it out. Insofar as I am aware, they did."⁴⁴

Overall, the new directives 525-13 and 95-14 placed greater restrictions on the use of firepower. Not only were the requirements for approval of fire increased, some common tactics such as the use of defensive fire were drastically curbed. These greater restrictions reflected General Abrams' and MACV's new perspective on the use of firepower and on the direction of the war. They were also in reaction to increasing domestic criticism of MACV battle tactics.

III. The New War and ROE, 1968

Three events in 1968 directly influenced the new rules of engagement used by American forces in South Vietnam. Collectively the effects of the three events

combined to influence MACV to produce a set of ROE that increased the restrictions placed on the use of firepower by ground forces. The Tet offensive, My Lai incident, and the appointment of General Abrams as the new commander changed the ROE. These changes included new restrictions on fire into urban and inhabited areas, defining who could approve attacks on targets, definitions of terms, and combining the ROE covering different types of attacks into one document. Far and away, the most important of these changes was the appointment of General Abrams as the new commander of MACV. He was the one who redirected the war to the One War strategy, and he was the one who ordered the ROE to fit this new approach to the war. One wonders how the war might have progressed had President Johnson made General Abrams the commander in the summer of 1967, as had been the original plan.

General Abrams' One War concept served to, by and large, solve the dilemma of how to use American firepower while at the same time promoting the stability of the RVN. The historians Krepinevich and Sorley cite a similar change in the war's direction following Abrams' appointment. The chosen tactics now matched the ROE and the aims of the war. They no longer encouraged commanders to apply firepower to rack up a high body count in order to show progress. Directive 525-13 is one of the best representations of this new war. It simplified the ROE while making the rules more restrictive. A key point is that the ROE became more restrictive on the use of American firepower even as MACV recognized the tactic of attrition was failing in Vietnam and acted to change it. General Abrams changed the tactics and the ROE in order to redirect the war. Future events would determine if he and MACV's efforts in Vietnam would succeed.

Solid, well thought out ROEs are a part of the good training and preparation of United States Armed forces. This has been a proud and honorable part of the American culture of war since the republic's founding. The historian Andrew Krepinevich notes that "the commander's dilemma that existed in Vietnam persists: What has priority—the traditional mission of closing with and destroying the enemy or population safety and security?"⁴⁵ The nation could perhaps do best to examine how MACV's ROE developed and evolved during the limited war waged in Vietnam and determine how best to apply what was learned.

Notes

1. Stanley Karnow, *Vietnam: A History*, Penguin Books, NY, 1984, pp. 213-214.
2. Lewis Sorley, *A Better War*, pp. 7, 12-14.
3. Department of the Army Fact Sheet, "Civilian Casualty and Refugee Data and Rules of Engagement", Department of the Army, Washington, DC, 14 April 1971, RG 472, Records of US Forces in SEA, NARA, CMH Historians Background Files. The percentage of hospital admissions to Vietnamese hospital caused by war related injuries was 10% in 1967 and rose to 18% in 1968, by and large as a result of the Tet Offensive.
4. Vietnam then and now is organized in the following manner, from smallest to largest administrative unit: hamlet, village, district, and province. Several cities are separate independent units not a part of provinces: Hanoi, Hai Phong, Hue, Da Nang, and Saigon (Ho chi Minh City). Confusion then (and now) could arise over this organization. My Lai (4) was the one of the hamlets of the village of Son My.⁵ David L. Anderson, *Facing My Lai: Moving Beyond the Massacre*, University Press of Kansas, Lawrence, KS, 1998, p. 10.
5. David L. Anderson, *Facing My Lai: Moving Beyond the Massacre*, University Press of Kansas, Lawrence, KS, 1998, p. 10.
6. "Report of the Department of the Army Review of the Preliminary Investigations into the My Lai Incident, Volume I, The Report of the Investigation", Department of the Army, Washington, D.C., 14 March 1970, pp. 12-7,8. Hereafter referred to as "Peer's Commission Report."
7. Lewis Sorley *Honorable Warrior: Harold K. Johnson and the Ethics of Command*, University of Kansas Press, Lawrence, KS, 1998, pp. 270-271. Sorley speculates that LBJ changed his mind for a variety of reasons: to not undercut the perception of his own running of the war, to thwart Westmoreland's political objectives, and to simply spoil the common assumption that he was going to change MACV commanders.
8. Sorley, *A Better War*, pp. 2- 4
9. Sorley, *Honorable Warrior: Harold K. Johnson and the Ethics of Command*, pp.228-234, 235.
10. Ibid., pp. 235, 237,
11. Sorley, *A Better War*, Ibid., p. 6.
12. Ibid., p. 24. See also, Lewis Sorley *Honorable Warrior: Harold K. Johnson and the Ethics of Command*, pp. 228-234, 235.
13. Sorley, *A Better War*, , p. 21.
14. Ibid., p. 38, 42.
15. Ibid., p. 29.

16. Ibid., p. 21.
17. Krepinevich, pp. 252-254. Combat After Action Report, Operation “Speedy Express”, 1 Dec 1968-1 Jun 1969, United States Forces Vietnam After Action Report, RG 472 Records of US Forces in SEA, NARA, pp. 1-3. The US 23rd and 101st Divisions also conducted Army Concept-style operations in 1969.
18. Sorley, *A Better War* p. 136, 191-2
19. Ibid., p. 28.
20. MACV Directive 525-13 Combat Operations: Rules of Engagement for the Use of Artillery, Tanks, Mortars, Naval Gunfire, and Air and Armed Helicopter Support, MACV Library, RG 472, Records of US Forces in SEA, NARA, 12 October 1968, p. 1-2.
21. Peers Commission Report, pp. 12-7,8.
22. “Riverine” forces were developed and used in the Me Kong River delta area of South Vietnam. These forces were composed of US Army ground troops transported and supported by US Navy small boats and gunboats. Observers agreed that the Riverine forces were some of the most successful in the war-when used properly.
23. MACV Directive 525-13, 12 October 1968, p. A1.
24. Ibid.
25. The government of South Vietnam divided the country into four Corps Tactical Zones (CTZ): I Corps in the north along the DMZ to IV Corps in the Me Kong delta to the south. ARVN units were assigned to one of these CTZs . US forces were commanded by, from north to south, the III Marine Expeditionary Force commander, the I Field Force commander, and the II Field Force commander. See map annex for details.
26. MACV Directive 525-13, 12 October 1968, p. A2.
27. Department of the Army FM 27-10, “Law of Land Warfare”, pp. 21, 152.
28. MACV Directive 525-13, 12 October 1968, p. A3. Later, critics of the war would charge the US with using “lethal gas” in its war efforts. In extremely concentrated doses military CS can kill (it suffocates), however such occurrences were rare and the use of riot control agents is not viewed as a violation of prohibitions against the use of “asphyxiating gases” in the Geneva Convention (see, FM 27-10 “Law of Land Warfare” p. 18).
29. Ibid.
30. Ibid., p. B1.
31. Ibid.
32. Ibid., p. B2.
33. Ibid.
34. Ibid., p. B3-4

35. Ibid., p. B4.
36. FM 27-10 *The Law of Land Warfare*, Department of the Army, Washington, DC, July 1956, p., 18, 19.
37. A point target is a single, defined point on the ground. An area target is spread out over a larger space. An example of a point target might be an enemy bunker. An area target could be several houses or an entire city block.
38. Ibid., p. B5.
39. William Westmoreland, *A Soldier Reports*, Doubleday and Company, Garden City, NY, 1976, p. 76.
40. MACV Directive , 95-14 Aviation: ARCLIGHT Operations, MACV Library, RG 472, Records of US Forces in SEA, NARA, 3 July 1968, p. 1.
41. Westmoreland, p. 340. The author can attest to at least one case of the lingering psychological effect the bombers had. While helping to interviewing witnesses during a Department of Defense investigation into MIAs in January 1998, an elderly witness in western Quang Tri Province near the base repeatedly told the team about how impressed he'd been by the ARCLIGHT strikes he and his comrades endured during the war. The village community building where the interview was conducted combined empty, US made 500-pound bombs and a bust of Ho Chi Minh as decorations for the stage.
42. Ibid., p. 2.
43. Ibid., pp. 1-2 of Annex C.
44. Rosson Letter.
45. Krepinevich, p. 272.

**McQueney Slide Addendum:
MACV's Dilemma: The United States and the
Conduct of the Ground War in Vietnam**

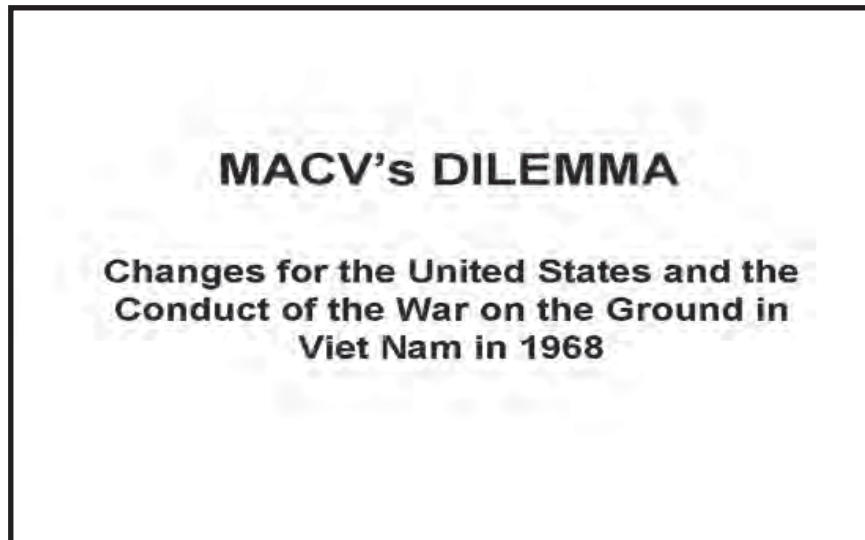


Figure 1

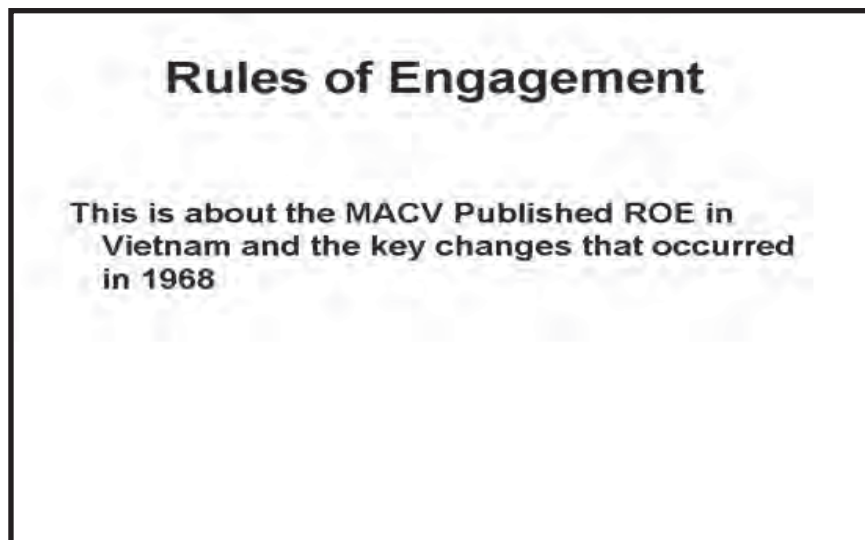


Figure 2

The American Way of War 1965-1968

**Westmorland and the Army Concept
Goes to War**

**Into Battle: The Big Unit Battle *la Drang* sets
the example**

**CEDAR FALLS and JUNCTION CITY:
American Way of War on a large scale**

**War of Attrition
Body Counts**

Figure 3

1968-the War and America in Transition

- **TET**
- **My Lai Number 4**
- **GEN Creighton Abrams One War-Pacification**

Figure 4

GEN Creighton Abrams

- One War concept
- Program for the Pacification and Long-Term Development of Vietnam (PROVN)=pacification
- Less focus on attrition
- Aim to cut flow of supplies to PAVN
- New ROE

Figure 5

The New War and ROE, 1968

- Focus on Pacification, Security and ARVN-Vietnamization
- Not all US Units changed approach right away:
 - Operations MACARTHUR and SPEEDY EXPRESS

Figure 6

MACV ROE 1968

- **525-13 Combat Operations: Rules of Engagement for the Use of Artillery, Tanks, Mortars, Naval Gunfire, and Air and Armed Helicopter Support**
 - Simplified and Clarified rules
 - More Restrictive in keeping with the One War Concept-increased GVN control
 - Greater emphasis on controlling firepower and limiting civilian casualties

Figure 7

525-13 Annex A: ROE Artillery, Mortar, Tank, Riverine and Naval Gunfire

- In SSZs- GVN approval required plus notification of the appropriate clearance authority before the fire mission
- Required permission for the attack from the MACV advisor to the ARVN units- an attempt by MACV to prevent United States forces from firing on South Vietnamese forces and civilians by mistake
- Firing on villages now required approval for the mission from a battalion or higher-level unit commander

Figure 8

525-13 Annex B, ROE Air Operations

- Air attacks were to be controlled by an airborne FAC
- Attacks on populated areas now required the approval from the attacking American ground task force or higher commander

Figure 9

95-14 Aviation: ARCLIGHT Operations

- MACV did not directly control these assets
- MACV responsible for nominating targets for the bombers
- Required specific, written requests for strikes certifying no noncombatants in box

Figure 10

Implications

- **MAVC's Dilemma: War of Attrition and an ROE that sought to limit non-combat losses in an unconventional war**
- **1968 Changes in the War: Abrams and One War, now the aims, tactics and ROE were in harmony-changes came too late**
- **US Army will be facing unconventional or small wars for some time into the future, ROE will have to be tailored to match**

Figure 11

Day 2, Session 1 Question and Answers

Moderated by
Dr. James H. Willbanks - Command and General Staff College

Dr. Willbanks

Before we turn to the questions and comments period, I'd like to make a few comments, if I could. I think these papers are pretty timely. You only have to listen to the news or pick up a newspaper—there are almost daily allusions to, or comparisons between Vietnam and Iraq, and some of them are more informed than others.

I think these two papers inform the ongoing debate about the utility of lessons learned from Vietnam and applying them to the current situation that we face on the ground in Iraq. Lieutenant Colonel Vlasak, I think, points out some very salient points involved with the writing—logistics and the requirements for large conventional forces faced with countering an insurgency. I think she aptly describes how the dependence on a sophisticated support infrastructure that we saw in Vietnam provided the Viet Cong, or more specifically, or more correctly, the PLAF and the PAVN, both targets of opportunity and sources of supply. The means of resupplying between these large bases and outlying units and smaller bases also provided a vulnerability to the enemy, just as we are seeing today.

She also discussed the development of the Vietnam forces and their logistic systems, pointing out the difficulties in building a long-term capability for self-sustainment in and among the indigenous forces. We saw the difficulties involved in that in Vietnam. We built for them a logistic system that they could not sustain after we left. I think that this should be kept in mind during the ongoing effort to organize, train, and equip the Iraqi security forces. So I think her paper provides some significant parallels that are worth considering when looking at the situation in Iraq today.

John's paper also addresses the lessons of Vietnam, obviously, but considers an even more contentious issue—that of rules of engagement. His paper maintains that the three events in 1968 influenced the change in the rules of engagement—the Tet Offensive, the My Lai incident, and appointment of Creighton Abrams as COMUS MACV in mid 1968.

I'll come back to Abrams and the Tet Offensive here in a moment. But first I would submit to you that the My Lai incident wasn't an ROE problem. The best ROE in the world probably wouldn't have done anything to remedy that particular situation, because it was a total breakdown in leadership and discipline. More

effective ROE would probably have made little difference—*because* of this total breakdown.

John concludes that the appointment of Abrams was far and away the most important factor in the change in the rules of engagement, and as one who participated in Abrams' "one war" concept as an infantry advisor with an armored infantry division in 1971 and '72, and also have spent some years here recently researching the Vietnamization period, over which General Abrams presided, I concur that Abrams made a major shift in the focus of the war and the operational concepts used to fight it. I also agree that the Tet Offensive brought about a change in the war. But I think it must be acknowledged—and this is a caution here—that General Abrams made the changes that he did in the ROE and the way that the overall approach to the war was to be fought—because he could.

He was dealing with a fundamentally different set of circumstances than General Westmoreland faced in 1965 to 1967. Westmoreland had to hold off the Viet Cong and the North Vietnamese, certainly after the fall of 1964, when the main force units began to move down the Ho Chi Minh Trail, in order to focus on pacification. It's pretty difficult to pacify a province if you can't hold off two or three PAVN regiments.

So I think that the change in strategy in 1968 and '69 was possibly largely because of the heavy casualties inflicted on the Viet Cong and the PAVN in the bitter fighting in not only the Tet Offensive—which extends, if you extend it out, into the fall of '68—but also in the subsequent battles, it extends up until mid 1969.

These losses permitted a change in focus, certainly set the preconditions then so that you could shift the focus, at least in some areas, in some provinces, to pacification, and of course a subsequent tightening of the rules of engagement, which I'm quite familiar with because it's the rules of engagement that we operated on.

There was a lot of discussion about what if this strategy had been tried in 1965 or 1966. In my mind, at least, it's doubtful that any of this would have worked, because you had—at that particular point—40,000 more Viet Cong and PAVN operating in the area of responsibility (AOR).

All of that being said, John's paper makes an extremely important point, I think, on the rules of engagement and how critical they are to the effort involved in winning the hearts and minds of the local population, while still providing security to your own forces—and therein, I think, lies the dilemma that he left us with.

Those comments being said, I'd like to open it to questions, comments from before, please. Yes, sir, in the back?

Audience Member

I am Rick Shrader. I have a comment, I guess an illustration of a couple of points that Colonel Vlasak made regarding the summer of 1968 and convoy operations and the enemy's use of our equipment. General Williamson, who commanded the 25th Infantry Division at that time, was notorious among us transporters for using the daily convoys up into Ku Chi, Loc Ninh, Tay Ninh, as bait. In August of 1968, the fish took the bait big time. There was an ambush to the daily Tay Ninh convoy, which General Williamson's combat forces, it took them 20 hours to rescue us—a 20-hour ambush. It was an example of this defending the LOC as using it as an offensive operation. Anyone who wants to try that technique, please be sure that you have sufficient combat forces to make it stick, once it happens, because it isn't pleasant for 20 hours in an ambush.

Something along on that same ambush, it was obvious, as we reviewed what had happened afterwards, that the North Vietnamese forces had targeted specific vehicles in the convoy. There was one tractor-trailer load of protective mass—they immediately went for that. There were several tractor loads of 50-caliber ammunition—they wanted that. And they pretty much left everything else alone or tried to blow it up or whatever. But it's very much a targeted attempt to get specific items that they knew were on the convoy. I did have one quibble, I think. You mentioned something there about the convoy commander in an aircraft. Those combat weenies would never let us anywhere near one of their airplanes.

In fact, the convoy commander—the transportation unit convoy commander—was not even permitted to have the frequencies and call signs for the artillery and supporting air. Those were given to a PFC or SP4 military policeman (MP) from, for example, the 25th Infantry Division, and he was the only one who had them; he would not let the lieutenant or captain, who was the convoy commander, have those. They were afraid that the transportation guys wouldn't know what to do with them. So of course, the first thing that happened in any ambush is the two MP jeeps at either end of the convoy were blown away by RPGs, and the subsequent consequence was, unless—well, what really happened is that we got smart and we would steal the call signs and so forth. But technically, you weren't supposed to have them, and it would have been all over. So this whole business of the convoy operations, I think, has a lot of relevance to what's going on today. I think someone needs to take a much closer look at convoy operations. The intensity of the IED kind of thing—a roadside bomb—of course was not quite the same in Vietnam, but you did have regiment-size ambushes. But I think someone could do well to make a real close study of that and see what practices worked and didn't work.

LTC Vlasak

Thank you, Dr. Shrader. I completely concur with everything you've said there. Thank you for giving me that corrective as to who actually had control there, which goes to show that I guess their retraining efforts, or efforts at improvement, were not as completed as they might have hoped. But I think that you're exactly right—this is an area that's extremely ripe for revisiting, because it has unbelievable relevance to today. So thank you.

Audience Member

It's another sort of a logistics convoy question. We could almost draw a parallel with convoy operations on the oceans in World War I and World War II, where after tremendous losses, they finally say, "Gee, maybe we better put our ships in a convoy, and protect them." The same with logistics convoy first, you know, in Vietnam, and then certainly, recently in Iraq. It's as if they started out thinking, "Well, nobody's going to hit these, so we'll just run them up and down the road," and only after tremendous losses do they realize, "Hey, maybe we better have gun trucks—that's an interesting idea; let's try that." It's almost as if their default position is, "Nobody's going to attack our logistics train, so we don't need to train our loggies to defend themselves; we don't need air cover; we don't need logistical thinking on how to protect these convoys"—until after the losses occur. Perhaps you could give me some idea of the mind-set of individuals that refuse to believe that logistics need to be protected until proven otherwise, as opposed to the other way around?

LTC Vlasak

You make several good points there, Dr. Seret. First, your reference to convoy operations on the high seas during World War II—again, primarily, the Battle of the Atlantic—I really appreciate that analogy, because I spent the last two years writing three lessons for the Intermediate Leadership Education (ILE) course here at CGSC on naval operations—one of them included the Battle of the Atlantic—and I'd like to point out to the students, or at least let them come to the conclusion themselves, that the dilemma faced to getting materiel to Europe, so there will be a Normandy and a D-Day, is very much the same one here—the medium is just what has changed; it is on water instead of on the land. But in terms of the way you have to think about it and approach this problem is very, very similar—that there is no one technological solution that you can throw at this. You have to have creative people who look for synergies to come out of this. You can keep inventing things, whether they're hedgehogs or lea lights or different type of depth charges or—you know, Germans will come back with snorkels and whatever else; there's sort of this point-counterpoint arms race that goes on. But until you find creative ways to combine all the materiel you have at your command,

technology you have at your disposal, in surprising and new ways—I mean, I like to point out, there’s a British naval commander who figures out that once you get the edacity of the airplanes, the little carriers, and puts it all together, and that if you do a certain type of maneuver around it, it’s what you do with it that’s the real point. So that’s a lovely lesson, that it’s not the medium, it’s not the technology—it’s how you think about the problem. On to your other points there, if you can refresh me on the second part there, Dr. Seret.

Audience Member

Well, specifically, why is it the mind-set that logistics don’t need to be protected, perhaps as the default, going into the war position, and then only after tremendous losses do they seem to recognize that, “Oh, I think we have a problem here”? It’s a problem that has occurred many times before.

LTC Vlasak

I think that goes back to the linear warfare mind-set, that there’s these fronts—it’s a legacy back to the World War II sort of pattern of war, that when you have these fronts that move through, this way of thinking, that, “We’ve cleared everything that’s come before us. How could there possibly be anything left behind or mass that has rolled through?” I think that’s part of it—it’s a very seductive way of thinking—and we don’t realize that when you get to this type of warfare, it’s very, very different. There are opportunities, especially when the problems are looking for logistic sympathy among the people.

LTC Vlasak

Well linear war is much more technology dependent and that seems to be our comfort zone—we like our gadgets and widgets and if we can find a technological solution that seems to be our default preference.

Dr. Willbanks

I think Richard makes a pretty valid point. If you want to know what the Army puts emphasis on, go back and take a look at curriculum here for instance. If you go up on the third floor and go into the archives, after 1973 counterinsurgency goes away, and it goes away very rapidly, and it becomes almost a non-word. Certainly by the time some of the folks in this room of my particular vintage come through, counterinsurgency is not even addressed.

Audience Member

Colonel Jensen here, and as both a transporter and a logistician I am very much aware of what’s going on with the main supply routes in Iraq and Kuwait right now as a movement control battalion. We have two things that come together.

First of all the reinvention of the gun-truck, if you will, came from a sergeant with a National Guard background who had been in Vietnam building an armored pillbox that was removable from the back of a HET. And very quickly the transporters armed there with what they call “hillbilly armor”, so the soldier in the field would adapt very quickly much as the hedgerow cutters were by a sergeant putting steel teeth in front of a tank. But the other part of that are rules of engagement. Most of the problems we have right now in Iraq deal with a very vague rule of engagement. Your comment was that it’s a different war and requires different rules of engagement could have been taken off of the political podiums I think after 9/11. We see this not only in the handling of prisoners in Guantanamo and others, but also rules of engagement in the cities. The most effective weapon on these convoy protections is the .50-caliber machine gun because they will shoot through walls. And the insurgents when they hit a convoy, and get rapid fire back at them, tend to leave those convoys alone. They read shoulder patches very quickly and they know which ones will respond with overwhelming force and which ones are tentative about it. The bad part of that, or in the background, is the soldier is continually looking over his shoulder saying “is this allowed?” We all see the court-martials and all the publicity coming out of it, and that’s a real dilemma for us when we don’t have well defined rules of engagement and don’t want to go off on a tangent. It’s kind of like the commander’s intent—if it’s not understood by the key players, then you get into a real problem with the soldier on the battlefield and we’re seeing that. All you have to do is read the headlines and you see the courts martial, the rules of engagement, and the commander is really put in a bind on what protects my soldiers and what’s going to get me court-martialed, and that seems to be the problem we have.

Mr. McQueney

A further study I did, I brought it down a few layers. This was MACV, I guess, roughly equivalent to General Casey’s level. It’s not as though these were the only things out there. You know, this thing sat confidential at the National Archives until 1998, or whenever I went in and said, “I want this declassified.” So this is confidential, so the soldiers in the field didn’t have this.

In another part of my study, I have a couple of the ROE cards that were actually issued, and they are kind of soldier-friendly—one of them is “nine simple rules.” Now, I’m not an Iraq veteran; I don’t know if they had a similar soldier-friendly kind of ROE distillation card in Iraq—that people understood, and were briefed on and got trained on. I know—

Audience Member

There's a card, you carry it with you at all times. When you first came in, you got it.

Mr. McQueney

In my talk with some of the Vietnam veterans, you get a wide range—either some of them told me they never knew there were any ROEs, and they would have ignored them anyhow; other guys said they were a huge handicap to them; and other guys admitted, “Yes, this was something we needed to keep”—you know, General Lawson said that, “This was an important part of the war, and our soldiers needed to understand this.” So don't presume that just the directive is the only that was out there. It was distilled down.

Dr. Willbanks

Well, I think you have to also look at the situation. ROE's different in the Central Highlands in 1969 than it is in Bin Dinh Province in 1972. So it kind of depends on what the situation is. I've been in provinces where you could wander around and not see another human for days. I've also been in built-up areas where you basically had to keep a close reign on everybody, because they're a finger away from rock-and-roll, and all the ROE cards in the world don't make any difference if you haven't inculcated that in the enemy.

Audience Member

I have a question for John. The ROE was imposed, in your view, to limit some of the collateral damage and some of the destruction that we were imposing on South Vietnam. Has your research turned up anything on how that was perceived by those who were victims, and how it was perceived, maybe, by our enemies?

Mr. McQueney

Sir, not yet. But if I turn this into further study, I have some contacts in the POW/MIA office who have contacts in the Social Republic of Vietnam. We often ignore that side of it, and I don't know. I would say, given how they approach most of the things, it could become a weapon for them to use against us, and probably was, and maybe some of the guys here who were there would know that they in fact would use My Lai, or incidents like that, as a political weapon. Remember they always had these levels of warfare that we tend to forget—warfare on...more than just warfare. So I presume that it could have been used as a tool against us.

Audience Member

Of course, presumably we were trying to influence the civilian population as well, and one would hope that they would realize, “Oh, gee, the Americans are

being so observant and so careful, and we really love them even more.” You would hope there would be a positive benefit, even if the enemy tried to turn it against us. But I don’t know.

Dr. Willbanks

Yes, sir, please.

Audience Member

I do have a question for Dr. McQueney. In your research, did you use the—I think they’re called the Abrams tapes? Did you have access to those?

Mr. McQueney

No. It was enough just getting the actual directives declassified and getting them in my hands. It would probably be interesting to see a lot more of what he thought about. I used General Lawson to get at that, because he was his deputy, and the different approach that Abrams would take it. But I’d be willing to bet, it’s just for me, really interesting that this guy was a tanker veteran—you know, a hero from Bastone, unless you’re a 101st guy; then he’s not the great hero. [Laughter] But you just don’t think of guys like that flipping their brain around the problem so quickly, and so differently. That’s probably at Knox, too, isn’t it, some of the tapes?

Audience Member

I think they’re at the—

Dr. Willbanks

The CMH.

Audience Member

They’re not at the US Military History Institute. Again, the reason I asked is I attended a lecture by Dr. Sorley, and Dr. Sorley had written the first book on Abrams, not knowing how much had been embargoed; the Army had hidden numerous boxes—rooms full—of his papers. So that’s why Sorley had written a second book when that embargo was lifted by the Army—he wrote, *A Better War*. I was reading something over the weekend where there’s another third wave of stuff that the Army has allowed Sorley and others access to, and I think it’s been very recent—this summer, as a matter of fact. Again, they keep holding it back, for reasons—I think they were waiting for more deaths of the major players, like General Westmoreland.

Mr. McQueney

It's the family.

Audience Member

Okay.

Dr. Willbanks

Go ahead, sir, please.

Audience Member

Yeah, I wanted to ask, for Colonel Vlasak and Mr. McQueney, it's virtually impossible to stop the logistics of an insurgent force, but you can certainly increase its costs to do so. What measures proved effective, both strategically or operationally, in driving up their costs?

LTC Vlasak

Well, I think the very—this practice of defending your locks robustly certainly made it more costly. But then, as we sort of diverged, or linked it properly to—it's a question of your rules of engagement, and it just kind of goes back to one of the earlier points or questions here, is rules of engagement, as defined for CSS units, combat service support units, and for combat units, we're supposed to sort of operate off the same page. But in terms of the situations that each type of units put into on a daily basis, sometimes I think that's where you start to see some of the tension, and I'll speak from my own sort of personal experiences taking convoys out in Somalia, just between log bases. We had a rules of engagement card, we had very defined things, when and where you were able to do what. Fortunately, I never had to actually put any of that into applied practice with lead down-range, but I remember thinking quite acutely about, well, how—you know, our situation's a little bit different. This works for guys who are out on cordon and search, or guys who are out deliberately hunting for bad guys. But when you're passing through town, trying to get the goods between bases, you can often be faced with a lot more ambiguous situations, and I'm not sure ROE, as we try to wrestle with it, often gets at all the things the logistician needs. I think that's just definitely an area worthy of more research and consideration, so I leave it at that.

Audience Member

I was specifically trying to get at what methods we use to drive up the insurgents' costs of logistically supporting themselves.

LTC Vlasak

I think, as I said, defending these convoys with lots of firepower, but as I said, that gets you into this difficult situation of when you're passing through towns and villages, because so much of the logistic effort has to co-exist with the people who actually live there. You run into a lot of more, I would say nebulous situations that we need to figure out how to handle better.

Dr. Willbanks

Well, I think, basically, you're going to find the LOC's in Vietnam, the LOC's came through two countries, and except for the secret bombings, we only went into once, and the ARVN went into once in 1971. So in that particular case, you never cut off the logistics trail to the PLAF and the PAVN in the south. So it's a self-generating organism, no matter how many casualties you inflict upon them. Jim, you get the last question; we're running out of time here.

Audience Member

I'll try to be very brief. I was a combat infantryman in the 25th Division from March '67 to March '68. I don't recall any ROE card, although it may have been issued to me. But the ROE that was imposed on my unit was imposed through discipline of a caring leadership. If there was a problem with ROE where I operated, which included the Michelin Rubber Plantation, it was that we could not even fire indirect fire in defense of our unit inside the rubber plantation without somebody's permission, and this was at the cost of American lives, and there's more details to that. But it actually cost lives in my unit, that we couldn't fire our own 81mm mortars inside the rubber plantation in July 1967.

Dr. Willbanks

In that particular area where Jim worked, I'm very familiar with, there is nothing but rubber plantations, which made things increasingly difficult for those on the ground.

We have reached the end of our allotted time here. Thank you, folks. [Applause]

Use of Private Military Corporations To Supplement Traditional American Ground Forces

Thomas E. Hennefer, PhD.

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“The mercenaries and auxiliaries are useless and dangerous, and if anyone supports his state by the arms of mercenaries, he will never stand firm or sure, as they are disunited, ambitious, without discipline, faithless, bold amongst friends, cowardly amongst enemies, they have no fear of God, and keep no faith with men.”

— Machiavelli, *The Prince*

Introduction

As the Global War on Terrorism (GWOT) progresses, the operational tempo of “first-strike” American ground forces will increase. There is an opportunity to supplement existing American forces with Professional Military Corporations (PMCs) to act as “force multipliers”, thus allowing traditional ground-forces to be deployed in conflicts with a higher national priority.

PMC’s represent the newest addition to the modern battlefield, and their role in contemporary warfare is becoming increasingly significant. Not since the eighteenth century has there been such reliance on private soldiers to accomplish tasks directly affecting the tactical and strategic success of military engagement. With the continued growth and increasing activity of the privatized military industry, the start of the twenty-first century is witnessing the gradual breakdown of the Weberian monopoly over the forms of violence. PMC’s may well portend the new business face of war.¹

The New Age of Mercenaries

Since time in memorial governments, empires, and armies have sought opportunities to expand their military capability so core resources could be brought into action. From William the Conquerer to National Socialists Germany, to Desert Storm, the mercenary soldier or “free lancer” has been enlisted when national interests require direct participation, but world opinion disapproves.

As the world becomes more intertwined, political and social acceptance of using PMC’s or “mercenaries” in combating global terrorism will continue to challenge traditional concepts of the citizen soldier. This new intervention may yet redefine what Carl Von Clausewitz termed “politics by other means”.²

The legacy of mercenaries is as old as military conflict itself. A historical review illustrates that many modern nations (i.e., Italy, France, Germany, Spain, and England) can directly trace their establishment to the implementation of mercenaries in an effort to consolidate power.

Historically, mercenaries in Europe were used as a way to expand an existing army either as an offensive or defensive force. Their justification was that since national identity was not a populist ideal until the 1700s, monarchs had limited options if they wished to expand or defend existing territories. Every ancient empire from the Hittites forward, including Persia, China, Greece, and Rome, used mercenaries. However, it was in the warring mini-states of Renaissance Italy that mercenaries came into their own. During this period (1420-1600) the Condottieri served whoever would pay and did so without stigma. “War was a barbaric business. The citizens of rich and flourishing states were not about to waste their time or their lives in pursuit of it.”³

The early European use of organized mercenaries was in the form of private bodies in the 14th century known variously as Free Companies, or Great Companies. These organizations ultimately developed in Italy as Condottieri (literally means military contractor), who offered their services to the highest bidder. The Condottieri system maintained fairly permanent companies of armed military specialists that were hired out for set periods to various Italian states. By the 18th century, this was a fairly common practice, as the British demonstrated with their use of Hessians to fight in the American Revolution.⁴

In a modern context, using mercenaries as force multipliers can be compared to the business equivalent of temporary employees or “temps”.

In business when employers need additional workforce they “outsource” immediate needs to organizations staffed to provide such services. When the “temp-force” is no longer needed, auxiliaries are released and move on to the next assignment.

The business advantage is that companies can “offload” the long-term expense of supplying and maintaining a bloated workforce while still maintaining specific economic advantages. Temps can be deployed or assigned less desirable projects allowing the organization to complete the assignment with limited exposure or risk.

In Saudi Arabia, for example, the regime’s military relies almost completely on a multiplicity of firms to provide a variety of services—from operating its air defense system to training and advising its land, sea, and air forces.⁵ Other advanced powers are also setting out to privatize key military services. Great Britain, for instance recently contracted out its aircraft support units, tank transport

units, and aerial refueling fleet—all which played a vital role in the 1999 Kosovo campaign.⁶

The parallel to military service outsourcing, is already manifest in the domestic security market, where in states as diverse as Britain, Germany, the Philippines, Russia, and the United States, the number of private security forces and the size of their budgets greatly exceed those of public law-enforcement agencies.⁷

The US military has also employed PMC's to perform a wide range of other services—from military instruction in more than 200 ROTC programs to operation of computer and communications systems at NORAD's Cheyenne Mountain.⁸

Today's PMC's represent the evolution of private actors in warfare. The critical analytic factor is their modern corporate business form. PMC's are hierarchically organized into incorporated and registered businesses that trade and compete openly on the international market, link to outside financial holdings, recruit more proficiently than their predecessors, and provide a wider range of military services to a greater variety and number of clients. Incorporation not only distinguishes PMC's from traditional mercenaries and other past private military ventures, but it also offers certain advantages in both efficiency and effectiveness. Incorporation also means that PMC's are business-profit focused instead of individual-profit focused.⁹ Unlike mercenaries, privatized military firms compete on the open global market. PMC's are considered legal entities that are contractually bound to their client...any client.¹⁰

American Mercenaries

Traditionally, most Americans would consider the use of mercenaries an affront to the values of fair play or with the traditions of the American military, but America has also hired and/or produced its own share of privateers.

General Friedrich Von Steuben: Born in Magdeburg, Prussia, on September 17, 1730, General Friedrich Von Steuben is credited with being the father of the modern American army based primarily on his drillmaster talents at Valley Forge. At that time, with few notable exceptions, the Continental Army was lead by non-professional soldiers with a majority of the officer corps culled from the educated classes or landed gentry. What Von Steuben brought to the Continental Army was the ability to take a group of largely volunteers and give them the skills necessary to stand toe-to-toe with the British, an army considered by most to be the best in the world.

In the tradition of the mercenary, General Von Steuben who in reality was a captain obtained his military experience in the Seven Years' War as aid-de-camp

to King Frederick II, and somewhere along the way acquired the title of baron. Through political connections with Benjamin Franklin, Von Steuben managed a commission in the Continental Army. Realizing that a lieutenant general commanded more respect than an ordinary captain, Von Steuben arrived in Portsmouth, N.H. on December 1, 1777 ready to serve in his new posting. Under the strong suggestion of General George Washington, Von Steuben was appointed inspector general and achieved the rank of major general by 1778. After serving in several campaigns, Von Steuben was awarded citizenship, a 16,000-acre farm in upstate New York and an annual pension of \$2,500. General Friedrich Von Steuben died in Steubenville, N.Y. on November 28, 1794.

Captain Miles Walter Keogh: Born on March 25, 1840 in Southern Ireland, Miles Keogh was born into a large, affluent, intensely Catholic family of thirteen children. Born to fight, Keogh was a member of the Wild Geese, an organization of professional soldiers of fortune whose only restriction was to never fight under the British Union Jack.

In 1861, Keogh went to Italy to fight in the papal army and was later awarded two medals for heroism: the “Pro Petri Sede,” and the “Ordine di San Gregorio” of Saint Peter and Gregory. After the Papal defeat, and with no more wars to fight in Europe, Keogh was invited by Secretary of State William Seward and the Archbishop of New York John Hughes to join the Union Army and was awarded the rank of captain ironically on April 1, 1862. Keogh was immediately posted as a staff officer to brigadier general James Shields who confronted Stonewall Jackson later that year in the Shenandoah Valley.

Described by George B. McClellan as “a most gentlemanlike man, of soldierly appearance” Keogh also served on Buford’s staff at Fredericksburg, Chancellorsville, Brandy Station, Gettysburg, and promoted to full major on April 7, 1864.

At the conclusion of the Civil War as a brevetted lieutenant colonel, Keogh obtained a commission in the regular army as a captain taking command of I company of the 7th Cavalry at Ft. Riley, Kansas.

Although not a close friend of George Armstrong Custer, Keogh is probably one of the most famous members of the 7th Cavalry to die at the Little Big Horn. His final act seems to be one of personal bravery since his body was found encircled by his men, and oddly enough, the only body not mutilated. This act is historically interpreted as a sign of respect by the Cheyenne and Sioux for a man that all agreed was dashing and heroic.

General Clair Lee Chennault and the A.V.G.: Recognized as the father of the modern Chinese air force, Clair Lee Chennault came to China in 1937 as a retired captain in the United States Army Air Corps.

Initially, Chennault came at the request of the Chinese government on a limited mission to observe and suggest changes on how best to combat the overwhelming Japanese threat. Chennault with unofficial support of President Roosevelt and political allies, equipped the assemblage later known as the American Volunteer Group (AVG) with planes, material and manpower and established a PMC style combat group destined to operate out of makeshift airfields throughout China.

Members of the “Flying Tigers” were handsomely compensated. On average (and these are 1940 dollars), the average American Volunteer Group (AVG) pilot received a salary of between \$250 and \$750 dollars a month, paid vacation leave, medical expenses, \$30 per month in miscellaneous meal expenses, and initially a \$500 bonus for every enemy plane destroyed in the air and later those destroyed on the ground. The AVG was later absorbed into the Army Air Corps in 1942.

When examining this fighting force, it is important to note that at the height of its power, A.V.G. squadrons rarely exceeded 30 serviceable aircraft. Japanese forces were estimated to be in excess of 400 to 500 aircraft, which placed the odds in any single conflict somewhere between four to one, and fourteen to one.

The New Privateers

At no time in modern history has the availability of freelance military force, equipment and “know-how” been so easily accessible to the average country, organization, or individual. In fact, billionaires such as Bill Gates, Steve Jobs and Warren Buffet could realistically hire their own private army, giving new meaning to the business term “hostile takeover”.

The elements that gave rise to this new market can be traced to three primary global factors: 1) the end of the Cold War, 2) the vacuum created when mother states such as the Soviet Union could no longer provide unlimited resources to satellite nations, and 3) the reduction of global military forces by some 6 million men in the 1990’s.

Massive disruptions in the supply and demand of capable military forces after the end of the Cold War provided the immediate catalyst for the rise of the privatized military industry.

With the end of superpower pressure, a raft of new security threats began to appear after 1989, many involving emerging ethnic or internal conflicts. Likewise, non-state actors with the ability to challenge and potentially disrupt world society began to increase in number, power, and stature. Among these were local warlords, terrorists’ networks, international criminals, and drug cartels. These groups reinforce the climate of insecurity in which PMC’s thrive, creating new demands for such business.¹¹ In essence, with enough money anyone can equip

a powerful military force. With a willingness to use crime, nearly anyone can generate enough money.¹²

The cost of entry into the traditional military industrial complex is staggeringly high, and until recently has excluded all but a few from participating in the activities of this once elite club. The entry barriers for PMC's, on the other hand is relatively low since the amount of financial and intellectual capital is relatively inexpensive having been pre-paid by super-power governments in the form of military training and education at such renowned institutions as Sandhurst, West Point and Annapolis. This intellectual capital is readily available from an open labor market supplied by highly skilled operators whose knowledge, experience, and practical application leave many with limited options in a traditional job market.

As for compensation, a high number of soldiers from declining nation states can expect to receive from two to ten times the normal pay rate they collected when employed by more legitimate governments where annual income in excess of \$95,000 is not uncommon. As for military hardware, with the decline of the Soviet Union, an amazing amount of surplus equipment can be procured not to mention excess supplies provided by employer-states who purchase armaments from legitimate sources. Current estimates place annual PMC industry revenues in excess of \$200 billion and climbing.

Predominant among global PMC's are two companies that typify what has been described as Type 1 and Type 2 providers: Executive Outcomes (EO), and Military Professional Resources, Inc. (MPRI).

Executive Outcomes: Founded in 1989 by former members of South Africa's Defense Forces who were originally assigned the implementation and enforcement of apartheid legislation, EO promises its clients: professional and confidential military advisory services, land, sea, and air training, strategic advice and "apolitical service based on confidentiality, professionalism, and dedication".

EO came to international attention in the 1993 Angolan Civil War where they assisted the FAA government forces (The Force Armada Angolanas) in its fight against UNITA (National Union for the Total Independence of Angola). Using a contingent force of 50 paramilitary advisors, EO supplemented a 600 man FAA force and recaptured a strategic oil refinery and storage facility.

The next contract assigned was in September 1993 where EO was paid \$40 million to protect one of the countries leading diamond processing centers. EO were classified as "military advisors", but authorized to make preemptive strikes against known threats if in their opinion they represented a clear and present danger to EO contractual objectives.

In March 1995, EO was contracted to assist the Kono mines in Sierra Leone, and succeeded in achieving its objectives in only eleven days implementing gunship, fast-attack Ranger-type tactics, and superior electronic communication networks. It is unclear how EO came into possession of this advanced hardware, but it is surmised that the equipment was supplied by the contractor and related government agencies that purchased the equipment on the open market. EO was paid in diamond contracts through their subsidiary company Branch Energy.

Overall, EO has operated in multiple African countries including Kenya, Angola, and Uganda. EO was disbanded in 1999 at the behest of the South African government who banned its citizens from embarking on mercenary activities. It is interesting to note that EO was responsible in one West African country for reclaiming 90% of territories lost to insurgents, but was later forced by the UN to exit the country on the condition that UN Peacekeepers would complete the operation.

It took EO less than six months to complete its objective at a cost of \$400 million. It took the UN less than one year to lose all the territory gained by EO to the former insurgents at a cost of \$1 billion dollars.

Military Professional Resources, Inc. (MPRI): Unlike Executive Outcomes that supplies on the ground hostile contact services, MPRI is more of a Type 2 military consulting firm that provides general-staff-like consultation. Where EO is a more “in-you-face” operation, MPRI is more interested in the overall strategic operation and implementation of the contract, and at present only advises clients on the best military solutions and possible options.

Established in 1986, MPRI has on call over 360 fulltime “core” employees, in excess of 2,000 supplemental contractors, and can stay in the field from a few weeks to several months. Consisting mostly of former military professionals ranging from noncommissioned officers to four-star generals, MPRI can provide large scale, long-duration support anywhere in the world.

Located in Alexandria Virginia, MPRI income for 1996 was estimated to exceed \$24 million. MPRI describes their business model as “focusing on military matters, to include training, equipping, force design and management, professional development, concepts and doctrine, organizational and operational requirements, simulation and war-gaming operations, humanitarian assistance, quick reaction military contractual support, and democracy transition assistance programs for the military forces of emerging republics.”

Like Executive Outcomes, MPRI has been involved in a myriad of contracts including a 1995 United States contract to deploy 45 operators to monitor the Bosnian border against smugglers, and a 1994 Department of Defense contract to

retrain the entire command structure of the Croatian National Army. This type of activity has not gone unnoticed by the international community where British and French officials accused MPRI of assisting in the planning of the Croatian invasion and the targeting of strategic communication centers in advance of invasion activities.

Help and Hindrance

Overall, PMC's operate under the same conditions found in many modern business industries or markets. Since no single business can be all things to all customers, or supply all the required resources a client might need, governments use the power of outsourcing to match the skills and abilities of one PMC to supplement those of another. If a contractor needs in-your-face force multipliers, they could offer Executive Outcomes or Sandhurst one part of the contract, if they needed command staff functionality, they could offer this part of the contract to MPRI, and if transnational logistics were required, they could seek the help of transnational companies like Halliburton.

Using tip-of-the-spear analogy, it is important to consider that not all PMC's look, function, or act within the same sphere of participation.

Type 1: Military provider firms focusing on the tactical environment. They offer services at the forefront of the battle space, engaging in actual fighting or direct command and control of field units, or both. In many cases, they are utilized as "force multipliers," with their employees distributed across a client's force to provide leadership and experience (i.e., Executive Outcomes and Sandline are classic examples of military provider firms as well as Von Steuben, Keogh, and Chennault as involved participants).

Type 2: Military consulting firms providing advisory and training services. They also offer strategic, operational, and organizational analysis that is often integral to the function or restructuring of armed forces. Their ability to bring to bear a greater amount of experience and expertise than almost any standing force can delegate on its own represents the primary advantage of military consulting firms over in-house operations (i.e., MPRI can call on the skills of more than 12,000 former military officers, including four-star generals).

Type 3: Military support firms provide rear echelon and supplementary services. Although they do not participate in the planning or execution of direct hostilities, they do fill functional needs that fall within the military sphere including logistics, technical support, and transportation—that are critical to combat operations. The most common clients of type 3 firms are those engaged in immediate, but long-term duration, interventions (i.e., standing forces and organizations requiring a surge capacity).¹³

PMC Website Links

Since the PMC industry is collection of hundreds if not thousands of companies ranging from large, well financed multi-nationals to a few ex-patriots in a Humvee, the following is a collection of some of the more known companies and their services. To maintain an accurate and unbiased depiction of each company, the information and accompanied URL (Universal Resource Locator) was taken directly from each companies website mission statement or description of services.

AirScan Inc. Airborne Surveillance and Security Operations

<http://www.airscan.com/>

A private military company committed to providing client the best air, ground, and maritime surveillance, security and aviation possible. AirScan strives for professional, timely results in response to clients' worldwide airborne surveillance and aviation requirements.

AMA Associated Limited

<http://www.ama-assoc.co.uk/>

UK based AMA Associates Ltd provides training and consultancy in the following: Risk and Crisis Management; Fraud Investigation; Surveillance; Technical Counter-Surveillance; Security Management; Counter Terrorist and Hostage Release; Maritime Security; Aviation Security and Air Cargo Security at all levels; Close Protection and Executive Management.

ArmorGroup

<http://www.armorgroup.com/>

Private military company with practices in: Security Planning and Management, Training, Mine Action, Response Center, Kidnap and Ransom, Humanitarian Support, Information Business Intelligence and Fraud, and Intellectual Property Asset Protection.

Combat Support Associates

<http://www.csakuwait.com/>

The CSA partners currently have projects at a dozen OCONUS locations where they provide technical training, base operating support, supply services, logistics and infrastructure support, transportation, and environmental support. The three divisions include:

AGS: An ISO 9002 compliant international services company with over 65 years of performance history in support of DOD, US Federal agencies, foreign governments, and commercial clients. AGS specializes in facilities operations

and maintenance (O&M), technical services, logistics, security, and environmental support services.

Space Mark, Inc.: A professional services company with 15 years of experience in Department of Defense logistics systems, telecommunications, multimedia training, airfield operations, facilities maintenance, and environmental services.

Research Analysis and Maintenance, Inc.: 20 years of experience providing technical services in support of testing and training activities of the US Army. A combined global workforce of 7,000 employees and revenues exceeding \$1 billion.

Control Risks Group

<http://www.crg.com/html/index.php>

Control Risks Group is the leading, specialist, and international business risk consultancy. Founded in 1975, Control Risks has since worked with more than 5,300 clients (including 86 of the Fortune 100 companies) in over 130 countries. Control Risks Groups aim to enable our clients to take risks with greater certainty and precision and to solve problems that fall outside the scope of mainstream management resources. Control Risks offers a full range of value-added services to companies, governments and private clients world-wide, including: political and security risk analysis, confidential investigations, pre-employment screening, security consultancy, crisis management and response, information security and investigations.

CSC

<http://www.csc.com/industries/government/>

CSC entered the private military company market by purchasing DynCorp. CSC offers government clients a telecommunications legacy that spans more than 40 years in both the commercial and government sectors. As a result, we offer integrated voice and data network solutions that other systems integrators and telecommunication companies cannot easily deliver to government clients. By leveraging the expertise of more than 5,000 telecommunications specialists, we bring unusual depth of experience and expertise as we offer: vendor-neutral telecom solutions, wireless solutions, a full range of network engineering and integration capabilities, and significant number active security clearances among our engineering staff.

Eagle Aviation

<http://www.eagle-aviation.com/>

Eagle Aviation is a full service Fixed Base Operator centrally located on the eastern seaboard, providing convenient, quality service to the general aviation industry. Eagle Aviation's one-stop location is ideal for all of your business and personal aviation needs. Occupying more than 36 acres at the Columbia Metropolitan Airport (CAE Columbia, SC), Eagle Aviation has built an international reputation for excellence as a full service facility.

Global Risk International

<http://www.globalrisk.uk.com/>

Incorporation in 1999 and with an ever-increasing threat to international security and industrial espionage, Global Risk International (GRI) takes a more bespoke approach to the security industry, providing a comprehensive, tailor-made service without compromising the integrity, professionalism and confidentiality that you have come to expect from Global Risk. GRI is the largest British private military company. GRI provides services in crisis management, kidnap and extortion management, fraud and insurance investigation, and counter-surveillance. GRI is headed up by a management team recruited from the upper echelons of the security industry, ranging from ex-special forces instructors to senior police officers.

Global Marine Security Systems Company

<http://www.hartsecurity.com/>

GMSSCO provides a comprehensive marine risk management program deploying finance, insurance, security and industry expertise to ensure a coordinated response to all security risks, with a focus on terrorism, political instability and criminal activity.

Halliburton

<http://www.halliburton.com/>

Halliburton is a private military company, which specializes in energy and infrastructure. Many people still know Halliburton by their old name, Kellogg, Brown & Root.

International Charter Incorporated of Oregon

<http://www.icioregon.com/>

International charter company that acts as a private military company in peace-keeping support and relief services. Past work includes Liberia, Haiti, Sierra Leone, Nigeria and Sudan. ICI has nearly a decade of extensive aviation and logistics experience on five continents, frequently under austere and difficult con-

ditions. ICI specializes in: relief services, peacekeeping support, project management, heavy lift, and VIP transport.

Janusian Security Risk Management

<http://www.janusian.com/>

Formed as a subsidiary of The Risk Advisory Group. The Risk Advisory Group's established reputation as a leading supplier of risk management services to include a range of security resources for the defense of personnel and assets. Our core concept is to offer a multi-disciplinary specialist approach to security management, utilizing the most qualified experts in the field. Our specialists have built their reputations upon challenging the orthodoxy, drawing upon their collective experience while approaching each task without preconceptions.

Military Professional Resources, Inc.

<http://www.mpri.com/>

The world's greatest corporate military expertise—capitalizing on the experience and skills of America's seasoned professionals. Integrity, ethics, professionalism, quality, and cost competitiveness are our hallmarks—a claim borne out by past performance. One of the oldest private military companies in continuous existence.

Northbridge Services Group Ltd.

<http://www.northbridgeservices.com/>

Private Military Company offering strategic advice, intelligence support, humanitarian disaster relief, counter-terrorism, support for law and order, and close protection teams. The Company's personnel consist of highly decorated individuals who have, in aggregate, more than 200 years of operational service—predominantly in Special Forces—therefore guarantying a truly international blend of experience, pedigree and specialty.

Sandline International

<http://www.sandline.com/site/index.html>

Sandline is a Private Military Company (PMC) focusing on conflict resolution. The company works worldwide, and is resourced by professionals with many years of operational experience at senior rank within first world armies. The business was established in the early 1990s to fill a vacuum in the post cold war era. The purpose is to offer governments and other legitimate organizations specialist military expertise at a time when western national desire to provide active support to friendly governments, and to support them in conflict resolution, has materially decreased, as has their capability to do so. Sandline is a privately

owned and independent business. It is incorporated in the Bahamas and maintains representative offices in London, England and Washington, DC in the US.

Securicor Hong Kong

<http://www.securicor.com/hk.htm>

Securicor Hong Kong is the Asia regions' longest-established security company, commencing operations in 1963. Since then the business has expanded into eight other territories and is one of the most familiar and respected names in security. Securicor Hong Kong is part of the Securicor Asia group, which is wholly owned by Securicor plc, a leading cash management, security and justice services company based in the United Kingdom. Operating globally in some 50 countries and with over 60 years' experience, and employs more than 100,000 people around the world.

The Steele Foudation

<http://www.steelefoundation.com/>

The Steele Foundation is a multinational firm providing a broad range of specialized risk management services that are designed to control loss by providing innovative and strategic business solutions. Since 1989, The Steele Foundation has been servicing a multinational clientele of governments, corporations, individuals and non-profit organizations to protect their interests 24/7. Proactive and comprehensive, our services eliminate business risks that affect your bottom line before they happen. The Steele Foundation has six core business groups including Business Investigations, Executive Security, Crisis Management, Behavioral Sciences, Information Security, Crisis and Environmental Services.

Triple Canopy

<http://www.triplecanopy.com/>

Dedicated to providing organizations with the capabilities and insight to reduce exposure to hostile threats.

UK Defence Services Ltd.

<http://www.ukdefence.co.uk/main.htm>

Offers physical security, close protection, canine services, electronic counter measures, maritime security and explosive ordnance disposal (EOD).

Vinnell Corporation

<http://www.vinnell.com/careers.htm>

A private military company, which is a recognized leader in facilities operation and maintenance, military training, educational and vocational training, and logistics, support in the United States and overseas. Since its modest beginnings

during the Great Depression, Vinnell has successfully completed projects on 5 continents and in over 50 countries for a variety of government and commercial customers.

Command and Control

As countries and militaries increasingly rely on contractors to supply vital assistance, the issue causing the most concern is accountability, control, and commitment.

Throughout history, participants in war have often been for-profit private entities, loyal to no one government. Indeed the state monopoly over violence is the exception in history rather the rule.¹⁴ Every empire, from Ancient Egypt to Victorian England, utilized contract forces. The private provision of violence was a routine aspect of international relations before the twentieth century.¹⁵ The practiced use of contractors in the military is widely used and although few are involved in covert or direct combat activities, their presence still blurs the line between soldier and contractor. The Army does not command and control contractors in the sense that it commands and controls military units and soldiers. Instead, contractors are managed, and the management mechanism is the contract itself. Managing contractors involves planning, visibility, and control, which are not unlike commanding and controlling soldiers.¹⁶

The primary reason PMC's are now gaining acceptance is that as the world becomes more intertwined, world powers can no longer be relied on to provide protection to smaller nation states, and with increased instability and terrorism, the need for contracted protection will become acute. Justification is that unless recognized as a global threat as with Iraq, Rwanda or Mogadishu, the United Nations seems reluctant to intervene on what it considers "internal domestic unrest". Until the confrontation escalates to genocide, only then will the United Nations act. Unless, it can be demonstrated without any doubt that there is a crime against humanity being committed, the population can expect little military assistance from the international community. Even then, the international community might be unwilling or unable to provide military assistance.¹⁷ Unfortunately by then, countries may lay in ruin and thousands if not millions of civilians slaughtered.

As the level of international terrorism increases and military demands expand exponentially, the US Military will need to enjoin assistance from PMC's in addressing the immediate or potential threats. Some of the issues concerning this implementation include: 1) what will be the immediate and long-term impact PMC's will have on the countries that use their services; 2) how will the international community regulate PMCs; 3) what international regulations will be required; 4) what action will be taken to assure PMC's resign magnanimously

when contracts expire; and 5) what actions should be considered valid or in violation of international laws regarding human rights, compensations, and legal regress?

Command and control of PMC's will be an ongoing challenge for military and civilian organizations simply because of the unavoidable clash of cultures. While the military is focused on holding the line, PMC's are focused on the bottom line and may modify contractual responsibilities if the situation becomes unprofitable. There is, however, a basic question of accountability.

Governments are accountable to their people and their legislatures. Private corporations, on the other hand, have little accountability to the public and are to some degree shielded from the scrutiny of government. The major worry that everyone has is that these forces will become a law unto themselves.¹⁸

The challenge when managing PMC's on the battlefield is that under the Geneva Convention:

- 1) PMC's are not soldiers, and they cannot be specifically and deliberately exposed to the same risks as soldiers. They must be protected. This involves issues such as legal status, personal firearms, security, battlefield location, and nuclear-biological-chemical (NBC) protection.
- 2) PMC's are neither combatants nor noncombatants. They occupy a special niche called "civilians authorized to accompany the force." As such, they are entitled to some, but not all, of the protections afforded combatants and some, but not all, of the protections afforded noncombatants.
- 3) PMC's cannot be targeted deliberately for military action. But the function they are supporting can be. If the function is targeted and contractor personnel are killed or wounded, the law of land warfare regards them as legitimate collateral casualties.
- 4) PMC's cannot engage in activities inconsistent with their status. They cannot perform any purely military functions. They cannot participate in attacks on the enemy, nor can they occupy defensive positions to secure the unit perimeter.
- 5) Combatants (soldiers) are uniquely privileged to conduct war. In doing so, they can knowingly and deliberately kill opposing soldiers. No civilian ever has that right. If a soldier kills during warfare and subsequently is captured, he can be held only as a prisoner of war. A civilian who kills during warfare and subsequently is captured can be held, tried, and pun-

ished as a criminal. This is a powerful reason for not permitting contractor personnel to wear military uniforms; it avoids the potential for jeopardizing the soldiers' protected status.

- 6) PMC's cannot perform functions in direct support of hostile operations. It is extraordinarily difficult to determine the limits of this constraint. A system contractor employee who travels to the area of operations to perform minor technical maintenance on a weapon system that is still operational and capable of performing its intended mission may be violating the constraint against support to hostile operations. On the other hand, the same person performing the same maintenance on the same item in a maintenance facility in a safe area may not be in violation of the constraint.¹⁹

Lessons Learned

In the military, a key factor in maintaining force cohesion during combat is termed "command and control". The stronger the communication link between combatants and commanders, the more effective applied forces become.

The challenge in traditional command adjoining itself with PMC's is how does one fighting force authority supercede that of another especially if that force is self-contained, mobile, and heavily armed? One answer may lie in the selection of leadership methodology such as the blending of transformational and transactional leadership.

For the PMCs, the primary motivator is the bottom line or a return on investment to the shareholder. If tensions arise over the military objective versus profitability, the temptation by PMC's to cut corners or invalidate a contract mid-mission is a serious consideration.

At the outset, PMC's may bid a project (mission) for a set duration and price. If cost overruns increase operational expenses and profitability declines, PMC's may exercise legal options unheard of in a traditional military structure. During the Balkans conflict, for example, Brown & Root (now known as Halliburton) is alleged to have failed to deliver on, or severely over charged the US Army, on four out of seven of its contractual obligations.²⁰

Another challenge is that, as PMC's become a normal part of the military fabric, political pressure on the military to accept PMC's as active participants on the battlefield may impact the way commanders are forced to formulate strategies, or how risk assessment is calculated. Because of their cost effective-

ness, politicians may be tempted to trade easy solutions for traditional values, or squander esprit de corps and professionalism for political expediency.

PMC's face little retribution if contractual agreements are not met and can not be relied on to hold their ground if the danger exceeds their ability to stay the course. How commanders communicate and interact with PMC's will be vital to achieving a successful integration of contractors into the battlefield. Since PMC's function on a tradition of transactional leadership, how commanders blend both the value sets of transactional and transformational leadership methods will greatly improve this union.

When blending two leadership styles it is important to consider that transformational leadership is different from transactional leadership in that transformational leadership is an attempt to alter the values and goals of the individual or group. Transformational leadership involves a selling process where the leader recruits followers based on a mutual goal or agenda. The essence of transactional leadership is the exchange of a carrot for a stick.

Transactional leadership uses a clearly defined chain of command where responsibility is well defined. With transactional leadership, responsibility is often assigned to subordinates, and although failure is not without risk, responsibility is often shared among those involved in the process.

From a military perspective, a primary concern is how to control a civilian force that is often as well armed, well trained, and motivated as those they serve. The focus from the contractor perspective is how to manage the process at a cost-effective level, and when to cut-and-run when risk exceeds expectations.

Because of the nature of the military, the need for formalized command and control processes is self-evident, for there are few organizations outside of the military (law enforcement and firefighters being the exception) where volunteers exchange individual need for the greater good, often at personal risk.

Supplementing existing forces with PMC's is now a battlefield reality that cannot be undone, but PMC's will not, and never will replace the professional soldier because PMC's lack the key qualities of loyalty, dedication, duty and honor.

General of the Army Douglas MacArthur illustrated the essence of this in his final address at West Point on 12 May 1962 when he stated. "Duty, honor, country: Those three hallowed words reverently dictate what you ought to be, what you can be, what you will be. They are your rallying point to build courage when courage seems to fail to regain faith when there seems to be little cause for faith, to create hope when hope becomes forlorn...the long, gray line has never failed us. Were you to do so, a million ghosts in olive drab, in khaki brown, in blue and

gray, would rise from their white crosses, thundering those magic words: Duty, honor, country.”²¹

Notes

1. P.W. Singer “Corporate Warriors: Rise of the Privatized Military Industry and Its Ramifications for International Security”, *International Security*, Vol. 26, No 3 (Winter 2001/02). pp. 186-220.
2. Carl Von Clausewitz, *On War*, Ed. Trans. Michael Howard and Peter Paret. Princeton: Princeton University Press, 1976.
3. Michael Mallett, *Mercenaries and Their Masters: Warfare in Renaissance Italy* (Totowa, N.J.: Rowman & Littlefield, 1974.)
4. Mallet, pp. 80-88
5. Singer, pp. 186-220.
6. Simon Shepard, “Soldiers for Hire,” *Contemporary Review*, August 1999,
7. Edward J. Blakely and Mary Gail Snyder, *Fortress America: gated Communities in the United States* (Washington, D.C.; Brookings, 1977) , 126
8. Steven Saint, “NORAD Outsources,” *Colorado Springs Gazette*, September 1, 2000, p. A1
9. Singer, (2001)
10. <http://airacan.com>, <http://icioregon.com>, <http://www.mpri.com>, <http://sandline.com>, and <http://www.vinnell.com>
11. Andre Linard, “Mercenaries SA,” *Le Monde Diplomatique*, August 1998, p.31.
12. Stephen Metz, *Armed Conflict in the Twenty-first Century: The Information Revolution and Post Modern Warfare*, Strategic Studies Institute Report (Carlisle, Pa.: U.S. Army War College, April 2000) p.24.
13. Singer (2001)
14. Janice Thompson, *Mercenaries, Pirates, and Sovereigns: State Building and Extraterritorial Violence in Early Modern Europe* (Princeton, N.J.: Princeton University Press, 1994).
15. Jeffery Herbst, “The Regulation of Private Security Forces,” in Greg Mills and John Stremblau. Eds., *The Privatization of Security in Africa* (Pretoria: South Africa Institute of International Affairs, 1999), p. 117.
16. Fortner, Joe, *Managing, deploying, sustaining, and protecting contractors on the battlefield*, *Army Logistician*, Vol. 32, Issue 5, Sep/Oct 2000.
17. United Nations General Assembly resolution 44/34 of 4 December 1989

18. Thomas K. Adams "The New Mercenaries and the Privatization of Conflict"
PARAMETERS 1999 US Army War College Quarterly.
19. Fortner, (2000).
20. General Accounting Office, Contingency Operations: Opportunities to Improve the
Logistics Civil Augmentation Program, GAO/NSIAD-97-63, February 1997.
21. Address by General of the Army Douglas MacArthur to the cadets of the U.S.
Military Academy in accepting the Sylvanus Thayer Award on 12 May 1962.

Facing Genocide: The United States Army as an Agent of Rescue

Keith Pomakoy

The scholarly community, humanitarian organizations, and victims' groups are becoming more effective at exposing instances of genocide and humanitarian crises around the world. Increasingly these groups harness the media to pressure policy makers. It is virtually certain that the United States Army will receive orders to wage anti-genocidal war in the near future, as, indeed, it may be doing in Iraq at this moment. While some scholars seem to understand the risks inherent in war, there often exists a gap between the realities of war and the hopes of rescuers. As the Army readies for this putative role, planners should be aware of the successes and failures of previous attempts to use state power, military and otherwise, to end genocide.

Genocide is a difficult word to define. The 1948 United Nations Convention on the Prevention and Punishment of the Crime of Genocide defined genocide as the "intent to destroy, in whole or in part, a national, ethnical, racial or religious group." While this offers a reasonably clear legal definition, the Convention suffers from at least two conceptual failures. First, its use of four privileged groups, arrived at by diplomatic compromise,¹ arbitrarily excludes other groups from consideration. Second, the UN definition requires "intent," and the lack of absolute intent has often been used to withhold the label genocide from deserving crimes. It is worth noting that Adolf Hitler, undoubtedly responsible for the genocide of the Jews, did not leave a paper trail.² The UN definition places a moral burden on signatories to prevent genocide, and, for practical reasons, governments have been hesitant to use the term. While the convention offers a useful legal tool, it also injects enough confusion into the issue that some of the most violent humanitarian crises of the second half of the twentieth century, including Cambodia under the Khmer Rouge, generally escaped the label genocide when the event occurred.

This is problematic because popular understanding often assumes that genocide is somehow worse – hence more worthy of attention – than other crises. The convention definition's conceptual failures have helped this process. However, a new subfield of scholarship, genocide studies, has emerged to question the convention definition, and, more importantly, to seek solutions to the genocide problem. Over the last twenty years genocide scholars have fought over the definition of genocide, and the term has taken on broader meanings. Currently, there is no consensus definition of genocide available in the literature.³ There is a new determination among scholars and non-governmental organizations⁴ to react to state sponsored killing campaigns aggressively. Ten years ago Secretary of State Colin Powell's use of the term to describe the situation in Darfur would have resulted in

significant scholarly debate over the definition. Now the debate has moved from definition to solutions. The old cry “never again” has become the rallying cry of well organized groups that look to American power as an agent of rescue.

The exercise of power is fraught with unpredictability. Norman Rich once offered the “cautionary tale” of the Crimean War, suggesting that careful negotiations offer a much safer path than war. America has rarely resorted to the open exercise of power in response to humanitarian crises, but has often engaged in more subtle rescue operations. Some of the most successful cases of rescue lacked the drama of Kosovo or Somalia, and have received little attention. Yet it is especially important for policy makers, who seldom have clear choices before them, to be familiar with the various paths open to would be rescuers. In simple terms genocide is similar to other humanitarian crises; the victims of genocide are neither more nor less deserving of aid than the victims of natural disasters. The same basic plan of rescue can be used—first, the conditions unfavorable to life must end, and second, enough aid must be sent to help those who can be saved. In natural disasters one must wait for nature to stabilize, and then rush in with help. In cases of state sponsored mass murder, such as genocide, convincing the perpetrators to end the killing is necessary but often difficult. Rescue, like diplomacy, is very much the art of the possible.⁵

Despite the expenditure of considerable resources on the study of genocide over the last generation, America’s attempts to end genocide are virtually unknown and receive little attention in the scholarly literature. America’s response to the Holocaust has been debated extensively, but narrowly, and has not paid significant attention to American philanthropy.⁶ The Pulitzer Prize winning monograph “*A Problem from Hell: America and the Age of Genocide*” branded American policy in the 1915 Armenian Genocide a “nonresponse ... that established patterns that would be repeated.”⁷ A more recent account has suggested that American philanthropy was “principally responsible for saving the remnant of the genocide,” but this work stopped short of a full explanation of American policy.⁸ The literature of a third important event, the Spanish-American War, generally admits that humanitarian considerations played an important, if under-rated, role in policy,⁹ but rescue scholarship almost never discusses this event. It is not clear whether the events in Cuba from 1895 to 1898 represented genocide or some morally analogous term,¹⁰ but 1898 did see the use of military force to end a vast humanitarian crisis.

It is in Cuba that a study of rescue should begin. In 1898 the US V Corps landed in Cuba and brought an end to a conflict that had seen at least 200,000 people die.¹¹ Indeed Cuba illustrates the difficulties of rescue. When the Cuban Insurrection began in 1895, America reacted passively, hoping that Spain would

restore order and with it the good business environment and sugar supply so vital to the American economy. Spanish attempts to pacify the island resulted in the establishment of concentration camps holding at least 400,000 Cubans in starvation conditions. In 1897 the death rate in these camps increased dramatically, and American policy hardened. The administration of President William McKinley pressured Spain to end the killing. On January 1, 1898, America's Minister in Madrid, General Stewart L. Woodford informed Washington that non-humanitarian concerns with Spain, including trade, had to be put on hold while he was "endeavoring to secure an early and effective change in the methods of conducting the war in Cuba." This, he said, represented the "diplomatic matters of chiefest concern between our government and that of Spain."¹²

The pressure seemed to work. In December Spain offered to let American philanthropy into Cuba, and McKinley called upon Americans to raise money for the Cubans. He dispatched Clara Barton to the island to supervise the distribution of relief. The Central Cuban Relief Committee (CCRC), which enjoyed official status as part of the State Department, coordinated philanthropic efforts.¹³ CCRC aid flowed to Cuba immediately, and raised over \$321,000 by June.¹⁴ However, as it became apparent that Spanish policy had not changed as much as Washington had hoped, war became almost inevitable. In March, Woodford informed the Spanish government that "the horrible facts with regard to the famine, destitution, sickness, and mortality among the people of the island had gradually become known to [America], and that humanity and civilization required that peace must be secured and firmly established at once... even beyond and above all questions of the destruction of American property interests in Cuba, the great and controlling questions of humanity and civilization require that permanent and immediate peace be established and enforced."¹⁵

War, when it came, immediately stopped rescue operations. Alfred Thayer Mahan, America's great practitioner of realpolitik, authored a plan to blockade Cuba, and the US Navy instituted a close blockade at the start of the war. According to Mahan, this was "unbloody pressure" that could "compel peace without sacrificing life."¹⁶ The blockade and the withdrawal of the humanitarian workers—over Barton's protest¹⁷—halted rescue. But McKinley's war plan called for an early invasion of the island. The army wanted time to train recently federalized National Guard units, and the navy wanted to capture Puerto Rico—which, according to at least one US Navy captain, would make "Cuba an easy question."¹⁸ Yet McKinley prevailed and, once the Spanish fleet was located, he ordered the invasion of Cuba.

The invasion allowed aid workers to return with the soldiers, and the surrender of the island ended the camps and brought a return to normality. Despite the

apparent brutality of the blockade and the withdrawal of humanitarian workers, Mahan's "unbloody pressure" facilitated the rapid conquest of Cuba, mitigated the weaknesses of the US V Corps, and removed the real cause of suffering—Spanish policy. A longer war would have been disastrous for the Cubans, and it was fortuitous that the American invasion succeeded so quickly. CCRC could have avoided the added suffering imposed by the war if the Spanish had relented, but Spain seemed intent on retaining its empire by any means necessary. In 1898 America had the power to intervene, and did so, but this complicated humanitarian concerns before solving the underlying problem.

The philanthropy of 1898 would become the pattern, if not the model, of American responses to genocide in the first half of the twentieth century. In 1915 America did not have the power to intervene in the Armenian Genocide. Presidents Theodore Roosevelt and Woodrow Wilson both commented on this point, as did Senator Henry Cabot Lodge.¹⁹ Officials on the scene, including Ambassador Henry Morgenthau, thought that an official protest would be harmful. Worse, Morgenthau thought such an act would most likely result in an increase in Ottoman attacks against the Armenians.²⁰ Near East Relief (NER), the American committee formed to aid people suffering in the Ottoman Empire and surrounding areas, also considered protests useless.²¹ Hoffman Philip, chargé of America's embassy at the Porte, suggested the withdrawal of America's diplomatic representative in protest, but he too thought that this would make the situation worse.²²

Placed in a nearly powerless situation America again turned to philanthropy. The Armenians who had fled to the Syrian desert lacked all essentials, and the Armenians who had escaped to the Russian Caucasus were only slightly better off. It is not clear why Ottoman officials allowed American aid to reach the Armenians in the desert (although sectional politics and international attention probably account for this opening), but significant aid flowed to the Armenians. State Department officials and American missionaries distributed the relief, and American philanthropists, led by Morgenthau, were careful to avoid any action that might offend the Ottomans and end the opportunity to save the Armenians. NER, an independent charity group with very close government ties, raised over 100 million dollars to help the Armenians, and claimed to have saved one million lives.²³ This was a crisis in which pressure and force—because no state could devote overwhelming resources to the problem at that moment—would only make the situation worse. Hence America pursued a much more subtle policy that, as Merrill Peterson pointed out, was "principally responsible for saving the remnant of the genocide." This became America's most successful rescue campaign, and it is notable that America applied no military pressure against the Ottomans.

World War II posed the greatest humanitarian crises yet caused by mankind. German and Japanese racial campaigns consumed somewhere between thirty and forty million people.²⁴ During this crisis America again turned to philanthropy, sometimes, but not always, with State Department support. A mobilization of charities raised over one billion dollars for the effort. The coordinating body of American relief, the National War Fund (NWF), claimed that its foreign relief reached 144,400,000 people, and supplied 40,894,000 pounds of food, 99,400,000 pounds of clothing, and 67,216,000 pounds of medical and other supplies – surely a massive undertaking.²⁵

The main limitation on the efficacy of World War II era American philanthropy was the power and determination of the Axis powers to kill until the very end of the war. Gerhard Weinberg wrote that “very little could be done to assist Germany’s Jewish victims by the Western Powers, who were losing the war on land until the end of 1942, losing the war at sea until the fall of 1943, and who were unable to assure victory in the air until February to March of 1944.” Weinberg, who is perhaps the leading expert on World War II writing in English, commented that the notion that bombing Auschwitz would have halted killing was “preposterous,” and warned against diverting military power away from the war effort. Weinberg writes that:

Given the determination of the Germans to fight on to the bitter end, and given the equally fierce determination to slaughter Jews into the last moments of the Third Reich, there were, as is well known, thousands of deaths every day into the final days of the war; and many of the surviving camp inmates had been so weakened by hunger and disease that thousands more died even after liberation. In this connection, it might be worthwhile to consider how many more Jews would have survived had the war ended even a week or ten days earlier – and conversely, how many more would have died had the war lasted an additional week or ten days. Whatever numbers one might put forward in such speculations, one thing is or ought to be reasonably clear: the number would be greater than the total number of Jews saved by the various rescue efforts of 1943-45.²⁶

Hence Weinberg realizes that the only thing that could save most²⁷ of the victims of Axis policy was the end of the war, and military power would best be used bringing the enemy to their knees. No Ottomans were the Germans and Japanese.

From this brief glimpse into these three case studies, one can draw important lessons about rescue policy. Certainly it is worth restating Rich’s cautionary tale:

war is unpredictable. Going to war in 1898 complicated relief operations, and attempts to divert resources in 1944–1945, had they been successful, probably would have been counterproductive. Perhaps most intriguing was the success enjoyed by the far more limited efforts in the Ottoman Empire after 1915—without force. While not a complete success (an estimated one million people died despite America’s best efforts²⁸), Armenia still represented America’s greatest rescue achievement. The factor that separated the success stories from the failures remained, and remains, the determination of perpetrators to kill, and their capacity to resist American power.

The collapse of Soviet power resulted in a relative increase in American power, and the three administrations who have held office since the end of the Soviet Union have exercised that power, if with different visions, for similar ends. All three presidents have launched humanitarian ventures. Whether this is “delivering the pizzas” or not, as one talk show host was wont to say,²⁹ the humanitarian mission has become increasingly important, and the implications of the Bush Doctrine suggest that this role may acquire increased significance over the next few years. Policy planners, and activists, might consider the following: the humanitarian mission in Somalia did not succeed; the limited campaign in Kosovo, which was eventually successful, left Kosovar women and children vulnerable to Serb attacks; and the war in Iraq, which drove out the genocidal Baathist regime, has resulted in a prolonged period of instability and a humanitarian crisis of its own. Yet the far less dramatic intervention in Liberia, too slow to be sure, seems to offer the hope of a return to normality that is essential for people to thrive.

What, then, do we do about the ongoing genocide in Darfur? Military force does not seem to be the answer, for such a move would probably fuel the instability in the region and invite attacks from extremists. Philanthropy seems to offer much more hope, and the subtle course might succeed with the correct amount of pressure. It depends on the will and the calculations of the Khartoum government. Yet this is an imperfect and unsatisfying solution. That, perhaps, is the lesson of the moment. There is no perfect, easy, or safe remedy to the problem of genocide. With some foresight tomorrow’s military can respond with a plan tailored to particular circumstances so that the humanitarian exercise of force does not exacerbate the problem. The next time the US Army is committed to a humanitarian crisis the successes and failures of the mission will probably rest with factors outside of military control, and planning will be difficult. However, there are some virtual certainties: genocide will occur again; political pressure will be directed at America to do something; and a future administration will turn to the military to intervene.

Notes

1. United States Delegation Position Paper, December 6, 1948, Foreign Relations of the United States 1948, vol. 1, General, United Nations Part 1 (Washington, 1975), pp. 298-302, hereinafter FRUS; Raymond Dennett and Robert K. Turner, eds., Documents on American Foreign Relations, X, International Social Cooperation (Princeton, NJ, 1950), pp. 428-30.
2. Hitler made some public statements against the Jews, but there is no document bearing Hitler's signature that directed or ordered the destruction of the Jews.
3. For similar conclusions, see Frank Chalk and Kurt Jonassohn, *The History and Sociology of Genocide: Analyses and Case Studies* (New Haven & London, 1990), p. xvii, and Samuel Totten and William S. Parsons, "Introduction," in Totten, Parsons, and Israel W. Charny (eds.), *Century of Genocide: Eyewitness Accounts and Critical Views* (New York, 1997), pp. xxi-xxxix.
4. For instance, one may see the efforts of the Genocide Intervention Fund, at <http://www.genocideinterventionfund.org/>.
5. This, of course, borrows from Bismarck's phrase.
6. For a brief sample of this debate, one may see David Wyman, *The Abandonment of the Jews: America and the Holocaust, 1941-1945* (New York, 1984); Verne W. Newton, *FDR and the Holocaust* (New York, 1996); William D. Rubinstein, *The Myth of Rescue: Why the Democracies Could not have Saved More Jews from the Nazis* (London & New York, 1997); Michael J. Neufeld and Michael Berenbaum (eds.), *The Bombing of Auschwitz: Should the Allies have Attempted it?* (New York, 2000). One will note that this debate neglects the non-Jewish experience. The efforts of humanitarian groups, such as the Emergency Rescue Committee, are only rarely discussed.
7. Samantha Power, "A Problem from Hell": *America and the Age of Genocide* (New York, 2002), p. 13. This event continued throughout and after World War I, and consumed non-Armenians as well as Armenians.
8. Merrill Peterson, "Starving Armenians": *America and the Armenian Genocide, 1915-1930 and After* (New York, 2004), p. 12. For criticism of this work, see this author's review of Peterson in *Journal of American History* 92:1 (June 2005), p. 261. One should also see Peter Balakian, *The Burning Tigris: The Armenian Genocide and America's Response* (New York, 2003), and James L. Barton, *Story of Near East Relief 1915-1930: An Interpretation* (New York, 1930).
9. See, for instance, Warren Zimmermann, *First Great Triumph: How Five Americans Made their Country a World Power* (New York, 2002), p. 251, who writes that humanitarian concern represented "a major and still underrated factor" in American policy; Ivan Musicant, *Empire by Default: The Spanish American War and the Dawn of the American Century* (New York, 1998), p. 69, writes that Spain's civilian policy in Cuba "did more to bring on the Spanish-American War than anything else the

Spanish could have done”; Kenneth E. Hendrickson, Jr., *The Spanish-American War* (Westport, CT, and London, 2003), p. 9, writes that “what began as an effort to stop inhuman behavior in Cuba ... erupted into a war”; David Traxel, *1898: The Birth of the American Century* (New York, 1998), p. 14, writes that President McKinley was “doing all he could to keep the United States at peace while trying to ameliorate conditions in Cuba.” Philip S. Foner, *The Spanish-Cuban-American War and the Birth of American Imperialism, 1895-1902, I, 1895-1898* (New York and London, 1972), p. 310, pursues a Marxist explanation of the cause for the war, writing “the war to liberate Cuba was thus a war to prevent its independence ... and open the door for the economic and political domination” of the U. S. But Foner also writes that “no analysis of the road to war can ignore humanitarian sentiments.”

10. John L. Offner, *An Unwanted War: The Diplomacy of the United States and Spain over Cuba, 1895-1898* (Chapel Hill & London, 1992), pp. 112-13, labels Spain’s policy “genocide.” Rudy Rummel, in a June 30, 2004, email to the author, referred to the policy using his term “democide,” which is morally analogous to genocide.

11. For a discussion of death figures, see Offner, p. 13, n. 27. Authors generally list the numbers of dead around 200,000, but estimates range from “thousands” to 400,000. George J. A. O’Toole, *The Spanish War: An American Epic – 1898* (New York and London, 1984), p. 22; Hendrickson, p. 7; David F. Trask, *The War with Spain in 1898* (Lincoln and London, 1984), p. 9; Traxel, p. 14; Foner, pp. 110-18.

12. Woodford to Secretary of State John Sherman, January 1, 1898, Dispatches from United States Ministers to Spain, 133, State Department Central Files, RG 59, National Archives and Records Administration, College Park, MD.

13. CCRC, mixing private money and public resources, functioned along the pattern established by some earlier relief efforts. One should see Charles M. Pepper, *Life Works of Louis Klopsch: Romance of a Modern Knight of Mercy* (New York, 1910).

14. Report of the Central Cuban Relief Committee, New York City, to the Secretary of State, Washington, D. C. (hereafter CCRC), First Report, June 15, 1898. The New York Historical Society, microfiche circulating copy.

15. Woodford to Sherman, report of a conversation with the Spanish Minister of State, March 25, 1898, 133, RG 59.

16. Alfred T. Mahan, *Lessons of the War With Spain: and Other Articles* (Freeport, NY, 1899), pp. 104-06.

17. Clara Barton to Rear Admiral William T. Sampson, May 2, 1898. Sampson to Barton, May 2, 1898. Text of both in George Kennan, *Campaigning in Cuba* (New York, 1899), pp. 10-12. CCRC, Final Report, February 15, 1899, pp. 75-76.

18. Captain Chadwick to Secretary of the Navy John D. Long, April 30, 1898. Gardner Weld Allen (ed.), *Papers of John D. Long 1897-1904* (Boston, 1939), pp. 108-9. Mahan

agreed that a war fought for realpolitik would have resulted in an invasion of Puerto Rico before Cuba. Mahan, pp. 26-29, 207-38.

19. Roosevelt to Samuel T. Dutton, November 24, 1915, in Theodore Roosevelt, *Fear God and Take Your Own Part* (New York 1916), pp. 377-83. This letter, often interpreted as a call to arms by TR, is the exact opposite. Woodrow Wilson, "An Address on Preparedness in Kansas City," February 2, 1916. Arthur S. Link (ed.), *The Papers of Woodrow Wilson*, vol. 36 (Princeton, 1981), pp. 100-106. Henry Cabot Lodge, *War Addresses, 1915-1917* (Boston and New York, 1917), pp. 66-70.

20. Morgenthau to Robert Lansing, July 16, 1915, 867.4016/76, Records of the Department of State Relating to the Internal Affairs of Turkey, 1910-1929, State Department Central Files, RG 59, National Archives and Record Administration, College Park, MD.

21. James Barton, pp. 58, 64-66. After the American declaration of war on Germany, American aid workers in the Near East were attached to the Swedish Legation. Near East Relief is used for clarity, but the committee had several names during the period under study. These include Armenian Relief Committee, Armenian and Syrian Relief Committee, and American Committee for Relief in the Near East. The organization was chartered by Congress in 1919 under the name Near East Relief. The organization became Near East Foundation in 1930 and still bears that name today.

22. Philip to Lansing, October 1, 1916, 867.4016/297. Philip also suggested that this might not be the case.

23. See James Barton, *Story of Near East Relief*, passim. The monetary figure amounted to \$116 million by 1930. One must critically examine the one million figure, as it was part of a marketing campaign. However, NER documents clearly account for 700,000 adults and 130,000 orphans under their care. While one million appears to be a guess, it is not baseless.

24. Rudolph Rummel, in *Death by Government* (New Brunswick and London, 1994), pp. 111-22, uses the figure 20,946,000 to represent the death toll from Nazi racial policies. Richard B. Frank, in *Downfall: the End of the Imperial Japanese Empire* (New York, 1999), p. 163, offers the figure of 17,222,500 for Japanese crimes. Iris Chang uses Rummel's figures and concludes, in *The Rape of Nanking: The Forgotten Holocaust of World War II* (New York, 1997), pp. 216-17, that as many as 19 million Chinese were killed by the Japanese.

25. The President's War Relief Control Board, *Voluntary War Relief During World War II: A Report to the President* (Washington, 1946). While much of this billion dollar figure went to projects such as the USO, \$464,191,775 was distributed in "war-ravaged countries," pp. 1-24. *Report of the National War Fund, 1943-1946* (Washington, 1946), pp. 11-12.

26. Gerhard Weinberg, "The Allies and the Holocaust," in Neufeld and Berenbaum, pp. 15-26.

27. Weinberg commented that “there were some minimal possibilities of rescuing Jews, but they were minimal indeed.” Ibid.

28. Reasonable estimates of the Armenian Genocide vary from 600,000 to 1.5 million. It is doubtful if an accurate count will ever be possible. For a contemporary estimate, see Boghos Nubar, President of the Armenian National Delegation, to Wilson, April 17, 1918, FRUS, 1918 World War Supplement 1 (Washington, 1933), pp. 886-87. His claim of 1 million dead is almost certainly an overstatement from one who wanted American guarantees of Armenian independence in a vast area; Nubar to Lansing, May 24, 1917, FRUS, 1917 World War Supplement 2 (Washington, 1932), pp. 791-95. Morgenthau claims that between 600,000 and one million died. Henry Morgenthau, *Ambassador Morgenthau's Story*. This is a somewhat polemical account of actions in the Ottoman Empire from the start of the war until Morgenthau resigned, and needs careful scrutiny to be of value. It is instructive of contemporary estimates; Martin Gilbert, *The First World War: A Complete History* (New York, 1984), p. 167. Although Gilbert does not give a source for his claim, he seems to be using the Morgenthau formula; Justin McCarthy, in the work that reportedly earned him death threats from Armenian terrorist groups, published population figures compiled by Armenians that show that the pre-war population did not consist of 1.5 million Armenians. *Muslims and Minorities: The Population of Ottoman Anatolia and the End of Empire* (New York & London, 1983), pp. 47-88. Because of the manner in which the Ottoman Empire counted people, all of these estimates remain either complicated or baseless estimates.

29. G. Gordon Liddy tended to offer this criticism of Clinton's military policy.

**Pomakoy Slide Addendum:
Facing Genocide: The United States Army as an Agent of Rescue**

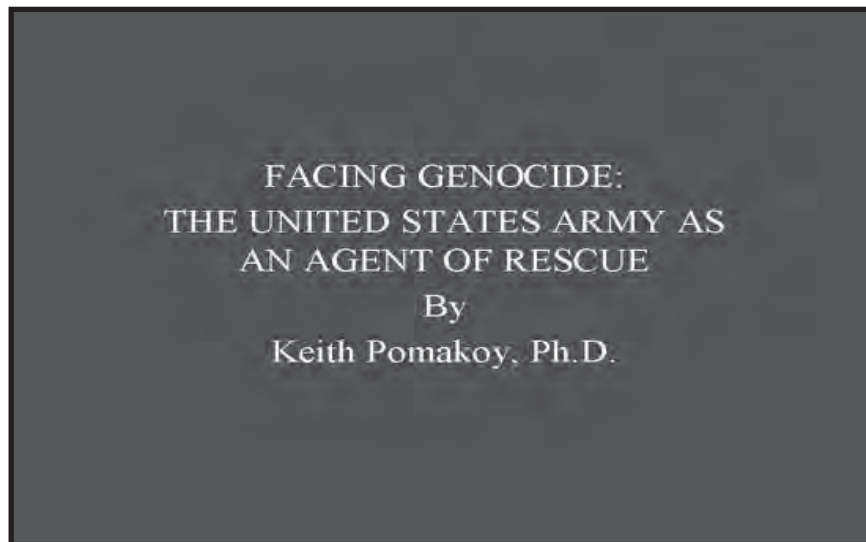


Figure 1

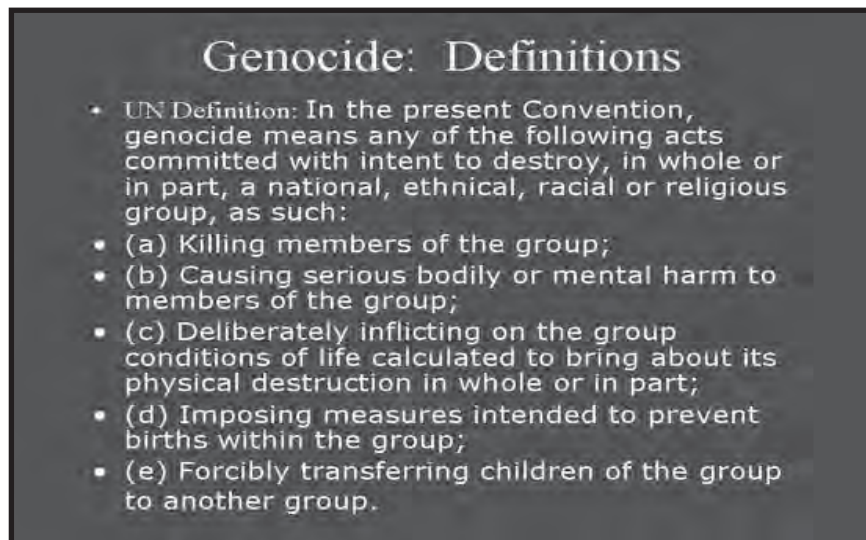


Figure 2

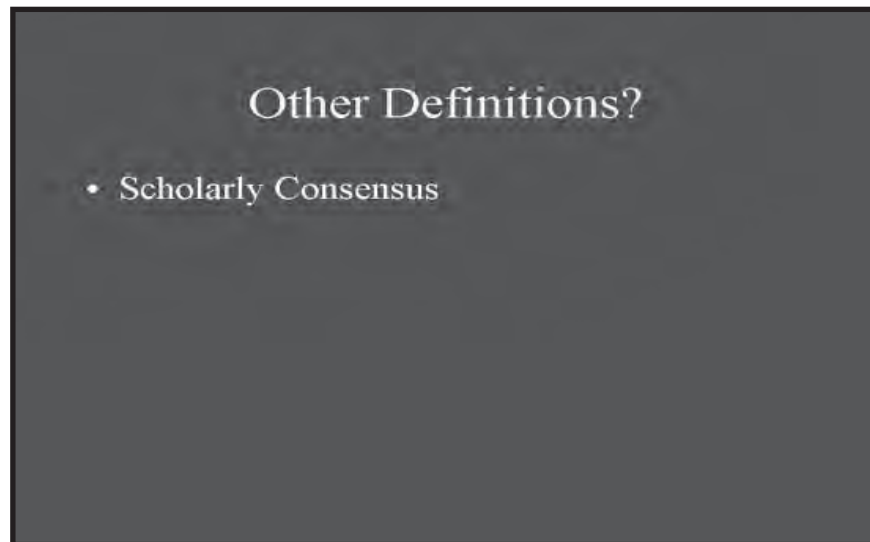


Figure 3

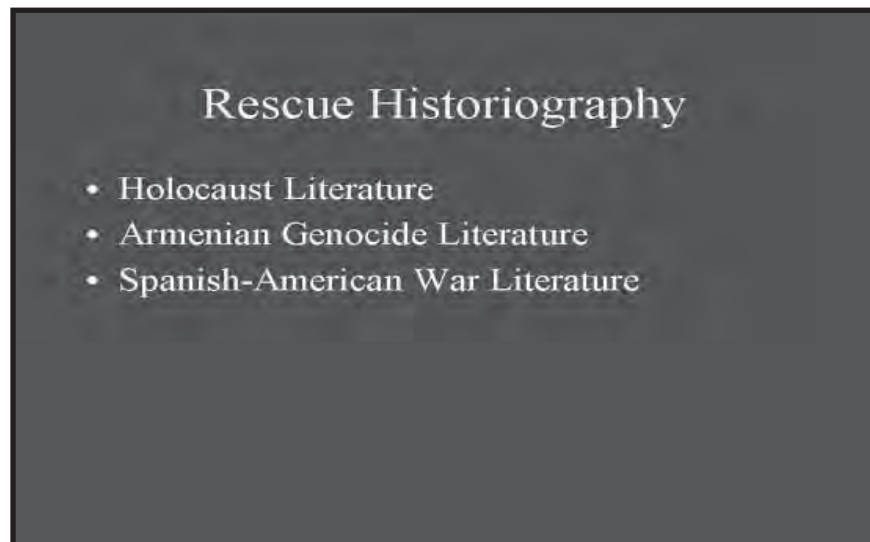


Figure 4

Examples of Rescue

- Spanish-American War and Reconciliation Camps
- “Diplomatic Matters of Chiefest Concern”
- Central Cuban Relief Committee
- Norman Rich and the Cautionary Tale
- War and the Rescue Effort

Figure 5

Examples of Rescue

- The Armenian Genocide
- War as an agent of rescue
- Henry Morgenthau and American Missionaries
- Near East Relief
- Result

Figure 6

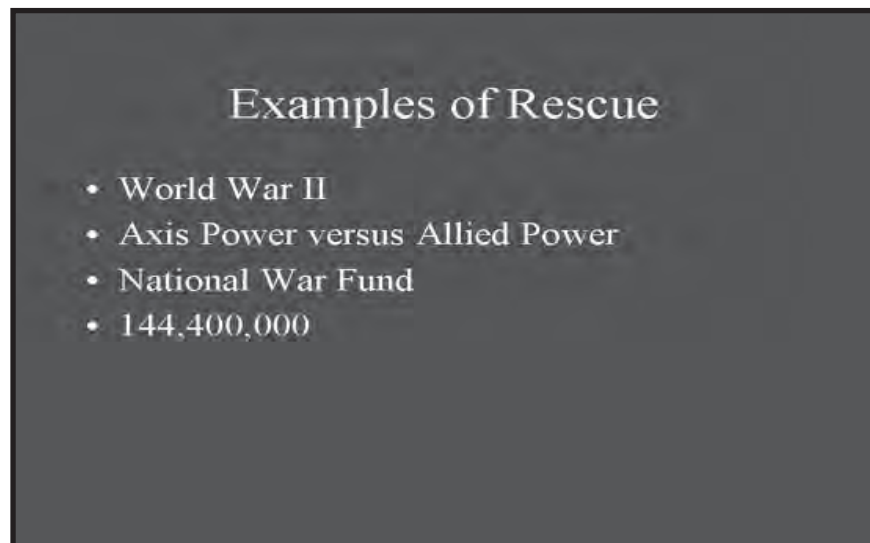


Figure 8

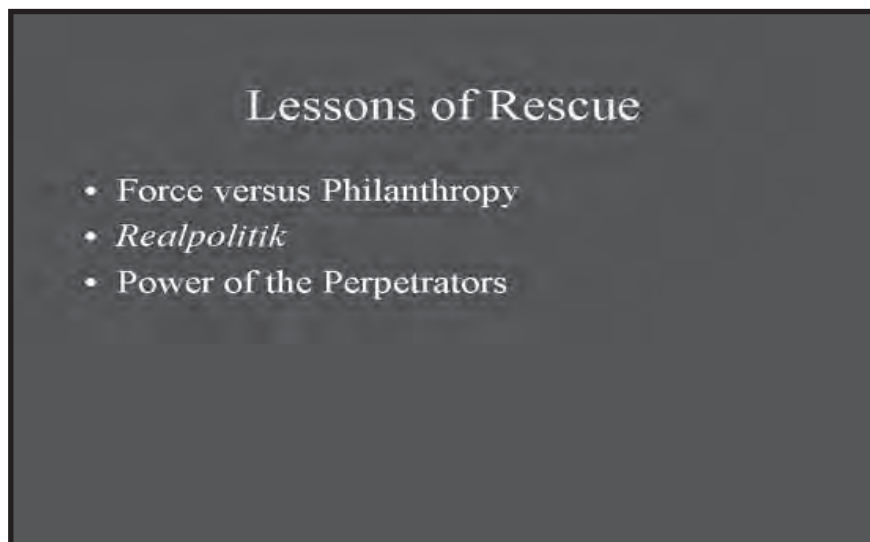


Figure 9

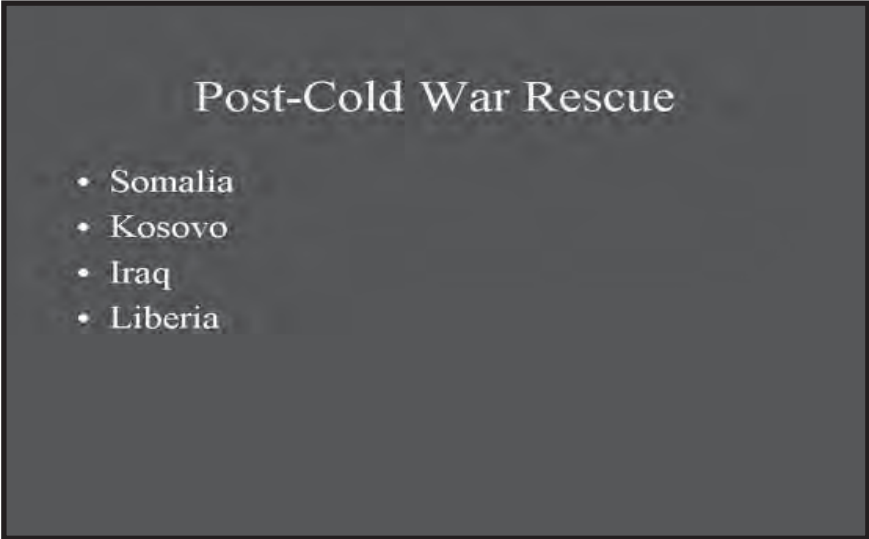


Figure 10



Figure 11

Case for Using an Afghan Auxiliary Force to Support Expeditionary Operations in Iraq

Captain Roberto Bran—2d Infantry Division

I'm presenting here a work in progress. It originally began as a concept paper that was drafted for the Afghan Reconstruction Group, with Brigadier General Patt Maney and Jack Bell before him. When I first wrote it, it was to use Afghans under an umbrella of Private Military Companies, which actually would have fit Dr. Hennefer's position quite well. But I'm now arguing a more formal, more permanent, less mercenary argument, and you'll see that as we go on.

On my background, I spent six months with Coalition Task Force *Phoenix*, working under Colonel Milley and Brigadier General Prasek, where I trained the weapons company. Also, what we found was that the Afghans were very strong on military fighting, but they were very weak on administrative and logistical matters. So I actually spent less of my time doing the weapons company bit and a lot more of it training their staff on maintenance, administrative, and logistical matters.

Then I also spent eight months with Combined Forces Command Afghanistan when General Barno's headquarters was stood up in theater—they just brought me from Pol-e-Charki over to Kabul, and I worked as the interagency planner. There was really no reason for it other than I probably complained so much at Task Force *Phoenix* about what was going on that they wanted to teach me a lesson—that things were a lot more difficult at the strat level than I thought, and they taught me well. [Laughter]

Okay. The British Gurkhas—and this is the model that I'm looking at towards employing our Afghans; sort of very similar to the way the British employ their Gurkhas (**Figure 1**). The Gurkhas themselves are citizens of Nepal, and they're descendants of the 8th century Hindu warrior saint Guru Gorkhnath.

They fought against the British East India Company 200 years ago, and over the course of these wars and this fighting, a mutual admiration and respect developed between the two sides, to the point that eventually, when India received its independence, a tripartite agreement was signed between the three parties—Nepal, India, and Britain—that would allow these British Gurkha units to continue to exist within the British Army, and four regiments continue to exist to this day; there's, I believe, eight in the Indian Army.

They have supported the British in just about every single deployment that the Brits have done—most notably in Argentina when they practically single-handedly destroyed the Argentineans in the Falkland Islands, or the Malvinas.

BRITISH GURKHAS

- Citizens of Nepal, descendants of the eighth century Hindu warrior-saint Guru Gorkhnath
- Fought against the British East India Company 200 years ago
- Courage and prowess in combat led to the emergence of mutual respect and admiration between British and Gurkha soldiers
- Following Indian independence (1947), Tripartite Agreement established rules to continue Gurkha units within the British Army
- Four Regiments exist under the British Army today and have served with distinction all over the world

Figure 1

The membership in the Brigade of Gurkhas is highly prized for the people of Nepal, or at least the Gurkha people of Nepal (**Figure 2**). There's nothing there, there's no opportunities for them, so they very much want to do this. I bring this up only because it's important to note that for about 230 positions they fill every year, the British get about 10,000 to 15,000 applicants. So they can't even keep up; they're turning people back all the time.

THE MAKING OF A GURKHA

- Membership in the Brigade of Gurkhas is **HIGHLY** prized
- **QUALIFICATIONS**
 - Aged between 17 and 22
 - Height/Weight Requirement
 - In good health
 - Level of education
- **SELECTION**
 - English grammar, math
 - Physical Fitness
 - Interview
- **TRAINING**
 - Nine month training course (includes three months of language training)
 - Military Skills
 - Western Culture and Customs

Figure 2

The qualifications they use—simple: age, height-weight requirement, they have to be in good health, and they have to have a minimal level of education. I'm going to talk about that as it applies to the Afghans, because obviously, we're not going to be able to just take this template and put it on top of the other one.

When it comes to selection, they get picked off their ability to do English, grammar, and mathematics, physical fitness—they do a very strenuous exercise—and then they actually do an interview with British officers and British NCOs, who pick them out. Then they finally get sent off for training, where they do a nine-month training course, which includes three months of language training. They learn military skills, obviously, and Western culture and customs.

So when we apply that to the Afghan auxiliary force that I'm suggesting, I'm basically saying that we start by identifying our Afghan volunteers at these—it could be very similar to the National Army Volunteer Centers that already exist within Afghanistan or recruit for the Afghan National Army. Now that may be a political decision that we don't want to actually have them be embedded with one another and we do it out of separate offices, but that's just my proposal at this point.

We screen them for qualifications and select them for a five-year enlistment, and I'll talk about that a little bit more. The family support channel is actually pretty important. Most Afghans work in support for their entire family, and it's a very big issue for them, because there is no banking system to speak of in Afghanistan, so when they get their paycheck in hard currency, they have to travel around the countryside, back to their province to pay their family, and then they come on back.

It affects training cycles pretty heavily if you're with Task Force *Phoenix*. But a similar channel would have to be developed within Afghanistan itself where we could get the payment to their families, so that their families were getting paid, and they're reassured and feel confident that their families are being paid; otherwise, you're going to have a serious problem—no one likes to serve for free.

Selectees would be assembled into a training Kandak and brought to a CONUS training camp, so we'd bring them over to the states, probably someplace isolated from the rest of the US, where we could train them, both in their basic training, and eventually, probably even keep them there for their barracks, for their standing army requirements. The place I recommended was the National Training Center, because it looks just like Afghanistan. [Laughter] You could build a camp out there and maybe by East Gate, Jackhammer Pass; you could build somewhere out there. You might have to dispossess some meth lab cooks off their property, but...[Laughter].

Training the auxiliary force (**Figure 3**). This is actually Afghanistan, so you can see it doesn't look much different from good old Barstow. I'm proposing a ten-month training program in which they would learn your basic soldier skill training. By that, I mean qualifications, physical fitness, common task training (CTT), the warrior "40 and 9," which are tasks and drills that every soldier has to be proficient in.

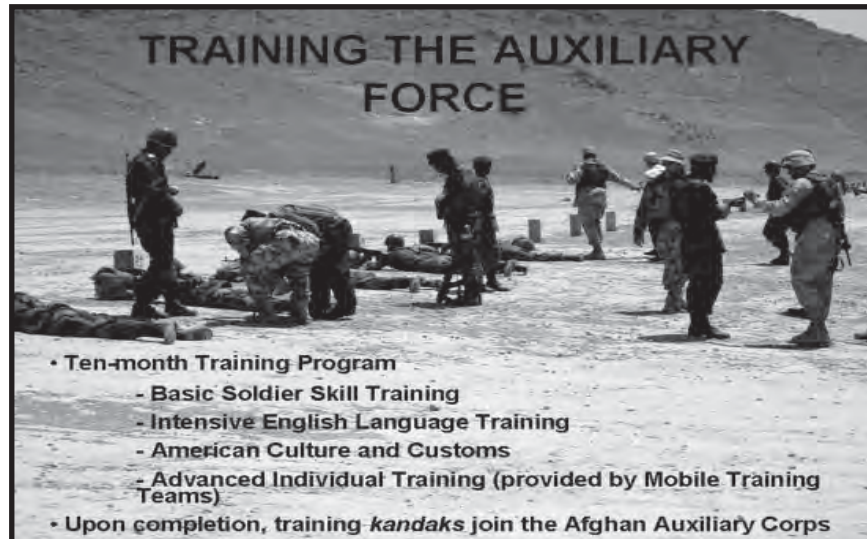


Figure 3

Intensive English language training—we would have to do a lot more of this than the British have to do with the Ghurkas, because most Afghans don't speak English. And they're also uneducated. Most of them—I don't want to say most of them—but probably half of them can't read or write. That's a serious problem when you're trying to teach people skills that they need to learn, so we have to be slow and patient with their development. But we do want to make sure they can shoot, move, and communicate, which are the basics of the soldier skills.

The American culture and customs—as I said, they're warriors, but they're not soldiers, within the customs of their culture. They can fight, they can do great things, but they're not necessarily—they don't understand why they have to belong to a prospective squad. We would take them down there and do training, they'd get bored of whatever training their platoon was doing, and they'd just go join another platoon because they liked what those guys were doing instead. [Laughter] Those are the kinds of things you have to be cognizant of, as you're bringing them through the course and bringing them in line with more of a Western army.

Then for advanced individual training (AIT) itself, rather than ship them out to Fort Gordon to learn signal stuff or ship them to Fort Knox if there's going to be a mounted component of this, or ship them to wherever, bring in mobile training teams (MTTs) and have the MTTs train them right there on Camp Irwin, or Camp Meth, whatever we want to call it, where they can learn their procedures there.

Upon completion of their training, the initial Kandaks would join the Afghan Auxiliary Corps, probably as the standing Kandaks. In the future, we'd be bringing them in as individuals joining the pre-existing organization itself.

Now what do I think this thing looks like? (**Figure 4**) I think it's fully functional light infantry battalions, and I think it needs to have its slice elements already organic to it. By the slice elements, I'm talking about the field artillery, the engineers, forward support companies, that allow these battalions to exist on the battlefield. Otherwise, you're going to be borrowing from existing American organizations, and that's going to cause some problems. I'm thinking the officer corps is drawn from the ranks of the United States Army, and the soldiers are drawn from these Afghan volunteers.

AFGHAN AUXILIARY CORPS

- Fully Functional Light Infantry Combat Battalions (~700 each), including Specialty Platoons and "Slice" Elements (Engineer Company, Howitzer Company, Forward Support Company)
- Officers drawn from the US Army; Soldiers drawn from Afghan volunteers
- Team of US Army Non-Commissioned Officers support each Battalion and fulfill roles similar to AC/RC Observer/Controllers— coach, mentor, train
- Habitual relationships with US UA/BCTs— but *capable* of deploying and operating independently




Figure 4

The teams of the noncommissioned officers, as I see it, are essentially like fulfilling the function of what active component/reserve component (AC/RC) fulfills for the National Guard and the Army Reserves, in which they're coaching, mentoring, and training these different organizations and units, because we're going to start off with Afghan noncommissioned officers (NCOs)—sergeants who we've identified based on their proficiency in a very short course. So we're going

to have to teach them what it means to be an NCO, because you can't just grow an NCO overnight. We're having this problem with Afghan National Army and we will have it with the Auxiliary Corps. It will take some time to develop it, but if we have full-time mentors who are coaching them through the process, I think that it would improve the system itself.

Finally, as I see it, I think it works better if you have them with habitual relationships with US Units of Action, Brigade Combat Teams—whatever we're going to be calling them in the future. But it's important that they are capable of deploying and operating independently, because there's going to be times when we want to deploy them and not the rest of the US Army, or components of the US Army.

Okay. The American side of it. We're talking about 50 officers when we fully resource—a battalion commander, his staff, company commanders, executive officers (XOs), platoon leaders—you can see the breakdown there (**Figure 5**). I think 30 months is just about a minimum we can use in order to build some retain

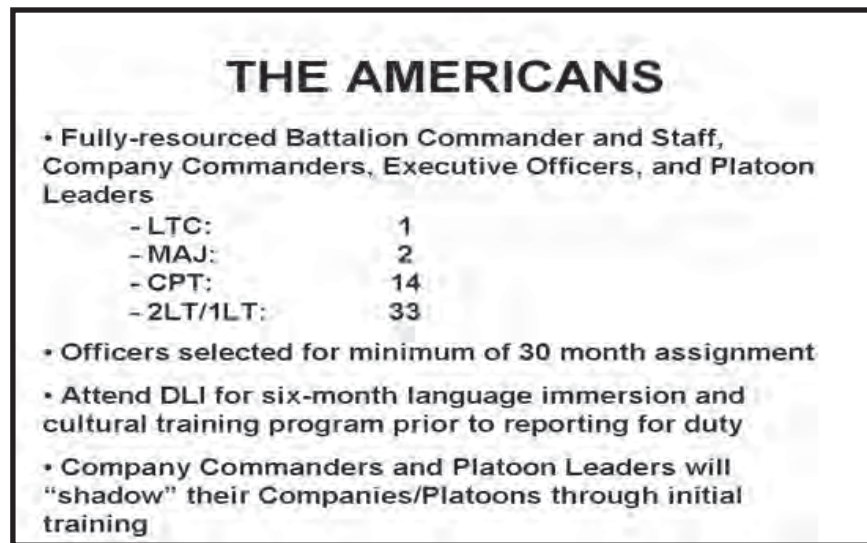


Figure 5

ability into it. Obviously, we could do more, and it would be more optimal, but a minimum of 30 months. The reason for that is I think that they need to get some cultural and language training from DLI (Defense Language Institute). I do speak a little bit of Pashto and a little bit of Dari. I learned it all when I was over there; I didn't learn it beforehand. It was just simply because when I got there, I had an interpreter assigned to me. I don't know how long he's going to live when we're running around out there; I don't know if he's going to quit and run off. So, as a

minimum, I want to know how to be able to say, “Soldier! Move there! Shoot that direction!” So I made sure that I could learn the basics of it. Sort of similar, even though we’re going to have the Afghans operating under the English language concept, there are going to be times when they could also have some PTSD (post traumatic stress disorder) of some kind or combat stress and we want our trainer or officer corps to be able to speak to them directly in English or in their own language if need be. And I thought in the initial concept that the company commanders and platoon leaders would shadow them through their training; sort of build that rapport from the very beginning. Obviously, that’s not probably a requirement, that’s just something that I was thinking.

Why does the US Army want to do this? A lot of reasons, and I am not going to go through all of them, you can read them on the screen there (**Figure 6**). It’s obviously an innovative and creative way to enhance the total force. Its going to support our Afghan allies; it’s going to enhance opportunities for cultural learning; and increase sensitivity—especially if these guys are habitually assigned to,



Figure 6

or habitually work with other brigades and Units of Action. It is also cost effective, I’m not going to go into the numbers, but a US soldier makes anywhere between \$1300 to \$1800 dollars a month and an Afghan soldier in the Afghan National Army makes between \$55 to \$70 dollars a month. Obviously we’re not going to pay them slave wages, but if we pay them too much then we’re going to take away from the Afghan National Army’s ability to recruit it’s people. So there is going to have be a happy middle somewhere in there in which they’ll be

making. The numbers I'm using, \$15,000 dollars, is about the average per month, in base pay of a US infantry squad which is an E-6 Staff Sergeant, two E-5 Sergeants, and around six soldiers ranging in rank from E-1 to E-4. For the Afghans we would be looking at about \$4,000 dollars in base pay each month. Finally, the last one, recruiting is down and deployments are up and it's likely to continue this way for at least another generation or so. That being the case, we need to find ways in order to continue to bring ourselves onto the battlefield with the assets and resources that we need.

Okay. Big question: Would the Afghans agree to this? Actually, I was at a meeting with Secretary Rumsfeld. The answer to this can be found, I think, if we look to South Africa and their historical experience (**Figure 7**). In the early '90s, the African National Congress took over and they assumed power, but their group was very tenuous, and it was by no means assured in the long run. You had the



Figure 7

South African Defence Forces (SADF)—probably the best—well, not even probably—the best military forces ever fielded in the continent of Africa itself, and they're mostly intact.

These guys, even the black Africans among them, are very conservative; they're very reactionary. The African National Congress (ANC) is somewhat threatened by the continued existence and presence of these guys within their country. They really get lucky, because Eeben Barlow and Executive Outcomes starts recruiting these guys and taking them on adventures all around the African continent. It's probably the one aspect of Private Military Companies that P.W. Singer, in his seminal book, *Corporate Warriors*, doesn't really talk about, which

is that there's a reason the South Africans turn a blind eye to these guys going all around Africa and causing disruptive chaos, and that's the fact that—Hey, they're out of South Africa; they don't have to worry about them now. The African National Congress has gotten rid of this core element that could have caused serious problems for their transition to democracy.

So there was a flight from South Africa, and then in 1999, South Africa's regime is now consolidated; the grip on democracy is a lot stronger—they can go ahead and make the decision to ban Private Military Companies, and they do, and Executive Outcomes is forced to close their doors.

Similarly, the Afghan situation (**Figure 8**), you've got between 100,000 and 200,000—when the Taliban fell—a 100,000 and 200,000 Afghans serving under arms for any of these private militia forces. DDR, which is the Japanese-funded United Nations/Government of Afghanistan New Beginnings Program, has suc-



Figure 8

cessfully removed about 60,000 former fighters at this point. Others have just sorted melted away; they've just laid down their own arms and gone away, and we'll never know exactly how many that is.

But estimates right now are between 50,000 and 100,000 guys are still running around under arms. They're working for their respective warlords, their local or regional warlord who, because he's got these guys serving under arms for him, he's bringing some military power to the table, which translates into his political power. That's obviously going to stunt the transition to democracy in Afghanistan.

A lot of these warlords are getting into or are complicity in narcotics trafficking I'm not going to get into the details of that, but as you can see, they're starting to create their own system, a parallel government of their own. Eventually, the Afghan National Army or someone is going to have to remove these guys, or we're going to have to find other ways to neutralize them.

Well, if you target these guys and you're bringing in most of their guys as your recruits for this Afghan Auxiliary Force, they're making it easier for you—if you could take 5,000, 10,000 of these guys immediately out from under their realm. It's going to require some very skillful diplomacy, because these warlords aren't stupid—they're not going to say, "Oh, yeah, this is great—I'm going to lose one of my regiments." You're going to have to actually convince them what you're doing, probably bring Zalmay Khalilzad back from Baghdad, in order to get them to do this.

So, in conclusion, President John Adams once noted that, "I must study politics and war that my sons may have liberty to study mathematics and philosophy. My sons ought to study mathematics and philosophy, geography, national history, naval architecture, navigation, commerce, and agriculture, in order to give their children a right to study painting, poetry, music, architecture, statuary tapestry, and porcelain." In keeping with this tradition, we need to take this young man and turn him into that—a legitimate professional fighter on the battlefield—so that this little boy can become that, which is an educator or a scientist or a doctor. And we do all of that so that this little girl does not become that (**Figure 9**). And that concludes my briefing.



Figure 9

Day 2, Session 2 Question and Answers

Moderated by
LTC Marian Vlasak—Command and General Staff College

LTC Vlasak

Wow, we've had three really interesting takes on the who does what question, and how that feeds into the problems we're facing in the world today. So at this time, I'd like to open the floor up to questions.

Audience Member

Yes, Captain Bran, I congratulate you on an interesting and innovative approach to some manpower. Some questions. I'm somewhat concerned—though it sounds a little bit like what we tried to do in the Philippines, and succeeded in doing in creating the Phillippine Constabulary, the Phillippine Scouts, to great success—but I'm also concerned with the fact that this sounds a little bit like we tried to do with the MIKE Force in Vietnam, which became an effective strike-and-rescue force, but the farther you took them from their villages and their own milieu, the more ineffective they were, and then they became a combination of Montagnard and Nung mercenaries, but little more than that.

If you remove them from their Afghanistan setting, aren't you forfeiting their language knowledge, their cultural ability to augment what we're doing now in Afghanistan, and putting them in a very alien—maybe a Muslim—but still a very alien environment, where their language skills, their cultural skills won't be of any help to us? They'll have to rely upon Iraqi translators, just as we would. So I can see your solution as a possible augmentation to what we're doing in Afghanistan—perhaps moving them to a different part of Afghanistan to get them away from their militia warlords in their own environment, but still retain their language and cultural abilities for our use. Still, a very interesting idea, and I look forward to more on this.

CPT Bran

Sir, in answer to that, I'd say that currently they're probably more of a problem than they are a solution, in terms of the existence of these AMF—they're called Afghan Militia Forces—that exist about the countryside. So partially, it is to pull them from the ranks of Afghanistan where they're sort of a thorn in the side of the central government. But more importantly, I do think we can follow the model of the French Foreign Legion or the British Gurkhas, or to go even so far as Max Boot's proposed Freedom Legion that he's been talking about, and you have access to this pool of Afghans.

I didn't go into the resettlement part—I had it as a hidden slide. You obviously have to decide are they going to be resettled into Afghanistan that part of it, or is there a possibility that they would gain American citizenship through their service? But in any case, I see it more as an opportunity or a way for America to use asymmetric means to improve our capability on the battlefield—not just in Iraq and not just in future Muslim countries, but in Western countries as well, or anywhere else, any kind of humanitarian deployment—any kind of crisis where you would want to deploy them. This is a very deployable force—they're not connected to the American population, obviously, so their deployment is not going to resonate the same as the deployment of myself or Colonel Vlasak.

Audience Member

Thank you.

LTC Vlasak

I see a question from the back of the room. Please move up to the microphone.

Audience Member

Roberto, I would just like to thank you for an extremely interesting talk there. A few points, if I may. The first is I didn't think that Ghurkas only, single-handedly defeated the Argentinean forces. [Laughter] So I have to sort of rap your knuckles for that. [Laughter] But I think, moreover, I mean, this idea of using a Ghurka type force is a wonderful suggestion, and I would suggest you also look, really, to the British response to the Northwest Frontier from about 1919 through to 1947—so after the third Afghan War, through to independence. Because, actually, if you look at how the British did things—and of course, I'm slightly biased; you've found the only Englishman probably in Kansas at the moment. But if you look at how we introduced Khasadars into the tribes to sort of manage themselves, and indeed, recruited both irregulars and scouts, where we had a very small number of British officers—probably the commanding officer, and ops officer, and a couple of company commanders—really running those organizations.

There is a terrific paper out there at the moment, written last year by a most wonderful British officer, called, "British Governments of the Northwest Frontier, 1919-1947: A Blueprint for Contemporary Afghanistan," written by a chap called Major Andrew Rowe, and it's absolutely wonderful—because that's me. [Laughter] [Applause] There are two things I'd probably like to ask you about, or to gain your comments on, really. I think the first is I had great concerns listening to your notion of taking Afghan forces out of Afghanistan, to train them here in America; indeed, before then, we were inserting them into Afghanistan. I'm very keen to hear the rationale behind that. Secondly, you might also wish to talk about considerations of perhaps legitimizing the militia forces themselves and the

warlords. That's quite a novel approach to attacking the problem, but rather than trying to dismantle these people, we know that the great concerns are also trying to give them employment. Really, what are your thoughts on perhaps rationalizing or legitimizing those forces under a central government, but recognizing that Afghanistan itself has never really had a strong central government, and this might be a way of sort of expanding that into the provinces? Thanks very much.

CPT Bran

Yes, sir. In response to your first question, I don't know if they'd necessarily be reinserted back into Afghanistan after their training. I'm saying this should be a long-term, stable force which would exist into the American force structure, just as the British Gurkhas have now for more than a hundred years for the Brits. And the same thing—they may be employed in Afghanistan, but then again, they may not. So I guess the reason I've pulled them out of Afghanistan for their training and to form them is because they're now going to be a component, or an arm of the American political system, and because of that, they need to be in the United States.

Secondly, I would say the part about legitimizing the AMF is actually not a bad idea, and there's a lot of people trying to do it. Some of the recalcitrant warlords, as we're calling them now, are coming in from the cold and they're joining the central government. Ismail Khan is a good example of that—of course, he did it after he was defeated militarily by Amanullah Khan. But what we're seeing is, even the ghostdoms that are coming in and joining the central government, or even Fahim Khan, who was defense minister and first vice president, they are not giving up their militias, because even though they're going to get to join the political process, they still see military power as the key to their success or the key to their strength and their stronghold in their regions—they're not willing to give it up.

Do I think that many of them will see the light and will join the central government? Yes. It's a matter of time before they realize that they can't defeat Kabul, and they can't defeat the coalition, more importantly—they're going to eventually join and make the deal that they need to make. But we can help that. We can expedite that process by taking some of their military guys away from them and employing them towards our means—not necessarily in Afghanistan, but in Iraq, possibly. You know, I'm not going to go into details, but possibly Indonesia, Philippines—I don't know where the next theater is or not; I'm not in the administration.

LTC Vlasak

I'd like to take another question from this side of the room.

Audience Member

Your idea, Captain, is a good one, but I guess my question or concerns would be that the political aspects of it for the United States and—so, for example, if in a moment of sobriety, you were sitting in front of Ted Kennedy at a Senate hearing, how would you explain and legitimize this before Kennedy and others who would certainly take a negative view of it?

CPT Bran

I think it would be a challenge, to say the least, to create this politically. But the Brits have done it and the French have done it. I think stressing the traditions of other countries is one way of pointing out that many countries have done this over time. Let me first say, as we all know, that we've used ethnic-exclusive units before in the past. You know, *Glory* was a movie about the 52d Massachusetts, I believe; we know about the 442d Nisei Japanese, who were the most decorated unit. We even had a Mormon battalion that fought during the Mexican-American War, which, you know, was not an ethnic-exclusive unit, but certainly had its own exclusive character to it. So I think part of the issue would be to point out that it's already been done in the past, and maybe that's not as radical departure as I'm suggesting; I'm merely saying let's formalize it with this foreign population. So I think it's just the next step in something we've already done before.

LTC Vlasak

I'd like to take one more question.

Audience Member

Hopefully, this will wrap all three of your presentations together—the genocide, contractors, and using auxiliaries. Captain Bran, great presentation, but I was wondering, rather than look at the British example, did you look at the US Army's example of using the Apaches and things of that nature? At one time, to prevent a genocide, because these nations were at risk, we co-opted them, and we used them unstructured. In your case, you talked about a member of a squad kind of wandering where he wanted to go; well, that's their culture. With the Apaches, they didn't form into squads and troops, and perhaps you could do the same thing. Yes, you put American leadership in there, but you allow them to form the way they do.

CPT Bran

Yes, sir. And that would definitely come out. I mean, I think the American squad itself has evolved over the years. Definitely, the American platoons have evolved over the years, and as well based on, okay, well, we don't really need a heavy machine gun or a light machine gun in a mechanized unit, because they're get-

ting their fire support from the Bradley itself. Then we realized, okay, that wasn't very smart, because the Bradley isn't always with the dismounted troops; let's go ahead and give them their machine guns back after all.

Similarly, I think you would see some change in the Afghan structure, based on what we've done. Colonel Reese was the Plans and Design Team for the Afghan National Army, and definitely, the structure that he built is not the structure that's in place today, because we've learned different things and we've had to make some changes to it. So we wouldn't want to blindly adhere to something that may be falling by the wayside, but rather enhance the nature of it.

LTC Vlasak

I'd like to have one parting comment here from Dr. Hennefer.

Dr. Hennefer

As an ancestor of a member of the Mormon battalion, it's interesting to note that after their movement across, out of Missouri—or more specifically, Nauvoo—the training they received going from winter quarters down to eventually San Diego and then back up into the Salt Lake Valley came back to bite the military a little bit when a few years later, Johnson's Army made their push out to commandeer the valley, and they were at, oddly enough, Immigration Canyon, which has a little town called Henefer, Utah, over there, and it caused a lot more problems in the end, because now they had a viable military force.

LTC Vlasak

Well, it does seem, after all, all three of these did fit very well together. I thank you for your time and attention here. We need to kind of stick to the schedule at this point, but I'm sure these gentlemen will be available for any individual questions. Thank you. [Applause]

Personal Observations of Logistics Operations in Kuwait and Iraq

Dr. Robert Darius—Command Historian, US Army Materiel Command

It's an honor for me to be here. Combat Studies Institute (CSI) is a great institution, and Fort Leavenworth is a wonderful place to come; it's like a dream place to come, even if it is once a year. Of course, to be on a panel with such distinguished people—Dr. Shrader himself is a well-known author and one of the best-known logisticians in the field of Army military logistics.

I was trying to see if I can talk him into doing contract work for us on Army Materiel Command (AMC) history. We have the same problem all the other historians do—we're doing everything but history. To do history, and do it objectively and in-depth, you really need the time, and you need to be less responsive to current needs, which are less history work and more public affairs, and be able to “navalize” and think and write. Unfortunately, many of us don't have the time to do that.

Now I'm not a historian by craft—I'm a political scientist. So I feel more comfortable in the conceptual world than and the world of model building and quantitative analysis than I do in history. But I've learned from great historians like General Brown and others, and so I consider myself a student of history.

With that generic statement, is it a great year to be at CSI? Yes, it is. It is a great forum for exchange of ideas. We've had some wonderful presentations—from General Scales with a worldwide perspective that raises a lot of issues and questions, to General Brown's presentation, which gave a broad history of Army history, and in the context of transformation made us think about, “Are we transforming? Are we changing? Are we modernizing?”, and the distinction between those three things. It's always useful to hear other presentations such as the one we heard about the creation of a Ghurka force. Since my father was a tribal leader in Balujistan, I could identify with that. I used to dream about how nice it would be to have a Ghurka expeditionary force for the United States Army—wouldn't that be a great thing? I'm not sure if it's saleable in the context of US domestic politics, but it's certainly thinking outside the box. So there's been a lot for all of us to think about.

I would hope you would allow me to share a little information with you about Army Materiel Command from one of our brochures—I handed out some of them to you. This is advertising for Army Materiel Command—after all, without AMC, you wouldn't have the Blackhawk. You wouldn't have the Avenger. You wouldn't have Meals Ready to Eat. You wouldn't have the Wind-Supported Air Delivery System. You wouldn't have Chinook airlift helicopters. You wouldn't

have all-purpose weapons equipment. You wouldn't have the Stryker—the interim armored vehicle—basically, beans to bullets, a tooth-to-tail ratio; that tooth will not bite without AMC.

At one time, about four or five years ago, the Center for Army-Naval Analysis was talking about “why an AMC.” Of course, during General Brown's era at CMH, they were talking privatization of CMH. General Brown did a tremendous job while he was at CMH—I'm proud of his leadership. I think he had probably a lot to do—he may not admit it—he had a lot to do with squelching that idea of privatization—as did the historians. His historians. Army historians who went to the field, and who served, with honor, and they considered themselves emergency essential.

In 2003, when the call came in for a historian to serve in theater at the Army Materiel Command, I volunteered, with pride. The Army is a great institution. A lot of immigrants have made their way through the Army, and became American citizens. I became a citizen before I started working for the Army, but I was honored to be able to start at a great institution at the Army War College in 1975, and I've got 30 years of service, working for the US Army, and I think it's the greatest institution in this country—in terms of its legitimacy, in terms of what it's done in US history, for the nation, in nation building, and in all the other things it's done.

It doesn't mean I cannot look at the US Army critically, or at logistics critically—I can do that; it's all within that family, within the context of we can look at ourselves at a family and be critical about each other. This is a great forum to do that—it's an academic forum—but these comments I'm going to make do not reflect the positions of the Army Materiel Command, or my general, General Griffin, or my lieutenant general, General Hack—these are my own personal observations, and I hope you'll take it in that context.

Again, I'm delighted to come here to this forum—CSI—and I have mentioned some of these things. I'm getting ahead of my own notes. I don't have a formal presentation; I have some notes I prepared here, while I was here. So I hope you'll forgive me for that. I must share my bias with you—and I already mentioned that it's a family bias—of love for our great Army, and I must add that it is not a blind love; I can and do provide constructive comments and criticisms, when I see a need for that. In that context. I will make this presentation today.

I also want to share with you another point that colors my observations, and that is having to do with my birthplace, which is not in the United States—it is Southeastern Iran, in Balujistan. Having spent my youth in the Middle East, my views are probably different from yours. Our perceptions are based on where we sit, and where we grew up. Having shared these points with you, I will discuss

the role of a deployed historian in theater, with some broad generic observations on logistics, and resulting publications in Army Materiel Command History Program since 2003.

My deployment to Kuwait in February 2003 was not the first one. I was deployed by Army Materiel Command to Miami, Florida—a CONUS humanitarian deployment—during Hurricane Andrew, where the US Army Materiel Command set up a humanitarian relief operation to assist in that humanitarian relief operation.

I spent 37 days collecting documents, conducting oral histories, developing a chronology, collecting situation reports, and other documents. I worked for Major General Arwood. We used to call him, affectionately, “Bulldog Arwood.” We called our facility at the airport “Camp Arwood.”

This was the first Logistics Support Element (LSE), in a formalized sense, under Army Materiel Command in the CONUS. Most of the people were scared of General Arwood—I wasn’t. He had a sign behind his chair that used to say, “Lead, follow, or get the hell out of the way.” So I went over there, and I decided, I’m going to follow—I didn’t have any problems.

This deployment resulted in a publication by Army Materiel Command Historical Office on Hurricane Andrew. So I sort of cut my teeth by my first deployment for AMC. I found the work—seven days a week, 10 to 14 hours per day—fascinating, and filled with energy. It felt really good to help our own people in need of help, and to work in a joint environment—Army, Coast Guard, FEMA (Federal Emergency Management Agency). Even PEMA—Pennsylvania Emergency Management Agency was there, which was kind of interesting, since I have a great deal of interest in Pennsylvania. On the Army side, the Center for Army Lessons Learned was there, and the Corps of Engineer had a historian there as well.

General Jimmy Ross, one of the people I have a great deal of respect for, one of my former bosses, requested that I go to South Florida, and he saw this as an event which would have an impact on FM 100-5, regarding establishment of a Logistics Support Element Forward in AMC.

Since then, AMC LSE Forward has matured quite a bit, and became the AMC Operations Support Command (OSC), headquartered at Rock Island Arsenal. It was OSC which established the AMC LSE Forward Support in Kuwait—in Camp Doha, and also Camp Arifjan. So when the call came in for a command historian to serve in theater as AMC LSE in Camp Arifjan, Kuwait, it piqued my interest, and after discussing it with my wife, who also worked for Army Materiel Command, and getting her approval, I agreed to volunteer to serve in theater.

General Paul Kern, our commanding general (CG), and Lieutenant General Richard Hack, our deputy commanding general (DCG), who was also dual-hatted as our chief of staff—and he’s been the longest dual-hatted DCG and chief of staff in the history of Army Materiel Command—called me and spoke with me, to make sure I’m volunteering—willing to go—and then gave the green light for my deployment.

I went through the Combat Readiness Center (CRC) at Fort McPherson, Georgia, picked up my two sets of uniforms, chemical gear, boots, etc., received some training, and flew from Atlanta to Kuwait. I reported to Brigadier General Vincent Boles, AMC theater commander in Camp Arifjan, Kuwait. I knew Brigadier General Boles when he was a colonel, working for General John Coburn at Headquarters Army Materiel Command, so I felt comfortable going to Kuwait to work for him. He is a great student of history; he’s very much interested in history; he wanted to make sure the history of Army Materiel contributions to Operation ENDURING FREEDOM (OEF) will be covered.

Our CG, General Paul Kern, was also deeply interested in capturing the history of OEF, as was General Boles.

General Kern also wanted to capture lessons learned, as did Major General John Dearman, our G3 at AMC.

General Kern wanted me to go to the theater to energize the process. General Dearman was more focused on the lessons learned aspect of it. This was a task coming from our G3, and with support from General Kern. I was willing and anxious to roll up my sleeves and do whatever I could do in both areas, as a one-man team. General Dearman said, “Do you have a format, Bob?” I said, “Sir, there’s a CALL format; I plan to use that.” When I went in theater, I found that the CALL format was not as friendly as I wanted it to be—and this is not a criticism of CALL for their format; it’s more generic. So what I did, I modified that to fit our needs.

At first, I met General Boles, and we had discussions and talked, and I met with a few other people. They were not sure what a historian could do in theater, and they were somewhat reluctant to share their views, but not General Boles—he was pretty open—let alone lessons learned, or to be learned, for the record. So I had to establish credibility with the military civilians and contractors, and I want to say AMC is largely civilian, and we have thousands of contractors in theater as well. So the process of establishing credibility took some time.

While I knew some of them were comfortable with me and willing to talk, I started interviewing them for the record. I found out that establishing trust and credibility was a critical step in working in theater—as it is anywhere, even in

CONUS. I felt being honored to see the great Army Materiel Command's Forward Supplement Element in theater, in support of preparations for war—this was, after all, what AMC was all about: to support the soldier during wartime; to support and sustain our forces, and those of our allies and coalition in theater.

It was kind of unique, since I was not a 20-year-old in theater; I was a gray-haired historian in theater. I thought that that had somewhat of an advantage for me, as it did having come from the region, from the Middle East, and being able to read and write Arabic, and having some rudimentary knowledge of Arabic; and having also been an aerial specialist in the Middle East and North Africa—that didn't hurt either. These aspects of my past helped open some of the doors into the hearts and minds of others deployed with me in theater.

While in theater, I spent most of my time in the war room, reading the traffic, writing my own observations on Non-secure Internet Protocol Router (NIPR) Net, and forwarding them to our G3, with copies shared with our theater commander, General Boles, and with others in theater. I reported my observations pretty much uncensored, and they went to our G3 at Headquarters Army Materiel Command. Some of them went directly to Lieutenant General Hack, our DCG, and some went directly to our commanding general, General Kern. I felt confident and comfortable that these were fairly solid observations, based on my own viewpoint, and based on what I picked up in theater, from others.

Once others in theater read some of my submissions, they, too, opened up and started sharing their views, and then I knew that I was on my way to capture more and more observations in theater. At that stage, I also modified the CALL format, and started passing those out so I could gather additional information.

I ran into other historians in theater, to include several reservists. I established contacts with the military history group that General Brown had center to the theater, headed by an O6—a very capable individual—and I was glad that CMH was present in theater, at Camp Doha—and Camp Doha wasn't that far from Camp Arifjan. I worked closely with our public affairs officer, from Rock Island Arsenal, and with others as well. I think we had a curator there—I'm not sure, General Brown, whether we had one or not; I didn't meet the curator there, but later on, the Army Art Section sent someone as well.

I felt like I was performing an important function for Army Materiel Command, and this was the impression I received from Brigadier General Boles; Lieutenant General Hack and General Kern as well.

Now I'll share with you some of my charts in the role of a deployed historian, in case you cannot read it from a distance, and then I'll respond to any questions after the other presentation is made, and as Dr. Shrader sees fit.

Let me see, I think I can work this out. All right. Personal observations. Let me see, I may have to read some of this for you if you can't—can you read it? Are you sure? Okay. Fine. Then I'll just let you read it, and if you can't read it in the back, please let me know—raise your hands if you can't read in the back—I'll be glad to read any parts of it for you.

The historian does not play an insignificant role, as I see it. We are—we should be—emergency essential, and maybe under the new National Security Personnel System (NSPS), we may become that—AMC is a laboratory for NSPS as well.

Are you ready for the next? I don't want to go too fast; I don't want to go too slow. All right? I followed these up by interviews in theater with the CG and DCG of AMC—I've got about 12 hours with Lieutenant General Hack and about 17 hours with General Kern. I interviewed some other people who returned from theater, and they were in AMC Europe in May of '03, after I left the theater. Then I followed those up with interviews with our depot commanders, and deputy depot commanders in theater as well, to see what they're doing in support of OEF/OIF. The interview with Frank Zardecki has been published, and it shows Tobyhanna Army Depot Support for OEF/OIF.

I interviewed the depot commander at Sierra Army Depot, and also at Red River Army Depot, and we covered other topics as well, other than OEF/OIF, to include Lean and Six Sigma. Army Materiel Command is a metrics organization—we are industrial-based; we want to make sure we improve the processes of production. We want to measure things; we want to reduce variability. We want to increase excellence in that context. We want to be able to surge—the industrial base is critical in this; we work closely with industry.

Documents collection. I had a camera with me. I traveled extensively to seaports of communications, airports of communications, air port of debarkation (APOD) and sea port of debarkation (SPOD)—what we call them.

We had conferences in theater. The US Army Center of Military History has the biennial Conference of Army Historians—we had two panels for that one. I was honored to have General Kern as our keynote speaker.

Equipment we use. Digital video camera, digital picture, voice recorders, laptop. We do our oral histories now both video and audio as well, because we can give a copy of the video directly to the individual we're interviewing—it makes it quick.

Examples. What went right; what went wrong. The basic things we usually have problems with are communication, automation, transportation. We had some other things within the context of AMC LSE—staffing procedures; soldiers

deployed given responsibility for logistics automation systems did not understand the system. Total asset visibility was still not there; was being worked at. We created a new theater distribution command. General Boles saw a need for that—just basically a place in the desert. Everything that came in from seaports and airports went over there and we'd try to go in there and find the stuff. It was the first prepo war—we have a publication on that one—a very successful one. 3d ID was very much interested in the equipment AMC was providing—3d ID, they took our equipment, rather than their own; they were very happy with it. Our Logistics Assistance Representatives (LARs), they are our soldiers—they're our civilian soldiers; they go and fix the tanks and the equipment there in theater, for the soldiers. There were other issues—length of tour, and whether LARs should be armed.

Some of the lessons, our commanders in the theater learned, and they implemented. So I cannot say we do not learn lessons—we do learn lessons. Tactical lessons that are learned are usually changed by the commander in theater. There are other lessons that are strategic that take time. This strategic airlift and sealift, we may not have had it, but now we have it. We are a superpower; we have tremendous strategic sealift and airlift capability—but that is also an Achilles' heel. When you project power 8,000 miles away from CONUS, there's a lot of responsibility—that tooth-to-tail ratio—and it's a very costly operation.

Publications. We have a historian here, I believe, Randy. Mr. Talbot, would you stand up? Mr. Talbot followed me in theater. Would you give him a big hand for me, please. [Applause] Mr. Talbot was followed by George Eaton, who goes to theater once every quarter, to cover history of AMC LSE in theater. We have carried on with it. The "Observations and Potential Lessons Learned," it's about a 200-page manuscript that I'm not privy to release yet. It is not classified, but it's limited distribution—a need-to-know basis only—and that's the way our Headquarters wants it. But the prepo war, that has been published, "It Was a Prepositioned War"—if you'd like a copy of that, we can get it to you. The interview with General Boles was conducted by Randy, and that's been published—we can get you a copy of that; it's on our website.

Thank you very much. [Applause]

**Darius Slide Addendum:
Personal Observations of Logistics Operations in Kuwait and Iraq**

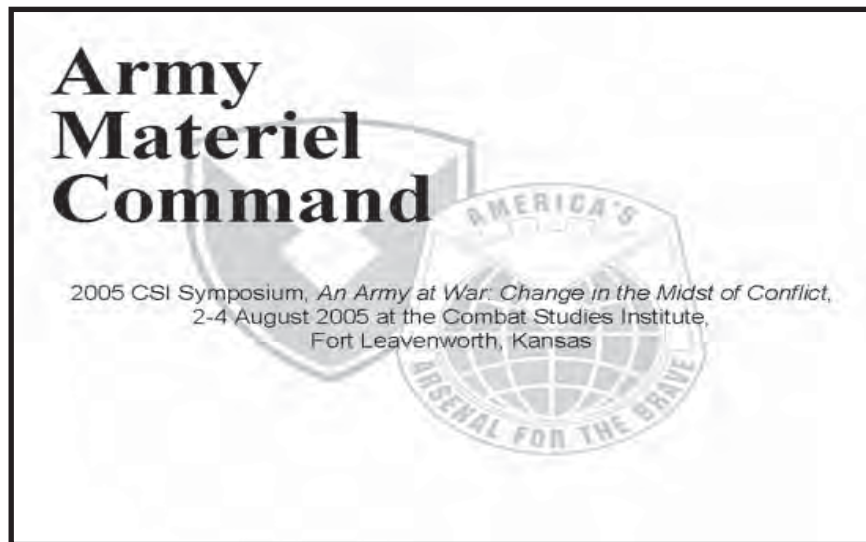


Figure 1

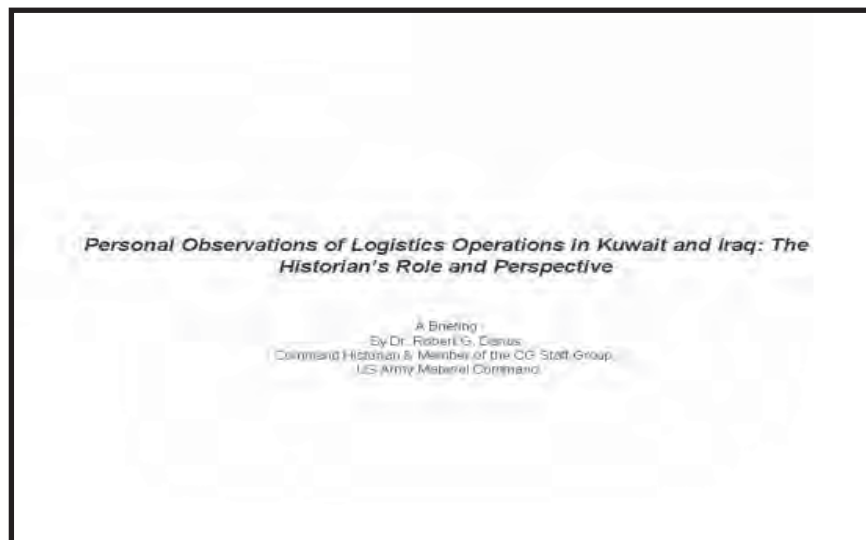


Figure 2

The Role of a Deployed Historian

An Introductory Statement

- The process of capturing lessons learned began in the planning phase of our current operations. Throughout Operations Enduring Freedom and Iraqi Freedom, the collection of lessons learned created the opportunity for them to be immediately implemented in theater, resolving many problems on site. Such "ad hoc" fixes are not uncommon in American military history.
- The primary purpose of the Historian in operations such as these is to capture the records used and results generated from these on site corrections, to ensure they are not forgotten, and to remind leadership of what still requires review.
- Combat Service and Combat Service Support, including supply and maintenance operations, play a vital role in the success of the army in the field and in combat. AMC and its subordinate commands are at the center of that fray, making sure the soldier has what he or she needs to fight and win on the battlefield.
- Lessons learned from OEF/OIF will also play a major role in transforming how AMC supports the Army in the future, in peace and in war. It is the historian who is at the center of that effort, collecting, interviewing, and writing.

Figure 3

The Role of a Deployed Historian

- Deployed to Kuwait, February-Early May 2003
 - Conducted historical work from the War Room, Camp Arifjan, Kuwait as Command Historian, AMC-LSE SWA, working directly for BG Vincent Boles, Theater Commander, AMC
 - Followed by Mr. Randy Talbot, TACOM Historian, who was followed by Mr. George Eaton, AFSC Historian, to ensure consistent coverage of history as events unfolded
- Historical Focus while in Theater & those that followed
 - Oral Histories
 - *Interviews were conducted with the CG and DCG in 2004/2005
 - *Conducted interviews in AMC-Europe in May 03
 - *Conducted oral histories with military, civilians, and contractors with BG Boles and other GOs in Theater
 - *Conducted interviews with Mr. Frank W. Zardecki, Deputy Commander, Tobyhanna Army Depot, covering OEF/OIF.
 - *Conducted oral histories with Commanders of READ, Texarkana, TX and Commander, Sierra Army Depot on depot contributions to OEF/OIF

Figure 4

The Role of a Deployed Historian

- Historical Focus while in Theater & those that followed
 - Documents and Photograph Collection
 - Traveled extensively throughout the Theater
 - Collected documents, sitreps, etc.
 - Photographed logistics operations
 - Initiated and prepared "Lessons Learned" for HQ, AMC and documents collections for follow-on historians to fall in on upon arrival in theater, and for HQ, AMC Historical Office
 - Conferences
 - In Theater
 - Held meetings with BG Vincent Boles, and others, on AMC-LSE-SWA operations
 - Established a program to collect submissions on various ongoing logistics programs
 - Worked in collaboration with others in Theater
 - Conducted historical operations forward at Camp Adar, Southern Iraq

Figure 5

The Role of a Deployed Historian

- Historical Focus while in Theater & those that followed
 - Conferences
 - In CONUS
 - Biennial Conference of Military Historians, 2003
 - CG AMC served as keynote speaker
 - Conference on Middle Eastern Studies, 2004, for CG of AMC and, GO/SES
 - Technology
 - Conducted operations employing the HQ, AMC History Office "Fly-Away" Kit Digital Voice Recorder
 - Off-the-shelf Technologies
 - Digital Voice and Analog cassette recorders
 - Digital Video Camera
 - Digital Picture Camera
 - Laptop (Greater flexibility and ease of operations)
- *Digital voice recorders did not arrive in time.

Figure 6

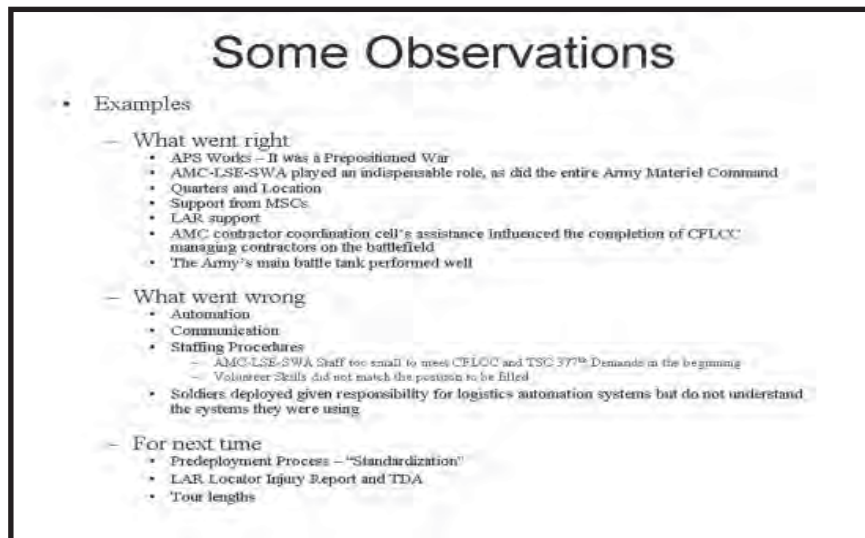


Figure 7

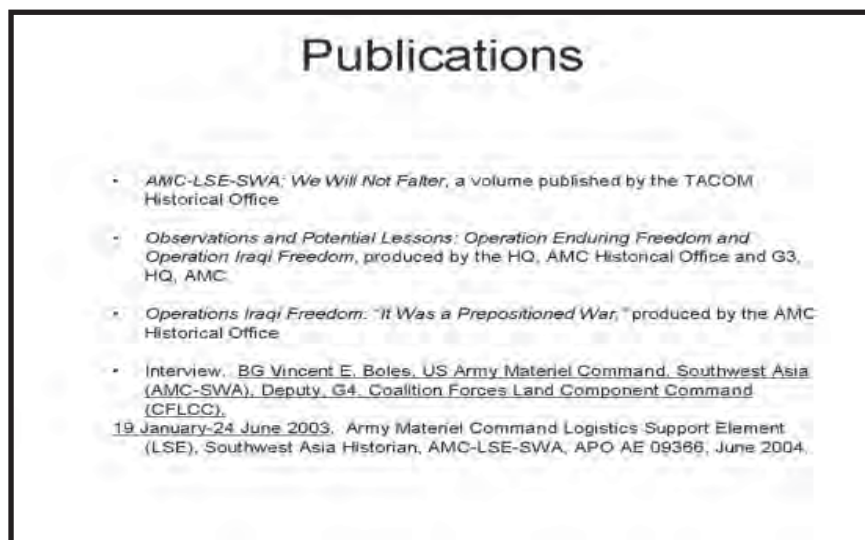


Figure 8

Transformational Logistics: Solution or Shell Game?

Major Guy Jones

The Objective Force white paper declares that the Army must transform to an expeditionary force with a “reduced logistical footprint.” Is this possible? Most of the current transformational effort is focused at the strategic and operational levels of improvement. One might argue that the Army is doing nothing that was not done prior to World War II by attempting to reduce a unit’s ability to support itself in combat – “not enough trucks, mechanics, fuelers, medics, and more.”¹ Because the Army’s transformation is focused on the strategic and operational deployment capability, the logistic transformation focus is on the communication zone’s lines of communication—not the growing length of the tactical level’s lines of communication.

James Huston, a renowned historian, stated, “Whenever shortages of supplies or equipment have appeared at the battle front, from the Revolutionary War to the Korean War, more often than not it has been the result of some shortage in transportation somewhere along the line.”² Where along the supply line do these shortages occur, and where do the shortages matter the most? The current logistic transformation focus avoids the primary problems of tactical level resupply, which are not easily solved, and merely shifts the sustainment issues “to the far end of the [supply] line.”³ Is the Army focused on a solution that will worsen instead of correct an age old problem, the delivery of logistical requirements to the end user in combat? Traditionally, logistic structure is neglected in peace and is the last structure mobilized in times of conflict. However, the Objective Force focus is not one of logistic neglect but potentially the elimination “a lot of fat, idle, useless support weenies.”⁴ This paper attempts to determine some of the problems through a selective historical lens that make the last leg, or last 1,000 yards, of the logistical supply chain difficult and to determine whether the Army’s logistical transformation accounts for and addresses these problems.

As the Army transforms to Brigade Combat Team (BCT) centric operations, each unit of the BCT must be able to sustain themselves in the contemporary operating environment of noncontiguous battle spaces and extended lines of communication. Efficiency through pooling logistical assets, which is at the heart of our current logistic doctrine, does not directly translate into effectiveness for all brigade combat teams.⁵ The Army’s current logistic transformation at the tactical level does not effectively fix the problem of the last 1,000 yards of the battlefield, getting the required supplies or resources to the end user. What historically causes the tactical logistical gap? What level needs to be the focus to fix this gap? Has the Army defined the problem correctly to address the gap? Will the logisti-

cal gap be bridged or widened by transformation? These are the focus questions that will be addressed.

What historically causes the tactical logistical gap?

Historically, what has made the last 1,000 yards logistically hard? The easiest answer is to blame this problem on Clausewitzian friction or merely chance as the Army has done countless times before. However, historical examples clearly illustrate the logistic gap's linkage to a lack of transportation, labor forces, and/or materiel handling equipment. While numerous examples exist, only selected historical examples are used for this illustration.⁶

James Huston stated clearly the common cause for the tactical logistic gap in the last 1,000 yards. "In World War I, as in most wars, the chief logistical limitation on the military effort was transportation."⁷ The strategic transportation of supplies across the Atlantic Ocean in this conflict was not the limiting factor. Instead, the inland or tactical transportation system could not keep pace with the arrival rate of materiel.⁸ Thankfully in one respect, victory prevented this inland shortage potential, which "...involved shortages for everyone concerned – in food supply for the Allied population, in munitions for their armies, and in supplies for the AEF," from reaching a strategic culmination point.⁹ However, victory also obscured this critical gap in the logistical system due to a "decline to a slough of indifference" that follows conflict only to be faced again as "a new national emergency should once more call forth the waves of progress."¹⁰

Similarly in the Pacific Theater of World War II, the tactical gap dealt with inland transportation. However, the logistical supply chain gap occurred on beaches. Transportation planning and resourcing failures at the operational and tactical levels created supply problems on the beaches of Guadalcanal and Okinawa.¹¹ These failures prevented the supplies, which were brought ashore by naval transports, from reaching the soldiers at the requirement end of the supply chain. Intense manual labor forces, which were generally filled with fighting soldiers, were required to unload supplies from transport ships on the shore and to subsequently reload the same supplies on limited inland transportation assets. In many cases when the beaches and trails could not support vehicles, the inland transportation asset became the fighting soldier instead of mechanized or motorized transport.

On the Western Front of World War II, the unloading capacity at the ports and local transportation beyond the ports, or inland transportation system, were also the greatest logistical problems.¹² One temporary solution to this transportation problem led to the creation of the Red Ball Express. The Red Ball Express was an ad hoc organization that was created to move supplies from the beaches of

Normandy to the culminated units on the German border in World War II. Luckily, the transportation assets in these ad hoc organizations were available in theater. “The trucks used in the Red Ball Express would not have been available had not a truck buildup been occurring in England in preparation for the reopening of the Burma Road in the Pacific theater.”¹³ Once again, the transportation gap that created difficulties in the last 1,000 yards of the supply chain was not recognized or resolved following World War II.

The Korean War illustrated an even further shift of the inland transportation gap towards the end of the supply chain. Task Force Faith, a composite element of the 7th Infantry Division that operated on the east side of the Chosin Reservoir in 1950, required extensive re-enforcement and resupply to survive. The designated reinforcement battalion was prepared to assist Task Force Faith but was “waiting on transportation from X Corps [7th Infantry Division’s higher headquarters] that never arrived.”¹⁴ Internal battalion and brigade transportation was not used, because these assets were task organized to support the movement of other units within X Corps. The final result was the destruction of Task Force Faith by the Chinese on December 1, 1950.¹⁵

Though not fatal, operations in Afghanistan in 2002 by 3d Brigade, 82d Airborne Division also demonstrated the logistical transportation gap that continues to exist. Due to extended distances between battalions and the brigade’s Logistic Support Area (LSA), rotary wing assets became the primary means of transportation for both maneuver and sustainment. Air assets, like transportation assets, were too limited to fully support both tactical maneuver operations and required sustainment operations simultaneously. Battalions had limited organic transportation assets that could handle the mass movement of both personnel and equipment. Therefore, host nation trucks were contracted to augment the transportation of supplies and personnel, which were required to accomplish both tactical maneuver and sustainment. This transportation gap did not impact the operational level receipt of supplies into theater or into the brigade LSA, but this gap did impact the ability to conduct tactical maneuver and sustainment operations at the battalion and company levels.

Closely related to the tactical transportation gap illustrated thus far is the lack of a designated labor force.¹⁶ Throughout America’s history, a reoccurring problem has been finding soldiers to perform “various service tasks necessary for logistical support.”¹⁷ Habitually, the Army measures efficiency through a ratio of combat troops to service troops, which is commonly referred to as the “tooth to tail” ratio. This ratio is meaningless unless the ratio accomplishes the desired effect on the enemy or the established capabilities desired for a future conflict. James Huston eloquently illustrated this point: “If the greatest total of effective

power can be delivered with one combat man for each service man then this is the desired ratio, but if 1,000 service troops for one combat man are needed to achieve that maximum, then that is the desired ration. If it impairs combat effectiveness to maintain a small ratio of service to combat troops then such a ratio is to be avoided rather than sought.”¹⁸

Historically, the “emphasis in war preparation had been directed toward the ‘fighting men,’ while little attention was given to the ever increasing needs of support forces.”¹⁹ Logistic planning immediately preceding World War II in both the Navy and the Army was “grossly inadequate” according to Lieutenant Colonel David Rutenberg of the Air Force Logistics Management Center.²⁰ At the start of World War II mobilization, “only 11 percent of the Army consisted of service troops, compared to 34 percent at the end of World War I.”²¹ Compare these historic ratios to modular Army estimates for support troops: “32 percent of the heavy brigade combat team (HBCT) and 29 percent of the infantry brigade combat team (IBCT).”²²

These modularity ratios would seem adequate, until the increase in logistic support, which is required to match technological advances, is considered. World War II demonstrated the requirement for more support troops to complement the increase in technological innovations such as the “mechanization of combat equipment ... [which] leaped forward between the two World Wars.”²³ The technical complexity of modular units is incomparable to units of either World War.

The low availability of service troops at the outset of World War II also created a lack of trained service troops for overseas deployment. These “service troops, beyond all others, were required in the early phases of the war. It was imperative that they prepare depots, receive equipment and supplies, and establish the essential services for the combat troops.”²⁴ The lesson learned from Operation BOLERO²⁵ was the necessity for “pre-shipment” of military materiel in advance of troops. This concept required large quantities of service troops to deploy prior to any combat units. To rectify the labor force problem, combat forces were rotated between service chores and combat functions. James Huston stated that this practice “has always been done as an expedient to meet a necessity of the moment and never as a deliberate policy with the prior planning and training necessary to make it most effective.”²⁶ The troop-to-task requirements and the necessary labor force size were not realized prior to World War I either, because the United States had not embarked on any large force deployment prior to 1917-1918. Therefore, World War I also exemplified the lack of labor forces at ports and forward bases.²⁷

Another critical contributing factor to the tactical logistic gap, which is directly linked to both transportation and labor force, is materiel handling equipment.

The industrial revolution at the turn of the 19th century introduced machinery to assist in the manual labor tasks of loading and unloading large volumes of equipment. As the United States began to deploy large volumes of equipment as part of both World Wars, materiel handling equipment became critical at transportation nodes such as ports and railway hubs.

Throughout history, the requirement to hand carry supplies was reduced with the introduction of machinery but has not disappeared.²⁸ The reduction occurred primarily at the strategic and operational levels of the lines of communication instead at the far end of the logistic chain, the 1,000 yards. Large manual labor forces were still required to hand carry or transfer supplies. During many occasions in both World Wars, manual labor was the only means available to get food, water, and ammunition to units on the front lines. In Korea, the lack of materiel handling equipment at the far end of the supply chain created a “renewed significance with the organization of the Korean Service Corps carrying parties.”²⁹

Today’s military force still must move supplies by hand. Units are not resourced sufficiently with either a labor force or materiel handling equipment to reduce the tactical logistical gap. In Afghanistan, tactical logistic units at both the brigade and battalion level were stretched thin attempting to receive and distribute supplies daily. Units were forced to pool all available labor, no matter what their military occupation specialty, to load and unload the daily sustainment operation trucks, planes, and helicopters. The units that owned materiel handling equipment found the quantities to be insufficient to prevent the need for this pooled labor force.³⁰ Units that did not own organic materiel handling equipment were forced either to barter with other units to utilize the limited materiel handling equipment assets or to conduct all loading and unloading of supplies by hand with an ad hoc labor force. Neither option was efficient or effective.

So, what has made the last 1,000 yards logistically hard? History clearly points to the factors of transportation, labor forces, and materiel handling equipment at the tactical end of the logistic line of communication. Most people, however, have not recognized that the Army has this problem, so no solutions are actively sought. Some, who have recognized this logistic problem, point toward logistic operations in large, merchandise businesses such as Wal-Mart for potential solutions.³¹ However, unlike Wal-Mart, the military’s disposition changes rapidly and continuously the closer one approaches the “tip of the spear” or the far end of the supply chain. Therefore, the business solutions have limited application in the Army.³²

What level needs to be the focus to fix this gap?

In the transformational Army structure, where does this last 1,000 yards reside? Clearly defining the level this logistical gap resides will answer the question of where the Army needs to focus its logistic modularity effort in order to fix the problem. The responsibilities of each unit within the tactical logistic chain offer the key to understanding where the last 1,000 yards or the gap resides. According to the Army Comprehensive Guide to Modularity, only three echelons of Combat Service Support (CSS) units provide sustainment for a deployed Army force. The lowest echelon is the organic support battalions or brigade support battalions (BSB), which support the brigade combat team (BCT). The next echelon is the tactical sustainment brigades, which support UEx organizations. The final echelon is the theater support command (TSC), which supports the total Army, joint, multinational, and interagency forces in the joint force commander's area of operation. The TSC is composed of operational-level sustainment brigades.³³

Have the roles and responsibilities of each of these levels been clearly defined? The modularity guide provides some delineation of responsibilities but does not clearly define the role of each with respect to the other levels. The theater support command (TSC), the highest echelon of deployed support, executes its responsibilities through operational-level sustainment brigades.³⁴ The TSC acts as the theater logistic headquarters and provides "obligatory theater support" by operating a theater-level Army logistic base, a Joint logistic base, or an intermediate staging base. The obligatory support includes direct support to Army theater-level assets as well as common-user logistics and general support to other services, other governmental agencies, and coalition partners through a central distribution management center. "The TSC will have full visibility of all services and supplies, current information on force logistics needs, and the ability to direct incoming supplies and materiel to the brigades that need them."³⁵ This echelon is also responsible for theater opening operations, which include reception, staging, onward movement, and integration (RSOI) for the Army and the Joint force and Army-specific reconstitution operations.³⁶

The middle echelon of deployed logistic support falls to the tactical sustainment brigade, which has the same organizational design as the operational-level sustainment brigade. The role of this middle echelon is to "provide distribution-based [replenishment] logistics" to the supporting or assigned elements of a UEx.³⁷ These brigades are also responsible for establishing temporary bases within the UEx area of operation to conduct mission staging operations (MSO).³⁸ During these operations, brigade combat teams receive general support maintenance.³⁹ This is also the echelon responsible for logistically supporting the Army's concept of "plug and play" with all three types of brigades: heavy bri-

gade combat teams (HBCT), stryker brigade combat teams (SBCT), and infantry brigade combat teams (IBCT). This task alone produces major modifications to the sustainment brigade's task organization each time a different type of unit is assigned to or detached from the UEx organization.

Finally, the lowest echelon of deployed logistic support as defined by the modularity guide is the brigade support battalion (BSB). The primary role of the BSB is to act as a logistics support area (LSA) that provides subordinated battalions of a BCT with logistic support for up to 72 hours of continuous operations. This type of logistical support is known as replenishment operations. Unlike the sustainment brigades, this echelon is not responsible for mission staging operations. However, the BSB is responsible for reinforcing medical support with a casualty holding capability and for reinforcing direct support maintenance as required. Depending upon the type of BCT being supported, the BSB is responsible for tactical transportation of maneuver units. When in support of an infantry brigade combat team, the BSB is responsible for the transportation of one battalion of dismounted soldiers.⁴⁰ The BSB, like the sustainment brigades, are expandable, which is the capability to accept additional CSS modules based on the forces assigned to the brigade combat team.⁴¹

Obviously, these three echelons of logistic support are important, but none have the direct responsibility to get the supplies to the end user, whose location and requirements changes rapidly. The BSB is the closest element of the three echelons to the last 1,000 yards, but the majority of its responsibilities involve reception and staging of assets for distribution. Although operating at a tactical level, these units still deal primarily in bulk items. These units are rarely tasked to “push” required supplies to battalions, companies, and platoons on the battlefield.

Are there other logistic echelons below the three defined in the Army Comprehensive Guide to Modularity that are truly responsible for the last 1,000 yards? If so, how can the transformational Army ignore these elements that are so critical to bridging the tactical logistic gap? Below the lowest echelon defined by the modularity guide is an echelon that is known as the field service company (FSC), which directly support the organic battalions of each brigade combat team. The responsibilities of these companies are to provide elements of the battalion with one to two days of supply,⁴² to replenish these supplies from the single day of supply maintained by the BSB, to provide mobility assets to support the maneuver plan, and to conduct operator—through direct support—level maintenance for all assigned or attached equipment. These organizations are responsible for both “pushing” and “pulling” assets within the supply chain. The FSC pushes required supplies to companies and potentially platoons. Additionally, the FSC

is responsible for retrieving or “pulling” supplies from the BSB. This is clearly the level responsible for the last 1,000 yards of the logistic chain. The only assets responsible for logistics below the FSC are a few individuals that assist with requisitions, tracking, and distribution management.

It is clear from the lack of focus on the BSB to FSC link that the Army’s transformation in the area of logistics is focused primarily at the operational level not at the last 1,000 yards of the tactical level. Major General (Retired) Robert Scales, a current military theorist and author of *Yellow Smoke: The Future of Land War for America’s Military*, stated that the Army’s transformation center of gravity, or source of power, is at the tactical not the operational level of refinement. “We have to transform small units to make them as good as we can.”⁴³ If this statement is correct, then logistic systems and capabilities must be designed from the “bottom up.” In the modular, BCT-centric force, the bottom is at the company and battalion levels. These are the lowest levels that logistic assets are assembled to execute replenishment operations. If the Army has defined the logistical problem correctly, transformation will ensure these bottom-level logistic organizations are capable of executing their responsibilities effectively.

Has the Army defined the problem correctly to address the logistical gap?

Has the Army defined the logistical problem correctly to address the last 1,000 yard gap? This question revolves around capabilities and assumptions. The starting point of any problem should be a clearly defined end state or result. The end state of transformation is an improved force capability. The desired, specific capabilities of the Army are based on assumptions about the current and future operating environment and on assumptions about the enemy that will pose the next threat.⁴⁴ The future operating environment might be similar to the current conflict in Afghanistan and Iraq, or might be in a remote jungle of the world, or even in China. The enemy that poses the next threat could be similar to those faced in Iraq, or might be a conventional force that is supporting the whims of a strong state government. Colonel (Retired) Bob Killebrew, the former director of the Army After Next program, stated that the Army still has a conventional threat to prepare for not just stability and support operations.⁴⁵ Regardless of the environment or the threat, the American people expect the Army’s costly transformation to enable the force to effectively handle any environment or enemy.

As stated previously, the objective or end state capability of the transformed Army is an expeditionary force with a “reduced logistical footprint.” Defense Secretary Donald Rumsfeld repeatedly stated that speed and technology would not only save lives but also “allow smaller, faster forces to combat conventional

foes effectively.”⁴⁶ Is it possible to reduce the logistical footprint while still bridging the gap that currently exists? Both politicians and senior Army leaders have made several key assumptions that do not support a reduced logistical footprint.

First, the contemporary operating environment is still focused on short duration conflicts.⁴⁷ This assumption is not supported by either current operations or history. Reality is proving to be long duration military conflicts and commitments. Brigadier General Dave Fastabend of the Army’s Training and Doctrine Command Futures Center observed that our previous model of episodic war has shifted toward protracted war.⁴⁸ If protracted war is the norm, then logistic requirements will grow over time to support the enduring conflict and not be reduced. Surely the next conflict can not be won on a “reduced logistical footprint.”

At the operational and strategic levels, logistic pre-positioning provides an initial, short duration of supplies. As the conflict wears on and brigade combat teams push further away from or consume the pre-positioned stocks, the units responsible for the 1,000 yards must possess the transportation assets, labor forces, and materiel handling equipment to bridge the tactical supply gap. These required capabilities will only increase the logistical footprint not shrink it.

Other assumptions, which are counter to a reduced logistical footprint, are illustrated in the Army Comprehensive Guide to Modularity’s offensive operation vignette for a light brigade combat team (IBCT).⁴⁹ The vignette assumed that all elements of the IBCT were topped-off with two days of supply prior to the execution of the operation and that the operation would be less than 72 hours in duration. These assumptions reflect the best case scenario, because the sustainment brigade and the brigade support battalion would not be required to perform replenishment operations.⁵⁰ However, few operations are ever conducted under ideal conditions. Another assumption of the prevalence of “ideal conditions” was that aviation assets would be available for and capable of delivering supplies to forward units of the IBCT. These types of replenishment operations brief well, but ignored the fact that a labor force, a knowledgeable skill, must construct the pre-positioned packages at “the forward base of support” prior to or during the operations.⁵¹ This oversight might appear “minor” in planning. However, bad assumptions have cost lives, because support or the right, configured support was not available when required. Similarly, casualty planning or evacuation was not discussed.⁵² Casualty operations are other logistic unit tasks that add significant friction to the last 1,000 yards of the logistic system.

The final assumption made in the modularity guide that is counter to the reduced footprint capability is all assets of an IBCT must be rotary-wing transportable. The modularity guide clearly states that an IBCT’s focus mode of tactical trans-

portation is rotary-wing assets, either CH-47 or UH-60. “Ideally, there should be no organic equipment in the IBCT that cannot be transported by CH-47, and no mission essential equipment in rifle companies that cannot be transported by UH-60.”⁵³ This desired capability assumes that rotary-wing assets will always be available to an IBCT for both maneuver and logistics. Even the legacy force brigades of the 101st Airborne Division, which were habitually task organized with an entire assault aviation battalion, did not validate this capability assumption. This assumption requires a smaller haul capability to meet the size and weight criteria of rotary-wing assets. The haul capability is directly proportional to the number of assets required.⁵⁴

Besides a reduced logistical footprint capability, the Army desires the capability to cross attach or “plug and play” with different types of brigade combat teams (BCTs). Units must be capable of plugging into a UEx organization and playing with the other types of BCTs assigned to the respective UEx headquarters. This “plug and play” capability meets Rumsfeld’s vision of a smaller, faster, more deployable force. How does this capability impact the desire for a smaller logistical support structure or footprint?

According to the modularity guide, the ideal employment of the three types of BCTs would be in concert or one of each type under a single UEx organization.⁵⁵ This method of maneuver force employment provides the UEx commander with the flexibility to maximize friendly capabilities against enemy vulnerabilities. Once again, this type of employment is ideal, not reality. There is not enough of each type to allocate one of each to every UEx or even against every threat faced by the nation. The modular sustainment brigades that are designed to support the various BCTs of a UEx must be structured differently with various subordinate elements depending upon the supported types and numbers of the BCTs. For example, each Stryker Brigade Combat Team (SBCT) is not logistically self-sufficient with the single brigade support battalion that is organically assigned. Each SBCT requires an additional combat service support battalion from the sustainment brigade to function on par with the heavy brigade combat teams (HBCT). The HBCTs have sufficient assets at the brigade and battalion level to actually be logistically self-sufficient.⁵⁶ However, infantry brigade combat teams (IBCTs) or light forces may appear to be self-sufficient, but they do not organically own enough transportation assets to move all assigned equipment and personnel at the same time. IBCTs depend heavily on pooled resources from either the sustainment brigade or the aviation brigade. Based on the different logistic support requirements from each type of BCT, each sustainment brigade will be forced to expand or shrink with each task organization change or based on the type of BCTs assigned. A sustainment brigade that supports three SBCTs or three IBCTs would have a rather large logistic footprint.

The final desired capability that significantly impacts logistics is “a distribution-based, highly automated and better-integrated system that will facilitate expeditionary operations.”⁵⁷ How can the Army raise the dispersion capability while reducing the support structure or the logistic footprint? Technology and automation can reduce some tracking and asset visibility problems at the strategic and operational levels of the logistic chain, but it is not the computer or data packet that physically loads, moves, separates, or delivers the physical part or materiel to the end user. These actions require transportation assets, labor forces, and materiel handling equipment.

What about “pooling” these assets? Is this a valid answer to meet the desired increase in dispersion while reducing the logistic footprint? The Army’s transition to the triangular division prior to World War II demonstrated that “pooling” was not as effective as it mistakenly appeared to be efficient.⁵⁸ Ad hoc organizations were created to bridge the asset gaps created by pooling.⁵⁹ Sharing assets is a valid alternative in emergency situations, but the Army should be wary of being reliant upon pooled assets to meet its steady-state capability instead of an emergency driven capability. If units operate continuously under ad hoc or emergency situations, then what happens during a real asset emergency? Pooling does not create redundancy, flexibility, or effectiveness, unless units have enough organic assets to fulfill assigned capabilities. Pooled resources should be used solely as backups or replacements to meet the needs of an emergency situation.

Besides faulty capabilities and assumptions, other issues prevent the Army as an institution from correctly defining the tactical logistic problem, which contributes to the difficulty of bridging the gap in the last 1,000 yards of the logistic chain. In the majority of training exercises, logistic units are not the primary training audience, so artificiality is accepted and almost required to prevent logistic problems from negatively impacting the primary training audience, the maneuver forces. The tactical logistic problem is trained around and not worked through under realistic conditions.

Another indicator of the Army’s failure to correctly identify the logistic gap, which is often wishfully assumed away, is the lack of focus on the complexities associated with extended lines of communications. Throughout history, the US Army has been an expeditionary force. Inherently, this requires long lines of communications both in and out of the theater of operation.⁶⁰ Despite the known requirement to deal with extended lines of communications, light forces are not resourced with the appropriate transportation assets, labor forces, and materiel handling equipment to effectively conduct replenishment operations in all weather conditions and terrain. The last 1,000 yards lies at the far end of these extended lines of communications.⁶¹

From the limited perspective presented in this section, either the Army has not identified the correct logistic problem being faced, or it made flawed or ideal assumptions to negate the severity of the logistic gap contained in the 1,000 yards of the supply chain. To correctly address the logistic gap, the Army must clearly establish the desired, minimum capabilities of all elements of the BCTs. These capabilities will define the end state of transformation in terms of effectiveness. Once the overall capabilities are defined, a logistic support structure must be designed from the bottom-up to facilitate the achievement of the desired capabilities. This method of design will bridge the growing gap at the far end of the tactical supply chain and will result in an effective distribution network. Since there is an inverse relationship between effectiveness and efficiency, the Army should not blindly accept the concept of “lighter” or “smaller” is necessarily better in terms of achieving the desired capability.⁶²

Will the logistical gap be bridged or widened by transformation?

Will the new logistic transformation structure fix or expand our tactical logistic gap? Is the Army just creating more Clausewitzian fog and friction with the modularity design in terms of last 1,000 yards of the supply chain? Logistic resources have been and always will be a critical factor in all conflicts. These resources are rightly viewed as a military center of gravity. Hence, logistic resources must be employed correctly to achieve effectiveness, or military forces will reach or exceed their internal culmination point.⁶³ While the transformational focus on velocity management and network-centric operations may produce resources of plenty at the strategic end of the logistic chain, the logistic resources at the other end of the supply chain are limited by the Army’s capability to deliver the products to the required user not to some stockpile at the port of debarkation. James Huston clarified this point, “Since all logistical resources are limited, every decision ... has implications for other areas or other activities or projects. Logistical factors always have to be regarded as relative.”⁶⁴ According to the Army’s focus, the relative areas of transformation that may hold the key to the logistic gap closure are transportation, the expeditionary structure, and technology innovations.

Transformation from a division-centric Army to a brigade-centric Army has inherently expanded the allocated battle space of all tactical organizations. This battle space expansion also increased the length of the lines of communication, not only laterally between units but also vertically between command and support echelons. However, has transformation increased the required transportation assets at each level to deal effectively with these ever expanding distances? The answer is emphatically no. Brigade support battalions (BSBs) can not physically move all their organic personnel and equipment at one time with only internal

transportation assets. The internal BSB transportation assets are the same assets that Army Comprehensive Guide to Modularity assumes are available to perform tactical maneuver transport of infantry soldiers for a single battalion of an infantry brigade combat team (IBCT).

Without organic or even dedicated “pooled” transportation assets, can IBCTs really fulfill their advertised “modular” capability in this larger assigned battle space? One proposed ad hoc solution to the lack of mobility for both maneuver and logistic tasks at battalion level and below is the addition of the Light Utility Mobility Enhancement System (LUMES). The LUMES is a “small and inexpensive all terrain vehicle” designed “to carry loads beyond the 50 pounds per soldier [individual maximum combat load], at least for part of the mission.”⁶⁵ If these vehicles are similar to the currently fielded John Deere Gators, then its speed restrictions prevent self-deployment in conjunction with other forms of motor transport. Therefore, these new mobility assets require additional motor transport to deliver them to the battle front. Additionally, the LUMES increases the amount of fuel that is required to be moved over the last 1,000 yards of the logistic chain.⁶⁶ When these vehicles are not being employed tactically for some reason or another, the vehicles become like most other deployed equipment or containers. They are given to the respective unit’s headquarters company or to the field support company (FSC) for accountability until the tactical situation once again requires these assets. The LUMES are additional equipment that only compounds the BSBs’ problem of conducting single lift movements, unless additional transportation assets are provided to transport all the required equipment and personnel correctly.

The LUMES provide some means of bridging the last 1,000 yard logistic gap. This equipment definitely makes the strategic deployment easier with respect to its weight and size in lieu of resourcing units with larger transportation assets that have the required capabilities of operational range, haul capacity, and speed to make units effective. “Lighter” equipment or forces might make the strategic deployment requirement of transformation easier, but “lighter” does not necessarily meet the required capability to survive and win on the battlefield. Once again, efficiency in strategic deployment does not equal effective logistic operations at the point of the spear.

The objective of a rapidly deployed military force is victory not just at the tactical level but at the operational and strategic levels. The keys to victory at the operational and strategic levels are to exploit success and to maintain the initiative through pursuit operations. Transportation is critical to both of these operations not only in terms of maneuver but in terms of logistics. James Huston stated, “One great weakness of logistics has been a failure of transportation for

the support of the exploitation and pursuit phases of an action.”⁶⁷ If supplies are not readily available at the far end of the logistic chain or the transportation assets are not sufficient to handle the rapid extension of the lines of communication during pursuits and exploitations, then the capability to rapidly secure operational and strategic victory, as Secretary Rumsfeld desires, is not possible. This was true for Hodges and Patton in 1944.

In that situation, planning had not anticipated Hodges’ and Patton’s rapid advance against Germany, and the Allied forces were not logistically postured to take advantage of this success. The inability to deliver the massive amounts of supplies from the beaches to the rapidly advancing units caused units to reach their culmination point and lose the initiative. A similar situation occurred in the advance to Baghdad in Operation Iraqi Freedom. In this situation, V Corps literally out ran its logistic tail and was forced to take an operational pause. Transformation has not resourced the modular, BCT-centric force with respect to transportation to effectively conduct exploitation and pursuit operations. The Army is in the same place it was during World War II with a complete reliance on the efficiency of “pooled” transportation assets for both maneuver and logistics.

The second relative areas of transformation that may hold the key to closing or widening the logistic gap is the expeditionary structure. As stated previously, the end state of transformation is an expeditionary force, which according to the Secretary of Defense means a small, faster force that “can do more with less thanks to technological advances.”⁶⁸ Technology may allow some areas of the force to do more with less, but normally this is not true for logistics.⁶⁹

Logistic units have been, and will continue to be, a larger consumer of strategic and theater transportation than combat units. The emergence of non-contiguous environments with the modular force will only continue to drive this inverse relationship between combat units and logistic units. Therefore, it is logical to assume that logistic units will consume even more transportation assets to achieve the Army’s transformation end state. If this logic is true, how can the Army simultaneously achieve the end state of both an expeditionary structure and a reduced logistic footprint? One method that might be used to achieve both of these requirements simultaneously is to play a shell game.⁷⁰ If equipment and personnel that are required to obtain a unit’s full capability are reduced to make the unit “rapidly deployable” or expeditionary, then an increase in the total number of units to accomplish the same previous capability would be required to offset the internal unit reductions. Is this not the case with the logistic structure of the Stryker brigade combat team (SBCT) transformation? The organic brigade support battalion (BSB) of an SBCT requires the support of an additional combat service support battalion from a sustainment brigade to enable the SBCT to func-

tion self-sufficiently on the battlefield.⁷¹ These potential shell games of transformation do not shrink in any way the ever growing logistic gap.

The Army has also focused on pooled resources as a solution to achieve the desired expeditionary structure. The historical perspective of pooling has already been discussed, and it was clearly established that pooling may achieve so-called efficiency but not effectiveness. Pooled assets are only efficient until their use is required continuously. If pooled assets are used continuously, maintenance requirements for the equipment will exponentially increase. Additionally, the equipment's "life span" will be dramatically reduced. These two second order effects of pooling will result in an increase of personnel to maintain and operate the pooled equipment as well as an increase of requirements on the supply system for parts and new equipment. These effects do not support either a smaller, expeditionary structure or a decrease in the logistic gap.

The over-use of, or inability to maintain, pooled equipment are indicators that subordinate organizations are not effectively resourced. Infantry brigade combat teams (IBCTs) are not effectively resourced for both logistic and maneuver transport. However, according to the modularity guide "almost every operation will require some, if not all, of the infantry in the IBCT to move by truck."⁷² Pooled transportation within the IBCT as well as the sustainment brigade will quickly become not only inefficient but ineffective. With a decrease in transportation assets due to maintenance, the ability of units to move supplies over the 1,000 yards will become non-existent without creating some type of ad hoc organization like the Red Ball Express.⁷³ Clearly, the expeditionary structure of transformation expands the logistic gap instead of bridging it.

The final relative areas of transformation that may hold the key to closing or widening the logistic gap is technology innovations. This area of transformation, according to the Army G4 and other senior Army leaders, has the most potential to allow military forces to gain significant asymmetric capabilities.⁷⁴ These asymmetric capabilities are the genesis of how a smaller force "can do more with less."⁷⁵ Technology, however, has a direct proportional relationship to logistic requirements.

Tooth to tail ratios historically expand with the introduction of technology. The Russian commander in the Russo-Japanese War made the following observation about technology and logistics: "A much larger number of engineer troops, including sappers, telegraph and railway units, than we had available in Manchuria is necessary, in order that all this technical equipment may be used to the best advantage."⁷⁶ Similarly, the introduction of the railroad during the Civil War caused the Army's logistic organization to rapidly expand. The same was true with the introduction of motor vehicles prior to World War II. New types of skills

and equipment were needed to maintain the equipment, and more labor forces were needed to handle the increase in types and quantities of supplies, which were required to support the new technology. Logically, an increase in demand for supplies leads to an increase in transportation requirements to move the requisitioned materiel. An increase in transportation leads to a further increase in personnel and equipment. These second and third order effects of technology advances recreate the problem in tactical logistics that was experienced in the Civil War with wagons and fodder.⁷⁷ If the requirement for one is increased, the requirement for the other is also increased. Together, these increases create a vicious cycle of growth. The key to breaking this vicious cycle of technology interdependence is finding balance between gained capability and new support requirements.

Transformation that is based on large technology improvements results in large logistic requirements, but the Army has restricted this natural and required logistic growth with the adopted end state of a reduced logistic footprint.⁷⁸ Technology based concepts such as velocity management and network centric operations, which enable total asset visibility and management, may improve the effectiveness of operations within the stationary industrial base and overall communication zone. However, information management and asset visibility will not reduce the requirement to transport supplies and materiel to the far end of the supply chain. In order to get these supplies across the last 1,000 yard logistic gap, the Army requires effective transportation, labor forces, and materiel handling equipment.

Transformation has yet to bridge the tactical logistic gap in the related areas of transportation, expeditionary structure, and technology innovations. Since logistic resources are the military's center of gravity, this logistic gap will continue to cause the Army to culminate prior to achieving rapid strategic and operational success. Unless the transformation effort is refocused on the right problem with realistic assumptions, the Army's transformation will result in peril not in an effective fighting force.⁷⁹

The Army is seeking a revolution in military affairs through transformation to exponentially expand the current military overmatch of the United States Army's ground forces. Correctly done, this transformation would prevent other world powers from maintaining pace with respect to military force development. However, General Dennis Reimer, former Chief of Staff of the Army, stated "that there cannot be a revolution in military affairs without there first being a revolution in military logistics."⁸⁰

The Army's current logistic transformation at the tactical level does not effectively fix the problem of the last 1,000 yards of the battlefield, getting the

required supplies or resources to the end user. Therefore, it is doubtful that a revolution in the tactical logistic system has been planned or accomplished. The evidence for this statement lies in the fact that the Army has not historically recognized the dependence of the tactical logistic problem on transportation, labor forces, and materiel handling equipment. Additionally, the institution has not recognized the fact that the tactical level holds the key to transformation objectives and goals, which should be the closure of the last 1,000 yard gap. As currently drafted, transformational capability and assumptions are incomplete and flawed. They focus on efficiency over effectiveness, which are inversely proportional objectives, under ideal instead of realistic conditions. With the current transformational objectives of a smaller, more mobile combat force and a reduced logistic footprint, modularity will not span the gap of the last 1,000 yards when viewed from the relative areas of transportation, expeditionary structure, and technology advances.

Transformation is a valid concept and is necessary for the United States military to remain relevant in the contemporary operating environment. However, the Army must rapidly recognize the significance of the tactical logistic gap and implement a solution prior to what James Huston calls the “decline to a slough of indifference” that follows conflict.⁸¹ Failure to bridge the tactical logistic gap and to accept the reality of the requirement to expand the logistic footprint in modern warfare will only lead to peril according to Charles Shrader, a recognized logistics historian.⁸² The military cannot afford to sit idle waiting for the next conflict to surface, so the logistic problems can once more be realized and potentially corrected with valid solutions.

Redundancy is a valid and time proven characteristic of successful logistic chains. However, redundancy under the current transformation model does not achieve the desired efficiency. What about a focus on effectiveness instead of efficiency? “Dispersion may be more costly ... but will contribute a great deal ... in terms of long term preparedness.”⁸³ The tactical logistics structure that supports the last 1,000 yards can not be ignored or marginalized anymore. The logistical challenges of the contemporary operating environment will only continue to increase as adversaries reverse asymmetry in their favor. Once again, James Huston’s discussion of the Army’s logistic challenges are still best expressed in his conclusion to *The Sinews of War*:

But the Army cannot rest on past laurels in logistics. The complexity of modern weapons is multiplying, the geographical areas of possible conflict are expanding, and the need for economy in the national defense continues. Recognizing that the United States is at the apex of defense of the free world, and

acknowledging the success of potential enemies in the improving their own military capabilities, the challenges to Army logistics today are even greater than challenges of the past.⁸⁴

Notes

- 1 Steven Eden, "What They Don't Teach You at Leavenworth," *Army Magazine*, July 2003, <http://www.ausa.org/www/armymag.nsf> on 5/19/05.
- 2 James A. Huston, *The Sinews of War* (Washington: Chief of Military History, United States Army, 1966), 699.
- 3 Huston, 670.
- 4 Eden
- 5 Frederick W. Kagan, US Military Academy at West Point, stated that there is an inverse relationship between efficiency and effectiveness during the recent AEI Conference on the Future of the United State Army in Washington, DC. [see Rich Dunn, Rich Dunn's Circulating Notes, notes from American Enterprise Institute for Public Policy Research (AEI) Conference on the Future of the United State Army, Washington, DC, 11 April 2005, http://www.thedonovan.com/archives/historystuff/AEI_Future_of_the_Army_Conf_Dunns_Notes_4_11_05.pdf on 5/20/05.]
- 6 The best sources of other logistic historical examples are James Huston's *The Sinews of War: Army Logistics 1775-1953* and Charles Shrader's *United States Army Logistics 1775-1992*.
- 7 Huston, 354.
- 8 Ibid., 354.
- 9 Ibid., 355.
- 10 Ibid., 252.
- 11 Recommend Charles R. Anderson's *Guadalcanal* [The US Army Campaigns of World War II, Center of Military History (CMH) Publication 72-78. Washington, DC: US Army Center of Military History, undated] For further study on Guadalcanal, and for further study on Okinawa, recommend Arnold G. Fisch's *Ryukyus* [The US Army Campaigns of World War II, Center of Military History (CMH) Publication 72-35. Washington, DC: US Army Center of Military History, undated].
- 12 Huston, 673.
- 13 David C. Rutenberg and Jane S. Allen, eds., *The Logistics of Waging War* (Gunter Air Force Station: Air Force Logistics Management Center, 1983), 89.
- 14 Russell A. Gugeler, *Combat Actions in Korea* (Washington, DC: Center of Military History, [no date]), Chapter 6, "Chosin Reservoir," pages 62-87, in US Army Command and General Staff College, *Leadership at the Brigade and Battalion Level Advance Sheets and Readings Book* (Fort Leavenworth, Kansas: United States Army Command and

General Staff College, September 2004), 125-141. http://www.army.mil/cmh-pg/books/korea/30-2/30-2_6.htm on 05/16/05.

15 This is an illustration of how “pooled” assets such as transportation are only effective until all supported units require the assets at the same time. “Pooling may be efficient to some bean counters or economists who only watch the bottom line monetary savings, but it is not always effective in a fluid battlefield where requirements cannot always be projected with complete accuracy.

16 This problem has been the source of questions concerning the number of men needed; of whether soldiers can be replaced by contractors to gain economic efficiency; the extent to which local labor should be used in foreign countries; of whether sufficient combat forces can be detailed to perform the required functions temporarily; of the training soldiers or civilians need to accomplish these logistic tasks; and of unit or individual morale.

17 Huston, 674.

18 Huston, 674.

19 Rutenberg, 84.

20 Ibid., 83.

21 Ibid., 83.

22 US Army Training and Doctrine Command. *Army Comprehensive Guide to Modularity*, Vol. I, Version 1.0 (Fort Monroe, VA, 2004), 10-9.

23 Rutenberg, 83.

24 Rutenberg, 83.

25 Operation BOLERO was the name given to the United States’ build-up in United Kingdom in preparation for Operation OVERLORD in 1944.

26 Huston, 676-677.

27 Ibid., 387.

28 Huston, 670.

29 Ibid., 670.

30 Beside the assigned quantity being insufficient, maintenance problems reduced the available materiel handling equipment even further. Another contributing factor to the available quantities of materiel handling equipment was the non-contiguous environment. In a non-contiguous environment, authorized equipment must be apportioned between multiple sites. These were the author’s observations of elements assigned to TF Panther in 2002-2003 during combat operations in Afghanistan.

31 Major Paul Herbert in *Deciding What Has to Be Done: General William E. DePuy* and the 1976 Edition of *FM 100-5, Operations* clearly stated why the Army is not and

will never be like commercial businesses. “The US Army’s problem is different because it has little margin for error and no definite criteria for success prior to actual combat.” This quote can be found on page 4 of Major Herbert’s book.

32 The tactical disposition of units is not restricted to its mere location. A unit’s tactical disposition may include a rapid change in types and quantities of supplies required. It is almost impossible to predict requirements in the contemporary operating environment, because the enemy gets a vote in the tactical situation with out any requirement to consult with friendly forces.

33 US Army Training and Doctrine Command. *Army Comprehensive Guide to Modularity*, Vol. I, Version 1.0 (Fort Monroe, VA, 2004), 5-78.

34 Operational-level sustainment bridges and tactical-level sustainment brigades are identical with respect to organizational design. The only distinguishing attributes between these organizations are the subordinate battalions and companies attached for operations and the assigned responsibilities. Both levels can perform the functions of the other, as long as the required battalions and companies are assigned.

35 US Army Training and Doctrine Command. *Army Comprehensive Guide to Modularity*, Vol. I, Version 1.0 (Fort Monroe, VA, 2004), 1-69.

36 Ibid., 3-24, 4-18, 5-88.

37 Ibid., 5-80.

38 Mission staging operations are deliberately planned operations to rotate brigade combat teams out of current operations to conduct refit, rearm, and replenishment operations. These operations for a single brigade normally require 24 to 72 hours. For more information, see paragraph 5-86 of the *Army Comprehensive Guide to Modularity*.

39 The Army Maintenance System consists of five levels of repair: operators, organizational, direct support, general support, and depot levels. Sustainment brigades are responsible for general support level, which consists of major component part rebuilds. The BSB is responsible for some direct support repairs, but the field support companies have the primary responsibility for direct support down to operator level of the Army Maintenance System.

40 To accomplish this transportation requirement, all the organic transportation assets of both the BSB and the field support company must be used according to paragraph 9-8 of the *Army Comprehensive Guide to Modularity*. To lift all the fighting soldiers of an infantry brigade combat team, all the transportation assets of the BSB and the FSCs will be used with an additional 24 trucks from the supporting sustainment brigade. This clearly indicates that IBCTs are not logistical self sufficient.

41 US Army Training and Doctrine Command. *Army Comprehensive Guide to Modularity*, Vol. I, Version 1.0 (Fort Monroe, VA, 2004), 5-79.

42 Each company normally maintains one day of supply or maybe two depending upon the situation and the type of brigade combat team. The FSC will normally maintain

one day of supply, therefore giving it the ability to provide immediate replenishment to companies. The BSB also maintains enough materiel to provide an additional day of supply for each battalion within the brigade combat team. Together, these three levels provide the BCT with the ability to conduct 72 hours of operations without drawing supplies from the supporting tactical sustainment brigade.

43 Dunn.

44 Capabilities and assumptions about the future threat are the basis for doctrine. A great discussion concerning the evolution of doctrine is found in Major Paul Herbert in *Deciding What Has to Be Done: General William E. DePuy and the 1976 Edition of FM 100-5, Operations*.

45 Dunn.

46 Greg Jaffe, "Rumsfeld's Push For Speed Fuels Pentagon Dissent," *Wall Street Journal*, 16 May 2005, p 1. <https://www.us.army.mil/suite/earlybird/May2005/e20050516368688.html> on 5/17/05.

47 John D. Millett, "Logistics and Modern War," *Military Affairs* 9, no. 3 (Fall 1945):193-207 reprinted in Charles R. Shrader, ed., *United States Army Logistics, 1775-1992: An Anthology*, vol. I (Honolulu: University of the Pacific, 2001), 38.

48 Dunn.

49 In this vignette, sustainment operations are only addressed in the last paragraph under the heading of "transition". This provides a clear indication that logistic operations are an after thought versus an integrated part of tactical modularity development. The referenced vignette is contained in chapter 9 of the *Army Comprehensive Guide to Modularity*.

50 The modularity guide further assumes that the contemporary operating environment will support replenishment operations to occur one company at a time. Rarely can a cycle be created during continuous operations to replace one company with another while the withdrawn company is resupplied. This type of replenishment rotation assumes all units will not require replenishment at the same time. Only a "piece-meal" employment of force will result in this type of cycle luxury.

51 US Army Training and Doctrine Command. *Army Comprehensive Guide to Modularity*, Vol. I, Version 1.0 (Fort Monroe, VA, 2004), 9-58.

52 The modularity guide also discusses how the Army will no longer be "faced with a numerically superior opponent and the prospect of high supply consumption, large casualty rates, and massive equipment replacement needs" which would require large support echelons. For further information on this assumption, see paragraph 1-66 of the *Army Comprehensive Guide to Modularity*.

53 US Army Training and Doctrine Command. *Army Comprehensive Guide to Modularity*, Vol. I, Version 1.0 (Fort Monroe, VA, 2004), 9-22.

54 This inverse relationship has been well documented in history. Napoleon's Army as well as the American force in the Civil War and World War I continuously experienced this "fodder" problem. If the number of wagons required grows, so does the quantity of fodder to feed the additional mule teams. As additional fodder is required, more wagons are needed to transport this fodder. It results in a never ending cycle of balance between haul capacity and the number of transport vehicles required.

55 The ideal maneuver components of a UEx would be one stryker brigade combat team, one heavy brigade combat team, and one infantry brigade combat team. It can be assumed that each UEx would also be assigned a maneuver enhancement brigade, a tactical sustainment brigade, and an aviation brigade. Other enablers may be assigned to a UEx based on the assigned mission or environment.

56 The reason that the heavy force has always had sufficient organic logistic assets is twofold. First, this force was created less than 65 year ago. When it was created, the army started the unit design at the lowest level (company and platoon level). This bottom up design allowed logistical requirement to be determined and organically resourced at the lowest level. Secondly, the heavy force has two distinguishably different types of transportation. The primary type is maneuver transportation which is their primary combat system (tanks or Bradley fighting vehicles). The second type of transportation is dedicated to fulfill the logistic requirements. Unit do not have to choose between allocating a single resource between maneuver and logistics as light forces have been forced to do since even before the Civil War.

57 US Army Training and Doctrine Command. *Army Comprehensive Guide to Modularity*, Vol. I, Version 1.0 (Fort Monroe, VA, 2004), 1-67.

58 For more information on pooling during the Interwar period, see chapter 3 of Jonathan M. House's *Toward Combined Arms Warfare: A Survey of 20th-Century Tactics, Doctrine, and Organization*.

59 Any ad hoc organization requires both time and training to become either effective or efficient. The Army cannot expect to be successful if required capabilities are not recognized or resourced appropriately. The Army can no longer expect to win with purely "ad hocery."

60 Historic examples of the requirement for inter-theater long lines of communications are World War II (both theaters), Vietnam, Operation Desert Storm, Operation Enduring Freedom, and Operation Iraqi Freedom. An easy case could be made that all of America's conflicts including the Revolutionary War and the Civil War were fought over extended lines of communication.

61 The location of the logistic gap with respect to organizational echelon has changed throughout history. It has continued to slide to the user end of the supply chain. During the Civil War, it was at the regimental level. World War II's gap was at the Division or Corps level. Korea's and Vietnam's gaps were at the regimental to battalion level. Most recently, Operation Enduring Freedom's and Operation Iraqi Freedom's gaps were also at the regimental to battalion level or below. The shift in the level that was responsible for

the last 1,000 yard was directly related to the Army's organizational structure and what level became the primary maneuver force level. Problems that shift to different levels of an organization between conflicts are harder to identify than those problems that remain at the same level.

62 Frederick W. Kagan, US Military Academy at West Point, stated that there is an inverse relationship between efficiency and effectiveness during the recent AEI Conference on the Future of the United States Army in Washington, DC. [See Dunn]

63 Once the culmination point is reached or exceeded, the force has dramatically increased its vulnerability to the enemy. Reaching or exceeding the culmination point normally results in the loss of initiative at some level. Overwhelming combat power must be regenerated to wrestle the initiative back from the enemy. The regeneration of combat power requires a large influx of logistic or combat service support assets. For more information on culmination points, see *FM 3-0, Operations*.

64 Huston, 667.

65 US Army Training and Doctrine Command. *Army Comprehensive Guide to Modularity*, Vol. I, Version 1.0 (Fort Monroe, VA, 2004), 9-23.

66 The limited operational range, haul capacity, and speed of these vehicles may prevent them being an effective asset to cover the new extended battle space. The incurred maintenance aspects of additional parts and repair skills are additional components of the problems, which are worthy of consideration in respect to a viable solution.

67 Huston, 672.

68 Jaffe.

69 "Technological advances" usually result in systems of increased complexity. As systems increase in complexity, the maintenance, support, and transportation requirements have historically increased proportionally to the complexity of the system. Simplicity is not equivalent to complexity.

70 LTC Steven Eden, the Chief of Combat Developments at the US Army Armor Center, wrote an article for *Army Times* that discusses the hollowness or the shell game potential of transformation. The title of the article was "What They Don't Teach You at Leavenworth," which appeared in the July 2003 issue. (<http://www.ansa.org/www/armymag.nsf> on 5/19/05)

71 Normally the shell game reduces assets at the tactical level only to recreate them as "pooled" assets maintained at either a higher tactical echelon or even at the operational level. These reductions are presented as more "efficient" solutions; however, they only increase the logistic gap that is already present at the far end of the supply chain.

72 US Army Training and Doctrine Command. *Army Comprehensive Guide to Modularity*, Vol. I, Version 1.0 (Fort Monroe, VA, 2004), 9-23.

73 How are the "pooled" resources or ad hoc organization trained to meet the demands of their assigned tasks? The Army continues to overlook the risks associated with

pooled assets. Pooled assets are required to quickly adapt not only to rapidly changing conditions of the contemporary operating environment but to the rotation of controlling headquarters. Though units may function similarly, each unit has a unique climate. It is critical for pooled assets to conduct detailed rehearsals and training with the supported unit to understand these unique climates. If the pooled assets are continuously being used, when do they conduct these rehearsals and training?

74 The Army's G4 website provides some critical insights to the viewed importance of technology in transformation. The G4 has identified four critical focus areas for transformational success: Connect Army Logisticians, Modernize Theater Distribution, Improve Force Reception, and Integrate the Supply Chain. These four areas directly relate to the G4's transformational vision: "To sustain combat power, our Army must have the ability to "see the requirements" on-demand through a logistics data network. We require a responsive distribution system, enabled by in-transit and total asset visibility and managed by a single owner who has a positive end-to-end control in the theater." More information can be found at <http://www.hqda.army.mil/logweb/focusareas.html> (as of 20 May 2005).

75 Jaffe.

76 Shrader, 39.

77 American forces in the Civil War as well as in World War I continuously experienced this "fodder" problem. If the number of wagons required grows, so does the quantity of fodder to feed the additional mule teams. As additional fodder is required, more wagons are needed to transport this fodder. These two elements, wagons and fodder, result in a never ending cycle of balance between haul capacity and the number of transport vehicles required.

78 US Department of the Army, "United States Army White Paper, Concepts of the Objective Force", [No date]. <http://www.army.mil/features/WhitePaper/ObjectiveForceWhitePaper.pdf> on 12/23/04.

79 Shrader, 4.

80 Mark J. O'Konski, "Revolution in Military Logistics: An Overview," *Army Logistician*, Jan-Feb 1999, <http://www.almc.mil/alog/issues/JanFeb99/MS20364.htm> on 3/11/2005.

81 Huston 252.

82 Shrader 4.

83 Huston, 661.

84 Ibid., 692.

**Jones Slide Addendum:
Transformation Logistics - Solution or Shell Game**

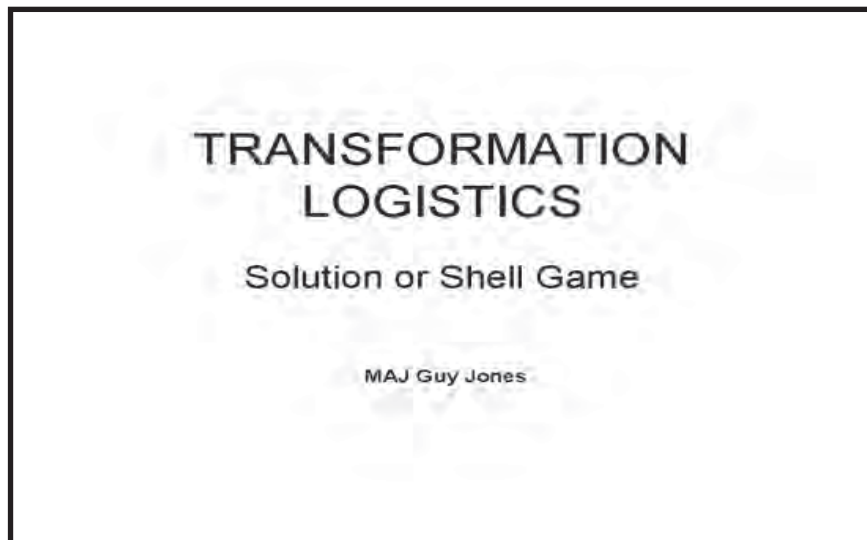


Figure 1

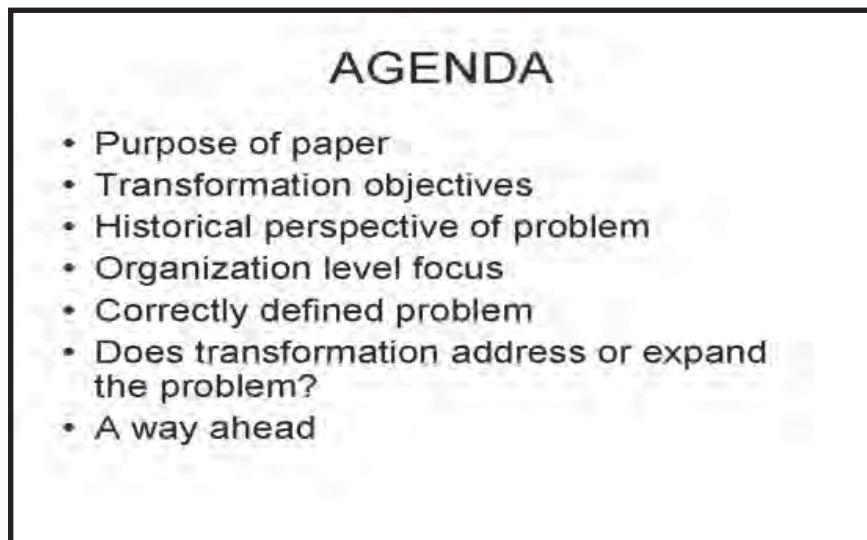


Figure 2

PURPOSE OF PAPER

- To determine some of the problems through a selective historical lens that make the last 1,000 yards of the logistic supply chain difficult.
- To determine whether the Army's logistic transformation accounts for and addresses these problems

Figure 3

TRANSFORMATION OBJECTIVES

- Expeditionary force with a "reduced logistic footprint."
- "On time logistics" through information sharing
- Improve the strategic and operational logistic system to achieve velocity management
- Brigade Combat Team (BCT) centric operations

Figure 4

HISTORICAL ANALYSIS OF LOGISTIC PROBLEM

"Whenever shortages of supplies or equipment have appeared at the battle front, from the Revolutionary War to the Korean War, more often than not it has been the result of some shortage in transportation somewhere along the [logistic supply] line."

James Huston
The Sinews of War

Figure 5

What Historically Causes The Logistic Gaps?

- Transport Platforms
 - No issues moving supplies to theater
 - Problem is "inland" or tactical transport
- Labor Forces
 - Fighting force or dedicated labor force
 - Required prior to mobilization/deployment
 - Tooth-to-Tail Ratio
- Material Handling Equipment
 - Reduces size of labor force required
 - Pooled Asset but constantly required

Figure 6

Why Lessons Are Not Learned

"The surge toward modernization stimulated by war once again would decline to a slough of indifference, to be disturbed only now and then... by a few imaginative officers seeking steady improvement, until a new national emergency should once more call forth the waves of progress."

James Huston
The Sinews of War

Figure 7

What Level Needs to Be the Focus?

- Echelons of CSS:
 - Theater Support Command (TSC)
 - Tactical Sustainment Brigade
 - Brigade Support Battalion (BSB)
- What level gets supplies to the soldier?
 - Field Service Company: Responsible for both "push" and "pull"
- Logistic Gap at Tactical not Operation Level

Figure 8

Is the Problem Defined Correctly to Address the Gap?

- **Assumptions Not Supporting "Reduced Logistic Footprint"**
 - Short duration conflicts
 - "Ideal Condition" logistic modeling
 - Means available for transport platform
- **"Plug-and-Play" Capability Impacts**
 - Change of logistic requirement with task organization
 - Additional assets required
- **"Highly Automated" Distribution System**
 - Will automation physically load or move material?
- **"Pooling" Assets**
 - Effective or Efficient?

Figure 9

Does Transformation Address or Expand the Gap?

- **Expanding BCT battle space**
 - LOCs expanding but not transportation assets
 - Ineffective solutions of transport platforms
- **Initiative/Exploitation through Pursuit Operation**
 - Requires transportation for maneuver and logistics
 - Potential culmination points instead of victory
- **Expeditionary Structure – "Smaller, Faster" Force**
 - SBCT requirement for additional CSSB
 - Over-use of "pooled" assets for maneuver and logistics
- **Technology Improvements**
 - Direct relationship of technology improvement to logistic requirements
 - Civil War problem of wagons to fodder relationship

Figure 10

A Way Ahead

- Summary
 - Transformation does not address viable solutions to close the last 1,000 yard gap
 - Transportation platforms, labor forces, and material handling equipment do not meet requirements for force effectiveness
 - Logistic transformation must focus on the tactical level
- Solutions
 - Transportation Units within BCTs
 - Dedicated and trained labor forces based on requirement
 - Quantity and type of material handling equipment

Figure 11

Closing Thought

“Nevertheless, the reality is that logistics is the primary consideration in all modern military operations and can be ignored only at peril.”

Charles Shrader

United State Army Logistics 1175-1992: An Anthology

Figure 12

Day 2, Session 3 Question and Answers

Moderated by
Dr. Charles Shrader - Carlisle, Pennsylvania

Dr. Shrader

Thank you gentlemen. I have just one or two remarks and then we'll get on to some questions. I think Major Jones has pointed out a really serious—not only a flaw, but a dilemma for those who are planning for transformation. The old desire, which goes back to the early days of the Army—like 1775—to get rid of the logistical tail, to reduce the size of the force in terms of the logistical component so that you can increase the combat component, is still the central problem. It's always been a problem.

In World War II, almost every amphibious assault made in World War II, the first thing that happened during the planning was that the combatant commander deleted logistical forces from the troop list. "I don't need all those stevedores on the beach. I don't want all those trucks and truck drivers. I want fighters. I want shooters." You know what the first message that came back from the beach to the ships every time was? "I need the logistical guys up here. I need somebody to unload this ammunition, this water, this food." It's really amazing. I mean, almost every amphibious operation, the same thing occurs every time.

Now we have a situation in which it's not the commander of the force on the ground that's redlining the logistical units out of the troop base, but the secretary of defense himself takes a pencil to it. It is a problem—there is a need to reduce the size of the force, in order to be able to transport it more easily. But as Major Jones has pointed out in his presentation, you've got to carefully weigh where the balance point is, because at some point, you go beyond the point of where you're able to support that combat force at all. Logistics is a combat multiplier. Just ask anyone we've faced in the last 100 years whether that's not the case.

I would love to be able to tie these two presentations together. I'm not sure how I'm going to do that. I think probably the way to do it is if you read those publications that Dr. Darius mentioned, and read them carefully about what went on in Kuwait, from the Army Materiel Command perspective, I think you'll see reflected there many of the things that Major Jones was talking about in his presentation. That's probably the best way to approach that.

At this time, I'd like to open it up for questions. Yes, sir?

Audience Member

Will O'Neil, the Center for Naval Analyses. I have a way to tie this together. If you look at what the contents of your logistics are, it's dominated by POL, and the next item is ordnance—ammunition. So the way to go to “lighter, faster, cheaper” is to not have any vehicles, and not be issued any bullets; you know, foot-mobile swordsmen would do the job. Short of that, the materiel commands could help a great deal by finding ways to make vehicles that don't consume as much gas. Of course, by developing weapons that don't need as much ammunition, which in part means first round kill. Now, we've gone a long ways in the latter matter, and we're sort of having to continuously readjust our ammunition requirements, because it turns out that in many cases, we don't need as much ammunition as we thought, because we kill people the first time. But certainly, the trend in terms of vehicular fuels has gone in the other direction. Of course, we have this problem, we want to make vehicles that are bomb-proof, etc. But I wonder if this is something where we ought to be calling more attention to the needs for reduced fuel requirements.

MAJ Jones

Sir, I'll take that. I agree with you. I think that long term in the Army, through technology, that maybe one day we'll be able to get there, that we can run an Abrams for 72 hours or more on one drop of fuel. But from my foxhole, the way I see it is, especially with the creation of doctrine, and even 10 to 15 years in the future, that's not possible. So what we have to do is transformation is not a one-time process—once we go through this, we're done—it's continuous. So we have to actually take off bites at a time, meaning, right now we don't have that technology, either in the field or POL aspect or the in armament, but it could be in the future. So what we have to do is we have to design a force right now based on our current technological capabilities. Then, maybe 15, 20 years in the future, as our technology improves, we can do it again.

Dr. Darius

May I add something to that, please? Our Army Research—ARL—Army Research Labs, and our Research, Development & Engineering Commands, which is now RDECOM—it's a separate major subordinate command of Army Materiel Command—they look at the challenges that we face now, and into the future. Of course, we work with DARPA and other organizations that look further into the future, 10 or 15 years. I'm not saying these are not being studied—they are being studied. The question is, as Major Jones so ably pointed out, is how far into the future before we have hybrid vehicles, before we have lighter tanks? I think the move toward using the kind of equipment we're using, like Stryker, is a move in the right direction. We're moving from track vehicles to wheeled vehicles, so

we're moving in the right direction. I'm not sure if it's a transformation or not; I think the historians would have to write that story later on down the road. As General Brown so aptly pointed out, whether it's change in modernization or transformation, that needs to be seen in the future. But we are moving in those directions, sir, and I appreciate your question. I hope this, in part, answered your question.

Dr. Shrader

We have a question in the back.

Audience Member

I'm Colonel Benson. I'm the director of the School of Advanced Military Studies, and I will be accepting the grading sheets on Major Jones' presentation when we're done. [Laughter] [Applause] Dr. Darius, if I may direct a question to you, sir. Since you observed the ongoing operations—at least at the time you did—our situation we face now is that our Army is coming home, as we all know. We'll have fewer and fewer forward-deployed forces; thus, we are going to become more expeditionary in nature, just by design—doctrine, everything. What did you observe when you were overseas that would inform us in our thinking toward making the Army more expeditionary, both in terms of adjustments to the APS stocks as well as the equipment sets, and I would offer more importantly, in terms of port opening packages?

Dr. Darius

A very valid question; a great question. In Kuwait, we didn't have the kind of deep seaports we had during Desert Storm. We had one major SPOD seaport of disembarkation, and the Kuwaiti International Airport, basically one APOD. In Saudi Arabia, we had an existing infrastructure—it was modernized over two decades—and gave us a much greater capability. We will need that kind of capability if we're going to project the kind of power projected now. But there's no assurance we're not going to have another Somalia, or another area where there is no developed port—seaport or airport capability. So we're going to need forces that are more agile, that could be projected more rapidly, and modularity may be a step in the right direction—historians would have to write about that later on, to see whether it's transformation or whether it's just change. We need agility. We need quick intervention capability. And believe me, looking outside the box, as one gentleman did here about an expeditionary force—now, whether it's going to be a Ghurka force out of Afghanistan, whether it's going to be a force created out of our own indigenous Afghan and Arab population and Hispanic population in here, which we're already absorbing. This is an immigrant society, we may just want to open up our National Guard and our Reserves and increase recruitment in

people who are linguists who know the area, which would be a step in the right direction. If we're going to project power and capability in failed states in the future or in areas in the non-west, we need to look at things probably outside the box. I'm sure a lot of people are doing that right now, I think the presentation by Colonel Harvey yesterday was an eye-opener. He was an area specialist, and he showed some of the problems we face when you deal with people in the non-west. I hope this is an answer in the right direction; it's not a full answer.

Audience Member

I'd like to comment a little bit on your idea of pooling, or proposed pooling. When you talk about MHE equipment (material handling equipment) you're talking about specialized equipment with specialized operators, and increased repair part requirements that are somewhat unique. To put those in each unit dramatically increases your foot size because you need better trained mechanics, more spare parts, and more trained operators. Maybe another alternative is--a lot of your problems today logistically are what you talked about with the wagon and fodder. In other words, a lot of our lift space is taken up with repair parts, and machines that maybe we don't need as many of. I've been deployed with a heavy equipment maintenance company and I never even unpacked my toolkits. So perhaps the best thing to do is to think of something like a pre-positioned ship with the machines already on it, and you can move into an area of operations and just drop the people in on it--some of these things, because spare parts and that take up a tremendous amount of your lift capability. Working at the SPOD we used an awful lot of deck space taking AMC stuff, taking it back to be looked at. So it takes up a lot of your deck space, and a lot of your expertise.

MAJ Jones

Yes, sir, and I totally agree with you, because the maintenance sides consumes, like you said, the fodder space. That's one reason that I think, as we go to transform, we don't necessarily need to look for brand new gee-whiz equipment. I think that you can take some equipment that we currently have, and that the parts and the knowledge for the repair are already in the system, and duplicate them. That's really what I'm advocating, because when you pool assets, like I said, it is for the purpose of the units below them not needing them in a reoccurring basis. However, a good indicator that I have found to know when your pooled assets aren't being used correctly is at any given day, if you request some, none are available, and this is a continuous process—every single day, not available—that probably is a good indicator that we don't have the capability that we think we do.

Dr. Shrader

General Brown?

BG (Ret) Brown

Yeah, kind of following up on that thought, your recent and personal experience is the Army as it exists today and not necessarily the Army that we're trying to design towards. With respect to the Army we're designing towards, you expressed a concern that there weren't sufficient logistical assets within the Brigade Combat Teams, and in particular, transportation assets. To what extent do you think that that's likely to be offset by the fact that they are also designing modules that would be sustainment modules, that are different and distinct from the Brigade Combat Teams? For example, there's going to be 16 sustainment brigades within the active component, and there's probably about a dozen sustainment brigades built into the reserve component. In your view, will we be able to design sufficient logistical assets into those sustainment brigades, that without encumbering the Brigade Combat Teams with too much, we can nevertheless make sure they have enough, when the time comes to use them?

MAJ Jones

Yes, sir. I think the answer to your question, in my view, is yes. Two things. First is when I say that the lack of assets at the BCT level, it really is in those three primary assets that I looked at—transportation, for example. Even in the modularity guide, it talks about for an IBCT, the requirement for 24 to 36 trucks just to move the unit—in addition to what they currently have inside. If you look at how much currently we are projecting transportation assets to have within a sustainment brigade at the UEx level—which would be the next level up—one they're not organic, and that's one question that I have not been able to find an answer to. As we have designed these new sustainment brigades to support the UEx, other than the headquarters, there is very few other assets that are organic to it—which gives us the capability, but it also gives us a disadvantage, because now, where are these other units coming from? Eventually, of course, we'll create them, but in the near term, where are they coming from?

The second piece is, I think that the sustainment brigades have the capability—I'm talking about UEx support—have the capability to support our force, if we—I don't mean to be coy, but—take off our blinders, and realize that a Stryker Brigade is not self-sustaining, without giving it a second CSSB. So why keep it at the sustainment brigade? I would advocate going ahead and giving it the rest of its assets that it needs, so it can function truly how we want it to function—that means being BCT-centric operations, where what we actually hold at the sustainment brigade level is really the assets that we want as an emergency basis. Does that answer your question, Sir?

BG (Ret) Brown

Sure.

Dr. Shrader

I'd like to just add on real quickly that the advantage, of course, is obvious, of having these assets be organic, and that is that they train and operate with you on a daily basis, so that you know how they work and they know how you work. I mean, that's the whole essence of having them be organic. When you move a truck company into a combat unit to assist them in a move, there's always a great deal of friction, even with the best of will and the smartest of guys and gals, just trying to figure out how each one operates. So that's another advantage, I think, of having them be organic.

BG (Ret) Brown

But the design difficulty is you don't want to have so much organic to the Brigade Combat Team that it's encumbered. It needs to have the things that it customarily will use almost all the time, and then those things that give it surge capabilities, we don't organic to it.

MAJ Jones

So that's why I advocate that that's the crux of the problem, is we have to do some hard thinking to figure out what are the capabilities that we want, and then what assets are going to give us that capabilities. Because until we establish this as, yeah, we agree that this is the capabilities we want, once we establish that, then we can leave it to nugs like me to figure out, okay, I'm going to need exactly X, Y, or Z. I am not advocating—and that's why I wanted to readdress—I am not advocating that everything go down at the BCT level, for exactly the reason you pointed out. They're going to be so big that they cannot perform the capabilities they were given, so it has to be a balance, and that's why I think there has to be a lot of thought put into it, and not just start throwing assets at it.

Dr. Shrader

Okay. We had a question at the mic in the back first.

Audience Member

My question is for Dr. Darius. Sir, there's been a lot of talk over the last couple of days about adaptive loops, and about how they're driving the conflict we're currently involved in. Specifically in regards to the Army acquisition system, and AMC's place in that; there's been a lot of talk recently about the interrelationship between combat developers, material developers, and the user community. In particular, there's been a perception that our acquisition system has been very slow,

inefficient, and unable to meet user needs. Sir, what's your perspective on this, in regards to AMC, and what are your thoughts for the future role of AMC in this process, as a historian?

Dr. Darius

Well, AMC plays a critical role all the way—General Kern used to say—from factory to the foxhole, and Tanzler Johnson, our capable G5, used to say, “Sir, it's from laboratory to the foxhole.” So the debate continued between those two as to which one it is. But we're involved in an entire process of acquisition. I remember talking with General Thompson back in the 1980s—Richard H. Thompson; great guy. He used to say he wanted to reduce the acquisition cycle for major weapons systems. I hope I'm not rambling in answering your question. But anyway, he said it takes too long to bring in a major weapons system on board—we need to reduce that cycle. But how do you reduce it? The skunk work age is gone—you know, where you can do things on the fly. You have to put in a contract, you get the Army contract agency involved, you have to put in the specs. It's all very complex and complicated. Then you involve what used to be Test and Evaluation Command; now it's Army Test and Evaluation Command (ATEC); TECOM used to be part of AMC. So it's a very extensive process, time-consuming process. How do you reduce that? It's a very legitimate question, and it's being studied; it has been studied in the past.

We could do some things, like the Stryker, where you get off-the-shelf equipment and utilize it. But if you're going to change major weapons systems, and looking into the future, it's going to be driven by TRADOC and AMC again—TRADOC, the doctrinal part, and... What is the next war going to be like? Are we going to have two major regional conflicts? Are we going to have fights with guerillas in failed states, or future potential failed states? What are the needs? I mean, it has to be done in a total context, involving not just the Army, but also the other services, if we're talking about fighting jointly. General Scales thought, well, it was not jointly; in Iraq, it was basically the Army and the Marine Corps. But right now, the conventional wisdom, we're fighting joint. So you're dealing with interoperability, rationalization, standardization, and interoperability—the entire issue of how we're going to involve the coalition, and Allied Forces are involved also.

So although we are a superpower, and we are the envy of the world in terms of strategic airlift and sealift, Nobody else has that kind of capability, guys; we are a superpower. But being the superpower, and the rich man on top of the hill, everybody's envious of us; they want to bring us down. Not necessarily want to bring us down, but they can't get to where we are, so we have a lot of commitment. So we need to sit down and think about what is a commitment. Like Bernard Fall

used to say in the '50s about Vietnam—"If we have a commitment with them, what is vital? We need to really sit down and think about it."

When I was at the Army War College, I used to carry this debate with some of the colonels there. They used to say, "Is South Dakota vital?" They were kidding, but they were making their point. We used to sit down and walk around the Army War College, saying, "What about Yugoslavia after Tito—what's going to happen? You know, nobody wanted the worst case scenario.

When I was there in 1975, I used to say, "We did a study on Iran. What about Iran after the shah? Well, the assumption coming from DCSOps (Deputy Chief of Staff for Operations) of the Army was that, "If the Shah goes down, the queen takes over; she leaves, his son would take over." Then we said, "What if this doesn't happen? What if there's a revolution?" So I had to send a little minority report down to the DCSOps of the Army that I did not concur with the assumptions that DCSOps made about what might happen. We need to sit down and think about it—we need to sit down and think outside the box. I think a forum like this allows us to do that, and I wish there were more forums like this, not only here but also all the other places. I'm not sure if answered your question—I probably rambled—but I think there was some responses to that.

Audience Member

Thank you, sir.

Dr. Shrader

Rich?

Audience Member

Yeah, a couple of questions. Number one is, given what we've learned over the past couple hundred years, given the logistics and the ever-present Clausewitzian encryption—to bring the dead jargons into the fray—would it be more sensible to just drop the notion of just-in-time logistics as something that you simply can't make friction-proof? The second thing is, given the increasingly expeditionary nature of missions that the Army is going to take, as Colonel Benson raised, should the Army develop essentially a forcible entry capability?

MAJ Jones

I'll take a stab at it. If you're asking for a personal opinion from on the ground—

Audience Member

Yes.

MAJ Jones

I think you're right on the money. I think we need to drop the concept of just-in-time logistics. I think it was General Scales who talked about it yesterday—as long as you add network-centric in front of something, you know, it's going to mean something; that's not necessarily the case. Just-in-time logistics has some value, meaning that when the AMC, or at the far end, the other end that I talked about at COMMZ, can see what assets are needed on a reoccurring basis, that's good. However, the Army is not Wal-Mart, and I know there's a lot of people out there—not in this forum, but other writers—that would like for us to be.

The difference occurs in what I see as two areas. One, the Army—especially at the far end, the tactical end—is always on the move; Wal-Mart stores don't move. The second one is, I can be perfectly fine on my logistics status this second—two minutes, two hours, two days from now, that could change; Wal-Mart doesn't change that quickly. So that's a personal opinion on that one. The second one, as far as the forced entry, I think, based on the lead-in question from Colonel Benson, I think that's one of the things that we have to look at, because our inability, or due to the political situation, for us to come across Turkey, demonstrated to us that we can never do away with units like the 101st, the 82nd, or the Marine Corps, that actually have a strategic entry capability—we have to continue to build on that. Now, I know some people, especially in the logistics world or big Army doesn't want to hear that, because that's a big bill payer that we might not use. But if we don't have that capability, where will we be when we need it?

Dr. Shrader

You had a question over here? Sir?

Audience Member

I'm going to try and put this in simple terms because I may not be up on all the vocabulary, but one of the questions, you were talking about where we put the line on what goes with the deployable force and what stays back, what do we move around. But is it in fact on the table, too, at some point, you just simply say, "We need a bigger boat." You know, we're going to need more lift capability because we can't do what we want to do with what we're proposing to move quickly now, and so what we're going to move quickly has to be bigger and more capable than what it is right now, and at that point, we decide we need a bigger boat, we need more lift, and we need faster lift. Is that still on the agenda at some point to be reopened in the dialogue?

MAJ Jones

Sir, I know I'm not qualified to answer that.

Dr. Darius

I can't answer the boat question, but I know that this was a prepositioned war. The Army has boats, believe it or not. The Army has aircraft. General Brown?

BG (Ret) Brown

Yeah. For some time, there has been a plan to build additional sealift, and it, you know, goes through the vagaries and bounces around with respect to funding. But there is—and remains—plans for additional sealift, plans for additional airlift. That complements the expeditionary nature of our Army. As an end state, the greater expeditionary potential is anticipated to rest on three legs, one of which is the modularity initiative that allows things to be more capably deployable—I mean, their packages are easily and quickly movable, so that's "right-sizing," I guess you'd call it. The second is promptness—to have in strategic regions sufficient materiel deployed that you can in fact get to it quickly, and you can marry up troops who are flying with materiel that's already there. The third is just additional capabilities with respect to sealift and airlift. So it's kind of disappeared from the radar screen, but it's still there.

Dr. Darius

The prepositioned ships that we have are tremendous. The 3d ID was very happy to get our equipment that we had on ships. I visited the ship that we had the prepo equipment there, and also visited the ship we had the ammo. We can't fight a war without ammo; we can't fight a war without food. If we didn't have the Logistics Assistant Civil Augmentation Plan, if we didn't have Brown and Root, we couldn't feed the soldiers; we couldn't put out the tents that—the LOGCAP contract grew from \$3 billion to about \$10 or \$11 billion in the last three years. We do a lot of work with the contractors, too, sir—this is something we often don't realize. AMC has about 50,000 contractors in theater—50,000. Our civilian workforce is about 50,000. Yeah, just about the—almost an equal number of contractors. So the battlefield is changing, sir, and while the objectives may be to reduce the logistics footprint, and we probably would find ways to manipulate that and reduce it, we need to support the soldier—that's what we're here for; that's what AMC is here for.

BG (Ret) Brown

Remember, about five years ago, Shinseki's vision, as Chief of Staff, was that we'd be able to deliver five divisions within 30 days, and that still is within the design, and we're still building towards that capability. But of course, the divisions you're talking about are very differently designed, and the promptness has expanded, but still, that's a lot of lift, to get five divisions moving in 30 days, and we're building towards it.

Dr. Shrader

I think we have time for maybe one more question—the mic in the back.

Audience Member

I wonder if you have looked—specifically, you talk about plug-and-play—and I wonder if you have looked at the historical example of armored cavalry regiments, a brigade-centric organization, and how it is supported on a plug-and-play basis—say, Desert Storm, or prior, Herat, because it deals with the same problem that your BCTs do, and it was nondivisional, and it was done plug-and-play.

MAJ Jones

I'll answer it yes and no. I did look at it as far as the inception. I believe—and this didn't come out in the presentation—of the three types of BCTs that we have bought into as far as the Army, the heavy force, or heavy BCT, is actually designed correctly. It can move, it can sustain itself. So as far as looking at it from a historical perspective, I think we got that one right. I believe that the reason we got it right was, from its inception, it started at the smallest level, and we understood that, as we grew it, we adapted it at each level to allow it to sustain itself along the way. We didn't start with the big organization, and then try to figure out how to support it, cutting corners; we started it with the platoon, and then the battalion, then the division. I think that, as far as historically, is what I'm going to try to look at to design logistic assets for the other two BCTs, so it can come up on par with our heavy BCT. Did I answer your question, Sir?

Audience Member

Yes. Thank you.

Dr. Shrader

Okay. My sole advantage in this job is I get the last word, and all the jokes about transporters and nontransporters and combat arms guys and non-combat arms guys aside, I think our session brought out one important point, and this is particularly for those folks seated in the back of the room, and that is, the planning, the thinking about logistical operations and logistical organizations requires the same amount of brainpower and effort that's being put into thinking about the combat forces themselves, because the two are part of a whole. If you make the right arm really strong and the left arm really weak, it's not going to work. So I hope that the same amount of effort goes into thinking about these logistical kinds of things that goes into the other part of it. I thank our two presenters, and I thank you for being here. [Applause]

**Transforming the Brigade Team on the Battlefield:
Modest Lessons in Coalition Operations from the
War Diary of the First Canadian Armoured
Brigade (1 CAB) in the Italian Campaign, 1943-1945.**

Major Michael Boire

Introduction

This paper will present a historical example of army change, specifically the transformation of Canadian armor on the battlefield. In order to draw useful conclusions on how armies cope with the pressures of transformation in action, this paper will explore four distinct yet related sub-themes: organization, education, training, and doctrine. As the title indicates, the research context is the participation of a Canadian armored formation in the Italian Campaign. Indeed, the crucial research question is: What were the fundamental elements of that unique Canadian armored experience and are they transferable to the modern battlefield?

Thesis

The paper's thesis is that the community of military historians can continue to be useful, as well as ornamental, in the face of army change. We can support today's armored warriors by constructing menus of tactical and technical lessons learned from the experiences of change in past wars and exploring their pertinence to the modern battlefield. The war diary written by the Headquarters of the First Canadian Armoured Brigade (1CAB) during the Italian campaign serves as an example of a historical document replete with useful examples of the management of change, specifically in the realm of armored warfare. Many of these lessons merit a sober second look. What follows is an executive summary of the brigade's history as background, followed by an abridged selection of lessons the unit learned as it lived its own evolution on the battlefields of Italy.¹

The Brigade's History

The First Canadian Armoured Brigade (1 CAB) organized itself quickly during the spring of 1941. Composed of three tank regiments with supporting logistics units, led by reserve officers and NCOs and manned by volunteer citizen-soldiers, the formation began life as an army tank brigade whose role was to furnish an infantry division with tank support. While 1 CAB nurtured hopes that it might eventually fight as a proper tank brigade in a breakthrough role, its infantry support mission remained unchanged throughout the war. After a brief period of basic training in Canada, the brigade found itself defending the southeast corner of England against the threat of an enemy invasion while struggling to acquire tank

skills in a country seriously short of suitable training areas and ranges. During this period, one of the brigade's regiments participated in the Combined Operations raid on the French port of Dieppe in August 1942, suffering heavy losses in the first use of Allied tanks against the Atlantic Wall.

Committed to the invasion of Sicily in July 1943, the brigade supported infantry divisions of Montgomery's Eighth Army as they pushed Italian and then German defenders across the island's mountainous interior and along the coastal plain. Bouncing the Straits of Messina in September, 1CAB fought up the Adriatic side of the Italian boot ejecting the 1st *Fallschirmjaeger* Division from the town of Ortona as the year ended.

Deployed to the western side of the Apennines, as the Allies concentrated forces for the advance on Rome in the spring of 1944, 1 CAB supported Allied divisions in the assault on the Gustav Line at Monte Cassino. There the brigade caught everybody's attention by crossing the Rapido River on the campaign's first self-propelled bridge. The brigade's engineers had welded several lengths of Bailey bridging onto two Sherman tanks. Then it was down the Liri Valley to Rome, through the German defences in front of Florence, across the Arno and into the mountains north of Florence where the brigade supported the Fifth US Army during the autumn of 1944. Transferred to the European theatre for the final battles of the European campaign, 1 CAB supported Allied divisions in the final battles in Holland and Germany. The Canadian government de-mobilized and repatriated the brigade at the end of 1945.

During the Second World War, no Canadian infantry or armored brigade saw more action than 1CAB. In the 657 days from the invasion of Sicily on 10 July 1943 to V-E Day on 8 May 1945, brigade units were in the firing line for 532 of them supporting 20 different British, American, Canadian, Indian, New Zealand, and Italian divisions in Sicily, Italy, Holland and Germany. So the brigade spent 80% of its war fighting. Its tanks supported the infantry from a majority of national contingents in the Allied coalition. With that record of service, it is safe to say that the brigade learned a few good lessons.²

Organization

First, let us look at organizational aspects of change in 1 CAB. Though the brigade retained its infantry-tank role throughout the war, its leadership longed for the opportunity to act as a tank formation, fighting its three regiments as a single armored formation. As it crossed the Straits of Messina in September 1943, that possibility appeared likely. Indeed, Montgomery, their army commander, had warned the brigade to prepare for such a moment. Once the mountains of Calabria were behind them, there appeared to be possibilities for armored manoeuvre

on the southern coastal plain. To general disappointment, the German defenders would not offer an open flank as they retired northward. Nonetheless, the brigade was prepared to re-role at a moment's notice. Neither leaders, nor soldiers, considered a fundamental and rapid reorientation of their battle tasks as particularly problematic. Command post exercises and tactical training in England, and later in Sicily, prepared the way for such a change by creating a mindset that welcomed challenge.

This held true for the brigade's principal fighting and communications systems, as well. ICAB's tank crews mastered four rather different fighting vehicles before finally receiving their Shermans on the eve of the invasion of Sicily. Mastering this procession of equipment instilled a sense of confidence that they could adapt to technological change quickly. Saddled with underpowered and unreliable high frequency radios, the brigade headquarters developed an alternate system of command and control based on highly trained liaison officers who collected and delivered information to higher, subordinate and flanking formations. The brigade's senior leadership exercised battle command through multiple tactical headquarters. To ensure redundancy in critical senior staff positions, logistics and operational staffs learned to replace each other.³

Education

In ICAB education was essential to mastering cultural change. The brigade headquarters became a finishing school for the formation's junior officers where they learned the finer points of cultural awareness when dealing with coalition partners as well as the intricacies of civil-military relations. Supporting so many different nationalities across the Allied Armies in Italy created a requirement for extreme interoperability unforeseen during preparatory training in England. Exposure to the imperial composition of the Eighth Army in Sicily had produced in ICAB's officers a cosmopolitan approach to inter-arm cooperation. When dealing with allies, tolerance, communication, and cheerfulness were the order of the day. With such an example from their leaders, the brigade's soldiers built an operational culture that accommodated an extensive range of national tactical doctrines. This was a significant transformation, indeed!

Training and Doctrine

From its baptism of fire in Sicily to the end of hostilities in Germany, the brigade's training philosophy incorporated constant change. Commanders at all levels maintained five training priorities. The first was tracking developments in new enemy equipment and tactics to assess their impact on the brigade's future operations. The second was to obtain lessons from the after action reporting process that would improve the brigade's performance. Third, to incorporate

information on the enemy as well as lessons learned into pre-battle training plans. Fourth, to insist that the infantry units to be supported in upcoming operations participate in an infantry tank cooperation exercise. The fifth priority was to remain up-to-date with modifications in allies' tactical doctrines and incorporate them in the cooperation exercises. Adherence to this formula set the conditions for success. Neglecting a priority produced battlefield failure. This was especially the case in operations where supported infantry units had been reluctant to find the time to participate in an infantry-tank cooperation exercise before crossing the line of departure.⁴

While maneuvering up the Italian boot, arguably the European theatre's most rugged terrain, the brigade defeated veteran German airborne and mechanized units equipped with superior anti-tank weapons and supported from time to time by insurgent groups in the local population. A command detonated roadside bomb killed more than one vehicle crew, as did antitank mines laid in the rear areas by Fascist sympathizers. Nonetheless, the brigade's battlefield success was the result of a training regime closely supervised by leaders who were committed to anticipating change in order to dominate it.

Conclusion

The brigade was indeed unique. Bringing together three militia regiments as well as supporting logistics units into a single fighting organization, 1CAB was raised in the context of a rapidly expanding army that had no real armored or mechanized traditions, and consequently little practical expertise in combined arms maneuver. Whereas Canadian infantry formations could draw on the experiences of the Great War as they organized themselves for eventual battle, the armored brigades and divisions of Canada's wartime army had no such corporate memory to draw upon. Consequently, 1CAB found itself creating its own senior and junior leadership cadres, developing its own armored skill-sets and training programs, while modifying British armored doctrine to its own purposes. The brigade was a new formation serving on a weapon system just recently introduced to Canada's army—the tank. In many ways, the odds were against the brigade's eventual success. The learning curve was not just steep—it was indeed vertical. For the First Canadian Armored brigade in the Second World War, change was a way of life.

Notes

1 In the context of Commonwealth operations in the Second World War, the war diary was both a descriptive and analytical report treating a unit's experiences on the battlefield. In order to avoid potential information dilution or distortion, units and headquarters submitted their war diaries directly to the War Office in London, rather than staffing them up the chain of command. Diaries included a 'summary of events and information' as well as copies of all orders and instructions received and issued, battle narratives identifying lessons learned in action, assessments of enemy intentions, tactics and new equipment as well as operational and administrative policy correspondence. During the Second World War, the Directorate of Tactical Investigation at the War Office made a careful study of unit war diaries in order to synthesize historical, tactical, and technical information into pamphlets and reports circulated to armies in the field. Because the war diary was an operational document, prepared by a unit or headquarters staff, endorsed by the commanding officer, and submitted promptly each month, they can be excellent sources of narratives and analyses for the military historian. See National Archives, Kew, London WO 232 "The Directorate of Tactical Investigation."

2 "A Brief History of 1 Cdn Army Tank Bde" Appendix 30 to 1 Canadian Army Tank Brigade War Diary 1-30 June 1943, National Archives of Canada (NAC) Record Group(RG) 24 Volume (vol) 14028 / Reel T-10630 and "Historical Narratives Files" Appendix 16 to 1 Canadian Armored Brigade War Diary, June 1945 , NAC, RG24, Vol 14043 / Reel T-10649

3 "'Beyond the Sangro' - an Account of the Operations of 1CAB during December 1943" Appendix 40 to 1 Cdn Armored Brigade War Diary February 1943, NAC, RG24 Vol 14031 / Reel T-10635;

4 "Weekly Report on Operations" in 1 Cdn Army Tank Bde ;;"Account of Operations in the Liri Valley" Appendix A to 1 Cdn Armored Brigade War Diary May 1944, NAC, RG24, Vol14034 / Reel T-10637;

Missile Defense – The Canadian Conundrum

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Introduction:

The debate on missile defense in Canada has been one characterized by starkly ideological, highly emotive, and, at times, even irrational discussion. The Ground-Based Midcourse Defense (GBMD) system has been described as “insane,” “impossible” and “imperialist” by critics.¹ Former Liberal MP Carolyn Parish went so far as to classify all GBMD supporters as “the coalition of the idiots.”² Many have suggested that GBMD will usher in a new arms race and that by participating, Canada will contribute to that arms race. Some critics and members of the government have even tried to cast missile defense as a women’s or mothers’ issue, such as Member of Parliament (MP) Sarmite Bulte, head of the Federal Liberal Ontario Caucus, who stated, “Personally, I think that you’ll find a lot of consensus among women my age, who are mothers and parliamentarians, that we’re not interested in missile defense.”³ Other opponents have used GBMD as a platform to attack broader engagement with the United States, such as Liberal MP Bonnie Brown who argues, “I think the proclivity among women is to be worried about further engagement with the United States.”⁴ Mel Hurtig has dubbed the system a “tragic and potentially cataclysmic blunder” and a “horrendous scheme” that will lead to nuclear Armageddon.⁵ None of these statements, comprised of negative generalizations and fear mongering contribute.

Those in favour of the system have not fared much better in contributing to an honest and straightforward discussion of the merits of missile defense. Proponents have tended to dismiss serious questions about the feasibility of the system, the implications of participation in GBMD on Canadian policy and have in some cases, severely overstated the negative results of non-participation. Joe Varner, for example, argues that in light of Canada’s indecision on GBMD and the US Unified Command Plan, North American Aerospace Defense Command (NORAD) has been rendered irrelevant and unsalvageable. He denounces the 2004 NORAD amendment as too little, too late, claiming “the corpse (NORAD) was already cold,” when such efforts commenced.⁶ This sort of fatalism

about the consequences of non-participation and the resulting implications for NORAD, including the common argument that NORAD will become a client command to US Strategic Command, subsuming Canadian sovereignty, typifies the extreme pro side of the debate. This sort of fear mongering about the end of all bilateral defense relations is equally detrimental to the debate as those arguments which claim the system will result in nuclear Armageddon, both creates more false urgency and panic than quality contributions to the discussion.

Even the most earnest attempts for public discourse on the topic are marred by misnomers and misconceptions about what missile defense actually constitutes. Up to the present time, this debate has done very little to inform Canadians about what missile defense would really involve for Canada. The pundits, however, cannot be blamed for all the myths about missile defense that circulate in the media and in the church basements. The highly technical nature of the system does not exactly make for Sunday reading material, and the constantly shifting plans and numerous types of missile defense included in the Bush Administration's 'layered' system frequently confuse even the experts.

The debate on Ballistic Missile Defense (BMD) must be an informed one if it is to be of value. In this respect, a number of key research questions must first be considered. These include:

- a) What is BMD?
- b) Which portion of BMD is Canada currently involved with and what portion did Canada consider joining?
- c) Would Canada contribute to the weaponization of space?
- d) Is GBMD Militarily Necessary?
- e) Would Canada be asked to contribute money?
- f) Will GBMD be effective?
- g) What will be the Impact of GBMD on Canadian Sovereignty and the future of NORAD?
- h) Does GBMD promote Canadian Policy Objectives?

This paper will seek to answer these questions, following the general research question of "Is current limited Canadian support and participation in Ground Based Midcourse Defense (GBMD) through Integrated Tactical Warning and

Threat Assessment (ITW/AA) and any potential future support or partnership in the GBMD system is in Canada's national interests?" This paper shall hypothesize that Canadian participation in GBMD through the provision of ITW/AA and any future further operational or political participation in GBMD is in Canada's national interests. Canadian national interests shall be defined as: Canada maintaining and strengthening sovereignty and security; the protection of North America; and the preservation and promotion of international peace and security, as defined by the International Policy Statement of 2005. The paper will focus specifically on how participation in GBMD supports the specific interests of maintaining and strengthening Canadian sovereignty and security, and the protection of North America.

This paper will assert that Canadian provision of ITW/AA through NORAD, to US Northern Command (USNORTHCOM), for the purposes of operating the GBMD system is a form of participation in the missile defense system. This paper will argue that provision of ITW/AA constitutes a form of participation because the information contained in ITW/AA is a critical and integral component in the operation and execution of Ground-Based Midcourse Defense. ITW/AA is required to alert the GBMD system to any incoming warheads and to target outgoing interceptors as ITW/AA provides the approximate trajectory of the incoming missile – critical information in targeting interceptors. This view point is supported by comments made by Canadian Ambassador to the United States, Frank McKenna, who stated in reference to the Canadian participation in GBMD, "We are part of it now."⁷ McKenna went on to specifically establishing the August 2004 decision to allow NORAD to relay ITW/AA information to USNORTHCOM for GBMD constituted involvement in GBMD, stating, "There's no doubt, in looking back, that the NORAD amendment has given, has created part—in fact a great deal—of what the United States means in terms of being able to get the input for defensive weaponry."⁸ For the purposes of this paper, the provision of a critical and integral operational component of GBMD shall be interpreted as quiet participation in missile defense, although it shall not be interpreted as full support, participation or partnership—politically or operationally in the system. As Bill Graham points out that the decision to share information "...is not the same as sending a missile up to intercept another missile—that decision will be taken in the course of good time by the Prime Minister of Canada,"⁹ however it is still a form of involvement and participation according to Canadian defense officials and Canada's ambassador to Washington.

When the time for the decision on becoming a full partner in missile defense came in late February of 2005, Canada clearly distinguished between providing support for the system via involvement in GBMD and all out participation, declining the US offer to fully partner in GBMD. The historical significance of this

decision was not lost on experts in the field who noted that for the first time in 60 years, Canada declined to participate in defending North America as a single theater of operations, opting instead to section off the defense against ICBMs as a purely American responsibility.¹⁰ This represents a fundamental shift in Canadian policy, unaccompanied by a formal shift in policy or shift in Canada's national interests regarding the defense of North America, in spite of government assurances to the contrary in advance of and following the decision to say 'no' to further participation in the GBMD system. In advance of the decision, Minister of National Defense Bill Graham asserted that the GBMD decision would be made, "...in accordance with Canadian needs and Canadian appreciation of our strategic interests in support of the defense of North America ..."¹¹ Following the decision, Foreign Affairs Minister Pierre Pettigrew claimed that the decision was made based on policy rather than emotion, however there is no evidence that any fundamental shift in policy or interests occurred to account for the 'no' decision on missile defense. Quite the contrary, there is evidence that participating fully in the program would have been in keeping with both The 1994 Defense White Paper and the 2005 International Policy Statement on Defense (see section h for more information.) The government continues to state its support for NORAD and continental defense, with Prime Minister Paul Martin stating "Canada remains steadfast in its support of NORAD,"¹² and then going on step further to state support for continental defense was the *raison d'être* behind the 2004 NORAD amendment declaring, "That's why we agreed last summer to enhance our long standing agreement to track missiles through NORAD. We stand by that commitment."¹³ The implications of quietly participating while simultaneously undertaking a major policy shift without the accompanying interests or policy reorientation will be explored at length under section g of the paper, examining the affect of partial participation on Canadian sovereignty.

While the current government has decided against further participation in GBMD (beyond ITW/AA), there are indications that a future government or shift in the balance of power of the House of Commons could result in a revised policy, as the current decision was made primarily upon preserving the immediate power of the government, rather than the any deep seeded opposition to missile defense or drastic shift in policies or national interests.¹⁴ The government had expressed support for Canadian involvement in GBMD on a number of occasions in the past, including the Prime Minister himself who repeatedly expressed a positive position on missile defense while on the campaign trail and during his Prime Ministership when he stated, "*If there is going to be an American missile going off somewhere over Canadian airspace, I think Canada should be at the table making the decisions.*"¹⁵ The August 2004 decision to support GBMD through ITW/AA appeared to be confirmation of some level of support

for missile defense and certainly a reaffirmation that Canada should have a seat at the table and NORAD should remain relevant.¹⁶ Comments by senior Canadian officials also indicate that there could be a reexamination of the issue by a future government, one senior defense official told CBC news “It is a firm ‘no’. I am not sure it is an indefinite ‘no’.”¹⁷ Given the partisan circumstances under which the decision was made, it is reasonable to consider the benefits of current support through ITW/AA as well as the merits of potential enhanced support (most likely in a political form, due to the operationally advanced stage of GBMD’s development), versus no further engagement or partnership in GBMD for Canada’s national interests.

What is BMD?

It is often said that missile defense is America’s new ‘Star Wars’ program. However, BMD is neither ‘Star Wars’ nor the ‘Son of Star Wars.’ The Canadian media, and even some academics, have adopted the term ‘Star Wars’ as a pseudonym for Ballistic Missile Defense. Referring to BMD in this manner is not only inaccurate, it biases the nature of the debate. ‘Star Wars’ was the catchy nickname given to the US Strategic Defense Initiative (SDI) – Ronald Regan’s vision for an all-encompassing missile shield over North America. The program was widely criticized for its potentially destabilizing effects on the US-Soviet relationship, as well as for its futuristic design, hence earning the nickname ‘Star Wars.’ In its mature state, it was to include the deployment of thousands of space-based interceptors, known as the Brilliant Pebbles Program.

Modern day missile defense bears no resemblance to SDI. The current system the United States is building is designed to defend against a relatively small number of missiles—the sort of arsenal a rogue state such as North Korea might possess, and not against Russia’s thousands of nuclear weapons.

There are a number of layers of anti-missile systems being deployed under BMD, and it is essential to identify which layer Canada could become involved in. It is essential to consider the layers Canada could politically and logistically become involved in because support or direct involvement of each separate layer carries different concerns, implications, and requirements for participation. Missiles can be intercepted in a number of phases, ranging from their boost phase—that time while the rocket is still running—to the terminal phase, when the warhead plunges back through the atmosphere towards its intended target. The United States is conducting research and development into a number of potential systems in developing their layered defenses, ranging from the highly-mobile theatre boost phase intercept by an airborne laser, to the terminal phase intercept by the Patriot II System. Canada however has only ever considered bi-national involvement in one system: Ground-based midcourse missile defense.

Which Portion of BMD is Canada Currently Involved in and What Portion Did Canada Consider Partnering in?

Canada has only ever considered participation in American missile defense through the Ground-Based Midcourse Defense (GBMD) initiative. Ground-Based Midcourse Defense is a missile defense system that is designed to defend against a long-range missile attack upon the North American continent, and it is managed under the aegis of the US Northern Command (USNORTHCOM).

First, it is important to clarify current Canadian involvement in the system. In February of 2005, immediately following the release of the federal budget, the Government of Canada announced that it would not join Ground-Based Midcourse Defense. Prime Minister Paul Martin stated, "It is in respect of that discussion that we are announcing today that Canada will not take part in the proposed ballistic missile defense system... BMD is not where we will concentrate our efforts. Instead, we will act both alone and with our neighbors on defense priorities outlined in yesterday's budget."¹⁸

The government's decision to decline direct participation in ballistic missile defense should not be misconstrued as Canada having chosen to avoid involvement in missile defense completely, but rather a decision to refuse a partnership role in GBMD. While Canada is not a joint partner in any form of BMD, Canada is a facilitator and is therefore arguably a participant, to a degree, in the operation of Ground-Based Midcourse Defense through the provision of information critical to operating the GBMD system. Canada is already involved in GBMD through its NORAD relationship. In August of 2004, Canada and the United States amended the NORAD Agreement to allow Canada to provide necessary information for the operation of the NORTHCOM GBMD system through NORAD's critical and well-established ITW/AA function. NORAD is thus involved in the operation and facilitating of GBMD through contributing data essential to the operation of the system, but is not involved in any of the GBMD decision-making processes or the execution phase of the system. Considering Canada's current involvement and support of GBMD through ITW/AA necessitates a careful consideration of what exactly GBMD entails and what the implications of Canadian support are. Furthermore, the current government's decision to refuse direct participation in missile defense is not necessarily a permanent policy. Several Canadian defense groups and senior military members have noted in private that the decision is not necessarily permanent and could be reconsidered (albeit with an increasingly smaller role as time marches forward) and Canada could accept a renewed offer by the United States, if the United States chooses to do so. Regardless of whether or not Canada ultimately decides to remain in its current role or expand involvement in GBMD, the nature of the system must

be clearly explained to facilitate a cogent debate and to understand the effects of Canadian involvement in GBMD on Canadian interests, security and sovereignty.

Ground-Based Midcourse Defense is a system of ground-based interceptors, located at bases in Alaska and California, that are designed to counter a limited Intercontinental Ballistic Missile (ICBM) attack (up to approximately twenty warheads at full capacity) through the execution of a kinetic and exoatmospheric 'kill' of the incoming warhead.¹⁹

These interceptors are located at two test bed areas in the United States: six are stationed at Fort Greeley, Alaska, with plans for ten more to be installed in the ground there by the end of 2005, and two are currently stationed at Vandenburg Air Force Base in California. There are no plans to add additional interceptors to the Vandenburg site. The test bed concept allows the US to deploy a measure of protection by erecting some preliminary interceptors while continuing to test and improve upon the system. The Bush administration argues that implementing the test bed concept allows the United States to simultaneously address the pressure of passing deadlines for deployment without permanently deploying a premature system.

The ground-based interceptors are comprised of two portions: a launch vehicle and a kill vehicle. The launch vehicle is simply the rocket that propels the interceptor into space at its proper trajectory and speed before separating and dropping back down to earth. These launch vehicles are similar to those used to launch NASA satellites and space stations. The kill vehicle is the active component of the interceptor. It is a six-foot tall concrete-and-metal 'slab' designed to slam into an incoming warhead at an extremely high velocity.²⁰ In addition to its concrete and metal components, each interceptor has an onboard guidance system that is capable of performing infra-red identification and tracking of the incoming warhead, as well as to receive information from Ground-Based radars to help it adjust its trajectory and directional thrusters to guide it to the target.²¹

The kill vehicle then identifies its target and adjusts its trajectory to perform an exoatmospheric kinetic kill, using 'bullet-hitting-a-bullet' technology. It sounds alarming but it is actually quite safe. Bullet-hitting-a-bullet technology simply means that the kill vehicle (an Exoatmospheric Kill Vehicle, or EKV), engages the warhead with the express intent of destroying it through collision. A kinetic kill refers to the demolishing of an incoming warhead through velocity alone, not surprising when one considers the force of impact between the two objects traveling at approximately 18,000 miles per hour.²² Considering the devastation that occurs in a car accident at a mere hundred kilometers per hour, and its not hard to imagine how the interceptor vaporizes the warhead on impact at such a phenomenal speed. There is no detonation of the incoming warhead and the warhead's

payload is not released or activated. It is destroyed upon contact. The exoatmospheric portion of the kill refers to the fact that impact between the warhead and the kill vehicle occurs at about 250 kilometres above earth's surface, putting the collision outside the earth's atmosphere.²³ One of the benefits of an exoatmospheric kill is that it allows any remaining particles of the warhead and interceptor to burn up on re-entry to the earth's atmosphere, rather than destroying the weapon in the earth's atmosphere as boost-phase and terminal missile defense systems do.

Extensive concerns have been expressed by many scholars and peace activist groups that GBMD will require Canadian territory, or that Canada will have to field interceptors to be protected under the GBMD system. Ernie Rehger of Project Ploughshares argues in his paper "Reviewing BMD Options and Implications for Canada" that Canada would be asked to host interceptors. Rehger theorizes that in order to receive coverage under the American BMD system, Canada would have likely have to field BMD interceptors, or risk being abandoned during an ICBM attack as American forces use American based interceptors to protect the United States.²⁴ Mel Hurtig, author of *Rushing to Armageddon*, has also expressed repeated concern about the United States "secret plans" to station GBMD interceptors on Canadian territory.²⁵ Michael O'Hanlon of the Brookings Institute asserts, however, that there is absolutely no evidence to support claims that the Pentagon would want or need to use Canadian territory in the GBMD system. Critics of the system base their trepidations about Canadian interceptors on the scientifically incorrect assumption that Americans will want to use the Canadian North to station interceptors, as it would offer the maximum defense against incoming ICBMs from Middle Eastern states, such as Iran. Scientifically speaking, the Pentagon does not require Canadian territory for any elements of the missile defense system, interceptors or otherwise. A number of sources document that additional US interceptor sites in Maine or North Dakota would be equally efficient as Canadian sites in terms of providing a rapid, effective and capable defense against Middle Eastern threats.²⁶ The Americans have discussed stationing a third test bed in Eastern Europe to defend against the Middle Eastern threat, but the use of Canadian territory is not required for an effective defense.²⁷

A careful survey of available literature, government documents and expert analysis reveals that no evidence exists to prove that the use of Canadian territory for interceptors has ever been a focus of discussion. The fact is, discussions about the use of Canadian territory for interceptors are not, and have never been, underway because it is simply not necessary to do so. Oddly, Rehger recognizes this and contradicts his earlier arguments, stating, "He [Bush] certainly doesn't need Canada's technical, territorial, or financial help..."²⁸ The United States could conceivably request Canada the use of Canadian territory in the future; however,

it has not been a part of discussions to date and is not required for an effective defense. There is also no evidence to support Rehger's claim that Canada would be required to field interceptors to receive protection under the GBMD system. Requiring Canada to host interceptors in order to qualify for protection under the system undermines the basic fundamental logic and principles of continental defense – the recognition of North America as a single theater of operations. The Ogdensburg and NORAD agreements (which will both be further discussed later in the paper) were founded on the belief that Canada and the United States faced a common threat so great that they had to cooperate to defeat it and that a single rationalized, effective defense was more important than the details of which country provided which resources.²⁹ For the United States to require Canada to host interceptors in order to be protected under the system would undermine the very basis of NORAD, something neither Canada or the United States has an interest in doing.

The United States has no interest in allowing Canada to be struck by a ballistic missile. A devastating strike on Toronto would not only damage American economic interests through shutting down critical Canadian-American trade, but would also risk devastating radiological contamination of North Eastern American states such as Ohio and New York. Radiation does not recognize the 49th parallel as a border and it would make no military, economic, or political sense to allow Canada to be struck by an ICBM. Finally, Rehger's argument about the necessity of Canada hosting missiles is contradicted by the functioning of the GBMD system. Interceptors are launched relatively early into an ICBM's flight, once the ITW/AA process confirms the missile poses a threat to North America. The nature of the GBMD system is such that the missile is shot down when it is deemed to be a threat to North America and before its exact target is known.³⁰ The US could not know if the missile was aimed at a Southern Canadian city or a Northern American one and, out of prudence, would have to shoot the missile down. Over 90% of Canada's population lives within 160 kilometers of the US border, meaning that NORTHCOM would have to assume the vast majority of missiles heading for southern Canada were possibly targeted at the US.³¹

It is interesting to note that in the face of concerns about American lust for Canadian territory, the Pentagon has not requested that Canada upgrade existing radar sites. It has, however, requested this of the Danes and British, both of whom cooperated with the Americans. The Pentagon's Missile Defense Agency has deliberately developed GBMD to function without Canadian participation or the use of Canadian territory in order to allow the United States to develop missile defense for its own national protection, irrespective of Canada's final decision on the issue.³²

A great deal of confusion surrounds the issue of GBMD's interceptors, with the main confusion emanating from what actually constitutes an interceptor and how the interceptor destroys the incoming warhead. Fears of nuclear explosions in space and heavily armed missiles are the predominant concerns about GBMD's interceptors, but upon closer examination the fear is unfounded. GBMD interceptors destroy through velocity alone; they do not carry any form of warhead, incendiary or explosive device.³³

Is Canada Contributing to the “Weaponization of Space”?

Many groups in Canada that oppose missile defense argue that participation in GBMD is tantamount to, or will lead to, the weaponization of space, violating Canada's traditional policy of opposing the placement of weapons in this last frontier. Mel Hurtig, writes that all US missile defense plans are ultimately designed with the goal of weaponizing space and therefore Canadian agreement to any kind of missile defense is tantamount to complicity in weaponizing space.³⁴ Hurtig claims that, “So-called US missile “defense” system is really about establishing a US first-strike-from-space capability,” and that “numerous official US documents reveal their plans to ‘dominate space’ and place deadly lasers and nuclear weapons in space.”³⁵ He goes on to argue that Canadian politicians want to join this global, space-based nuclear strike capability and therefore Canadian involvement in BMD is tantamount to Canada launching nuclear weapons into space. Clear logical fallacies exist in the GBMD equals the weaponization of space arguments including several very tenuous links between unrelated US documents in an attempt to reveal a conspiracy, not to mention in Hurtig's particular case a suspicious absence of any footnotes, endnotes or sourcing. Regardless of the reliability of the sources or the strength, coherence or accuracy of Hurtig's particular comments, concerns about GBMD contributing to the weaponization of space must be addressed due to their dominance in the debate and implications for Canadian policy if proven correct. The majority of arguments opposing Canadian participation in GBMD are based in the assumptions about GBMD contributing to the weaponization of space and vehement opposition to that concept. Canada has a clear policy stance against the weaponization of space and multiple polls demonstrate that Canadians widely oppose the idea of placing weapons in the final frontier, but the question remains: does participation in GBMD contribute to the weaponization of space and could participation in the system draw Canada into other space-based missile defense systems? In light of the vocal dominance of the anti-weaponization of space lobby, current Canadian policy and apparent public opinion, it is essential to examine whether or not Hurtig and his fellow critics are correct that GBMD does or could involve Canada in the weaponization of space.

A great deal of the opposition to Ground-Based Midcourse Defense stems from the deliberate blurring of the lines between the militarization and the weaponization of space on the part of missile defense opponents. The militarization of space began when the Soviet Union launched Sputnik in 1957, and it is not prohibited by any international agreement or Canadian policy. Militarization of space includes the use of space-based assets for communication, surveillance, navigation (such as the Global Positioning System), weather reporting, etc. Weaponization of space, on the other hand, involves the deliberate placement of weapons systems in space for the purpose of destroying other space-based assets, or targets on the earth's surface.³⁶

No new weapons precedents will be established by participation in GBMD. The system will utilize the sensors located onboard the existing Defense Support System (DSP) constellation of satellites to warn of a ballistic missile launch.³⁷ The DSP system is the same system Canadians and Americans have been using since 1970 to fulfill NORAD's most critical mission, that of ITW/AA. In the near future, the DSP system will be replaced by the Space-Based Infra-red High Satellite constellation, which will provide improved early warning information to NORAD, and it will also assist with target acquisition for the EKVs.³⁸ Participating in GBMD in no way contributes to the weaponization of space, as it places no weapons systems in space, only upon the earth's surface.

Canadian policy recognizes the distinction between the weaponization and the militarization of space as is evidenced by Canadian participation in numerous international agreements prohibiting the weaponization of space, while the Canadian Forces (CF) simultaneously access the advantages space-based assets offer the modern soldier.³⁹ Canadian civilians also benefit from space-based military assets on daily basis. Canadians rely on the military system of GPS satellites to fly airplanes, navigate using onboard computer systems in their cars and even to make a simple ATM transaction to buy dinner (ATMs rely on GPS timing signals to remain synchronized). Canada's critical infrastructure system is another example of the essential role space-based assets. Another example of Canadian reliance on space-based assets is revealed by considering Canada's critical infrastructure system. The current space architecture forms much of Canada's critical infrastructure system that Canadians rely upon to survive in emergent scenarios to provide critical services.

Historically, Canada has consistently been involved in defense space projects whether indigenous; such as studies of the atmosphere, ballistic research and development and satellite design and construction of the 1950s, or through American assets and projects, typifying the 1980s and 1990s.⁴⁰ There are many modern examples of the Canadian government utilizing space-based assets for military

purposes. During the 1999 Kosovo air war, Canadian CF-18 Hornets were responsible for dropping 10 per cent of the total attack ordinance delivered in the form of Precision Guided Munitions (PGMs).⁴¹ These so-called 'smart' bombs allowed the CF to engage in highly specific and accurate targeting, thereby minimizing the loss of innocent life. Canadian pilots relied upon satellite reconnaissance, as well as intelligence assets located on the ground, and that obtained from actual area flyovers to accurately select targets for bombing. Satellite weather information further increased accuracy by providing pilots with the fullest possible awareness of factors such as wind or cloud that may influence their flight or ordinance drop. Without access to this imagery, the Canadian mission would likely have been less accurate and would have probably generated higher rates of collateral damage.⁴²

Canadian Forces involved in the War on Terror make extensive use of satellite communications to receive orders from their commanders, to download lists of suspected terrorists while performing interdiction operations, and to navigate across remote areas, using GPS systems to hunt down Taliban and Al Quaida fighters.⁴³

Project SAPPHIRE is proof that the Canadian government considers space-based assets critical to defending Canada's national interests. SAPPHIRE is a \$C 66 million spy satellite scheduled for launch in the 2009-2010 time-frame, that is designed to provide the Canadian government with situational awareness of man-made objects in medium-to-high orbits of outer space.⁴⁴ SAPPHIRE will function in support of DND's space surveillance mission to monitor potential space threats, including detecting foreign satellites spying on Canadian troops or territory.

SAPPHIRE offers the government two distinct advantages – an independent ability to monitor objects in space, and a way to 'keep a Canadian foot in the rapidly-closing door' of access to American space operations. Canada will have sovereign access to space information for the first time, thanks to this 32-inch satellite, which will beam its information directly into a Canadian control station.⁴⁵ That information will then be forwarded to be used in support of NORAD's missile warning mission. SAPPHIRE will offer a Canadian feed from the Space Surveillance Network (SSN) for the first time, making space surveillance and early warning a de facto bi-national operation, instead of NORAD relying upon purely American-originated information.

SAPPHIRE offers the additional benefit of providing access to and knowledge about American space operations through participation in the SSN, an important step in circumnavigating the increasingly-protectionist tendencies of Pentagon policies. Evidence of the American preference to keep space operations to itself

can be found in the realignment of the US command structure in 2002 under the Unified Command Plan (UCP).⁴⁶ The UCP mandated that Space Command (USSPACECOM) should move from its traditional headquarters at Colorado Springs, where it shared a commander with NORAD, to Nebraska, where it was merged with US Strategic Command (USSTRATCOM), the command in charge of American strategic weapons. According to Jim Fergusson, Director of the Centre of Defense and Security Studies at the University of Manitoba, severing the “organic link” between NORAD and SPACECOM was a clear signal that the Americans wanted to keep weaponization of space issues, and more arguable space issues in general, to themselves.⁴⁷ NORAD insiders have been whispering about the increasing difficulty in accessing information about US space operations for the last five years, a trend that has been magnified since USSPACECOM moved and Canada lost almost all of its remaining access; access that had existed as a by-product of the previous co-location of the USSPACECOM and NORAD headquarters facilities in Colorado Springs. There are still ten Canadians active in Air Force Space Command, which used to be a subset of USSPACECOM, and is now a subset of USSTRATCOM.⁴⁸ However, the level of Canadian participation in this Command is nowhere near where it was in the 1990s, when a certain Canadian general was jokingly-reminded that the purpose of the Canadian presence at NORAD was not to infiltrate USSPACECOM!⁴⁹

This trend of distancing Canada from space operations is disturbing, because it is in Canada’s national interest to remain at the discussion table in order to maintain access to information about American plans. It is unrealistic to think that Canada would be able to stop the United States from deploying space-based missile defense in the future, should the Americans believe it is in their interest to do so.⁵⁰ A ‘seat at the table,’ however, would provide some level of influence, and, more importantly, it would provide insight into American plans and it would allow Canada to react before it performed a reactionary whiplash to a fait accompli.⁵¹ Given the American desire to keep space operations purely American, it is really nothing more than a form of fear mongering to declare that the United States would ask for Canadian participation in a US space-based missile defense program. The Pentagon is well aware of Canada’s views on weaponizing space, and, more importantly, it is not in American interests to involve third-party countries in such a sensitive arena. There is no evidence of an American desire to create a multinational ‘coalition of the willing’ with respect to weapons in space. If the Americans ever do weaponize space, they will seek dominance, not burden sharing.⁵² The Americans neither want nor need Canadian help with their space research.

It should also be of comfort to many Canadians that any real effort to deploy space-based missile defense is many years from fruition. The technology, at the

time of this paper, is unreliable and unproven, specifically to the degree or accuracy that US Defense Secretary Donald Rumsfeld has specified—100% accuracy. The Bush Administration closed the space-based missile defense office in the Missile Defense Agency when it first came to power in 2001 because the technology was considered too futuristic and unproven to warrant any major effort. The proposed Fiscal Year 2006 budget holds a drastic funding cut in for missile defense. The strategy appears to be one of freezing one program—space based missile defense—in favour of keeping other more proven, reliable and developed systems ones alive. It appears the Bush administration is willing to sacrifice space-based missile defense in favour of ground and sea based systems, at least for the present. The Bush administration's requested defense budget for Fiscal Year 2006 will slash more than \$1 billion dollars of funding from the Missile Defense Agency and an addition \$800 million in FY 2007, with the majority of the cut targeted at the space-based Kinetic Energy Interceptor (KEI).⁵³ The KEI is the most developed form of space-based missile defense and rationale for the development of a space-based test bed, a cut to the KEI program renders direct funds to space-based missile defense to \$10.5 million per year.⁵⁴ Despite these cuts, the Pentagon will continue to receive indirect funding for space-based missile defense, primarily through research related elements, such as the Near-Field Infrared Experiment (NFIRE), which is scheduled to receive \$68 million per year.⁵⁵ NFIRE will provide an enhanced study of rocket plumes from space and possibly carry a space-based kinetic kill vehicle to be used in missile defense or anti-satellite (ASAT) activities. Overall missile defense and particularly space-based missile defense still represents a tiny portion of the total US defense budget considering the entire BMD budget accounts for only 3 per cent of the total US defense budget. If funding can be viewed as a commitment to a system, then the lack of funding and development of space-based missile defense is telling—this type of system is a long way off and low down on the list of priorities. Space-based missile defense is nothing more than a research and development project at this time. It may or may not be deployable one day, but either way, it will be a purely American initiative that Canada will not be asked to join, and will have no ability to prevent.

US Command Structure and the Slippery Slope to Weaponization of Space

A great deal of apprehension swirls around the concern that Canada may now agree to support or participate in a limited, ground-based system and find itself trapped in a space-based system that Canadian policy clearly forbids (assuming that space based system constitutes the weaponization of space). To suggest that

Canada could be tricked or trapped into any system that counters the explicit Canadian position on the issue would seem to provide an unfounded critique of the intelligence and capabilities of Canadian politicians, bureaucrats and military brass in pursuing Canada's national interests as well as Canada's legal right to withdraw from agreements which have shifted away from their initial incarnation without explicit approval of all parties involved. Apart from the deeply negative assumptions about Canada's consciousness and capabilities, the argument that Canada could find itself trapped in a space-based missile defense system belies a deep misunderstanding of the nature of the US command structure, as well as the role and structure of the system. Ground-Based Midcourse Defense is designed to protect only North America and is therefore not a space-based system that would be assigned to a command with space or global responsibilities. Canada is not party to any American command with global or offensive capabilities and as such an explicit decision to join would be required, as well as American consent for Canada to join. The nature of the US command structure would not allow Canada to accidentally join space-based missile defense because of the way command missions are assigned, an issue discussed in depth below.

Linking command and control of a missile defense system to space-based operations offers compelling aesthetics, a seemingly contiguous and therefore logical explanation of the convoluted dynamics of command, control and mission in the US command system. However upon careful examination it is revealed that there is no automatic link between command and control and the execution of missile defense. First, an examination of the current system will reveal that Canadian support and de facto participation in GBMD will not result in automatic participation in space-based missile defense due to the architecture of the US command system. Second, the tenuousness of linking command and control in general to the execution of any specific mission will be discussed.

Currently, Ground-Based Missile Defense is assigned to Northern Command (USNORTHCOM), the American command tasked with homeland defense and liaising with civilian authorities to coordinate emergency response in the event of a terrorist attack. USNORTHCOM is exclusively American, unlike its bi-national roommate NORAD, and the two commands share Cheyenne Mountain as their operational headquarters. The Department of Foreign Affairs acknowledges the overlap between NORAD and USNORTHCOM missions stating,

Significant overlap exists between NORAD's threat tracking and assessment mission and the missile defense mission assigned to the US-only Northern Command (NORHTCOM), which is collocated with NORAD in Colorado Springs. Many US NORTHCOM personnel,

*including the commander, are at the same time 'double-hatted' as NORAD personnel.*⁵⁶

Current Canadian support of missile defense exists through the Integrated Tactical Warning and Attack Assessment function, performed in the Missile Correlation Center (the MCC, formerly the Missile Warning Center) of Cheyenne Mountain as a NORAD mission. The NORAD Americans performing this mission are also double hatted as USNORTHCOM utilizing the ITW/AA information to execute a USNORTHCOM response to threats, in particular ICBMs as the MCC is also the USNORTHCOM GBMD execution center, and the GBMD operator responsible for launching interceptors is located within the MCC at all times to reduce potentially devastating logistical delays, ensuring rationalization of command structure. ITW/AA informs missile defense operators of when an attack is occurring and provides details of the nature of the attack, including the speed, trajectory, number and target of the incoming warheads. These are all critical factors in the decision making process to determine the nature of the response including how many interceptors need to be launched to effectively counter the attack, the trajectory interceptors should take, and the location interceptors ought to be deployed from. The provision of NORAD ITW/AA as facilitating information for the missile defense mission is the only link that exists between Canada, USNORTHCOM's GBMD, and NORAD. Canadians are not participants in a new command or subordinate to any American command. They also continue to perform the same function they have for decades, only now they share the information produced by ITW/AA with one more command. Canadian participation in NORAD and its basic functions does not, and has never, constituted potential forced involvement in any sort of space-based defensive or offensive system. Provision of information to a command executing a ground-based system does not constitute forced participation in some future space-based system. Ernie Rehger, Director of Project Ploughshares—a group explicitly opposed to missile defense—acknowledges the falsity of implying that participation in a NORAD mission is, or could ever be, tantamount to participation in space-based missile defense. He states that, "It is highly misleading to confuse air-defense and missile defense in space."⁵⁷

Critics of Canadian participation in missile defense are not sated by the argument that current Canadian support of missile defense via ITW/AA is the continuation of a previous mission with an additional client rather than a new mission altogether. Some critics, such as Mel Hurtig, argue that any future increased participation in missile defense will place Canada in a position that forces it to participate in space-based missile defense.⁵⁸ The structure of the US command system suggests, however, that even with greater participation in a ground-based

system, Canada would not be at greater risk for being trapped into a space-based system than it is now through the ITW/AA mission of NORAD or, in the future, possibly USNORTHCOM.

Due to the nature of the GBMD system, a future bi-national missile defense effort would be located in one of two commands: USNORTHCOM or NORAD. GBMD is a purely defensive system and therefore must be assigned to a defensive command, limiting options. The second limiting factor on GBMD is that it is only capable of defending continental North America, requiring it to be assigned to one of the homeland defense commands. Finally, it is an aerospace mission, requiring it be assigned to a command that is dedicated to the explicit defense of North American aerospace. This leaves only one option: NORAD. As discussed earlier, GBMD was not assigned to NORAD but rather to USNORTHCOM. The reason behind this decision was that Canada had not yet yielded a decision on direct and public participation in missile defense. GBMD, a purely US program, could not be assigned to a fully bi-national command in which one of the participants had not agreed to the system. Instead, GBMD was assigned to USNORTHCOM as the next logical recipient of the mission—USNORTHCOM was collocated with NORAD addressing logistical and time constraints of relaying ITW/AA information from NORAD to USNORTHCOM for GBMD's execution. USNORTHCOM also provided the most appropriate home for GBMD next to NORAD based on its mission: homeland defense in all three theaters of air, land and sea and responsibility for all of North America, including Canada and Mexico.

Based on the above information about the nature of GBMD and suitable commands for the mission, there are only two options for which a future bi-national ground-based missile defense could be placed and not put Canada at risk for the weaponization of space. The first scenario would see GBMD remaining a Northern Command mission, requiring a Canadian presence at Northern Command beyond the current liaison Bi-national Planning Group. The extent to which the US would be willing to restructure USNORTHCOM in order to build a fully bi-national command is debatable; however, USNORTHCOM would not need to become fully bi-national in order for Canada to participate in missile defense as a sovereign country. There are a range of participation options that could be considered to facilitate Canadian participation in missile defense ranging from full bi-national integration of the command, to bi-national cooperation on individual command programs such as missile defense. At a maximum, the entire command would transform into a bi-national NORAD type model, likely consuming NORAD in the process to avoid duplication of mission. This model would also likely include expanded continental defense in the areas of maritime and land

defenses, as well as coordination of disaster response—all expansion issues currently being considered by the Bi-national Planning Group in Colorado Springs.

The minimalist option for participation, possibly a more plausible model given Northern Command's already established role in civil defense coordination with US agencies as well as time and resource constraints that would be stretched by full bi-national expansion, would be to transfer NORAD's ITW/AA mission to USNORTHCOM. In this model, NORAD Canadians working in the Missile Correlation Center would also become USNORTHCOM Canadians responsible for executing the GBMD mission. This option would also allow ITW/AA to remain in the same location, providing the same function, but involving Canadians with new responsibilities. Essentially, this minimalist opt-in plan would reverse the current situation of USNORTHCOM Americans double-hatting as NORAD officers, to Canadian officers double hatting. This is the most probable configuration as it would involve the fewest changes, expenses and growing pains. In either of the above Northern Command scenarios or any of the possibilities existing in the spectrum between these two extremes of USNORTHCOM participation, Canada would not become involved in space-based systems. USNORTHCOM deals only and explicitly with homeland defense and has no mandate to operate abroad or wage offensive capabilities, both of which would be required to field a space-based missile defense system (see further explanation below).

In the second scenario, GBMD would be transferred to NORAD, restoring the command's mission of aerospace monitoring and defense (now against a full range of threats, including missiles). In this case, NORAD's previous North American aerospace mission would remain the same, with the additional capability to defend against missile attacks on North America. NORAD's theater of operations and area of responsibility would not shrink or grow, maintaining NORAD as a purely North American command. Furthermore, the addition of ground-based missile defense would maintain the role and capabilities of NORAD as defensive, not offensive. This is because GBMD's interceptors cannot be used in any sort of offensive fashion as discussed previously. USNORTHCOM Americans would continue to double-hat as NORAD Americans in the Missile Correlation Center and Canadians in the MCC would remain NORAD Canadians, however with a new mission, the execution of missile defense.

Two factors must be carefully considered to determine whether or not ground-based and space-based systems could be collocated in a single command, placing Canada in danger of participating in weaponization of space. The first factor that must be considered is the nature of ground-based missile defense as opposed to space-based missile defense including functional and geographic similarities and differences to determine whether or not the two would likely be collocated.

The second factor that must be considered is the structuring of the US command system—command capabilities and requirements—that dictate which missions are assigned to which commands. Carefully examining the nature of GBMD as compared to space-based systems as well as considering the possible commands that the system could be assigned to (given varying levels of Canadian involvement in GBMD) will clarify whether any incarnation of Canadian participation in a ground-based system could result in the country being trapped in a program of space-based defense.

The differing natures of ground-based defensive and space-based offensive systems place different requirements and demands on the command responsible for each that may be mutually exclusive. In this case, the two systems could not be contained by the same command. The nature of GBMD is defensive and limited to North America, while space-based missile systems are global and frequently considered to be strategically offensive. The nature of space-based missile defense must be carefully examined to determine whether or not it actually is functionally and geographically different from GBMD and, therefore, whether or not it may be placed in the same command as GBMD. This is important as it influences the argument that participation in GBMD would see Canada sucked into the weaponization of space.

Space-based missile defense is comprised of a range of mechanisms to facilitate boost-phase intercepts, most prominent among the options are space-based lasers and space-based kill vehicles (launched from space-based platforms). Boost-phase missile defense is difficult to discuss, because scientific research on the subject is extremely preliminary. It is not yet known which, if any, space-based mechanisms present legitimate and viable options for space-based missile defense and which are merely futuristic dreaming. Regardless of the mechanism used to negate the launching missile, it is accurate to describe boost-phase missile defense as a form of BMD that shoots a launched missile down while it is still in the boost phase (before the missile's rocket has burned out or separated from the warhead).⁵⁹ It is extraordinarily difficult to predict a missile's target in the boost phase because the arch, or the trajectory, cannot yet be calculated, making any interception of the missile a questionable defensive action. Space-based, boost-phase missile defense offers two major advantages over other types of missile defense (ascent, midcourse and terminal): the ability to preempt countermeasures and the creation of an additional layer of defense in a layered missile defense system. Countermeasures present the most significant challenge to midcourse missile defense. The very characteristics that make midcourse BMD an attractive option also render the system vulnerable to countermeasures: the length and predictability of an incoming warhead's flight path.⁶⁰ The midcourse of a ICBM's trajectory is the longest and most predictable phase of flight meaning intercep-

tors have the best chance of accurately predicting when a warhead will be in a particular location and arriving in the same location at the same time to destroy it.⁶¹ The length and predictability of the flight also offers the longest amount of time in the flight path for the deployment of various countermeasures designed to counter the predictability of the flight path and confuse or overwhelm interceptors with devices such as Mylar balloons, decoy warheads and the release of multiple reentry vehicles. Boost-phase missile defense circumvents these challenges by shooting the missile down before it has the opportunity to employ countermeasures.⁶² The second advantage of boost-phase missile defense is the additional layer of defense and therefore security it adds to the type of layered BMD system the Bush administration is pursuing. The earlier a missile is targeted by interceptors, the better the chances of defending against it with back-up mechanisms if initial measures fail. The layered defense system is designed to exploit different vulnerabilities and overcome challenges posed by ICBMs in each phase of flight, the addition of one more layer offers an additional layer of insurance.⁶³

The difficulty inherent in boost-phase BMD is that while an early intercept increases the chances of killing an incoming missile, the ICBM is negated before its target can be determined, making the shoot-down a strategic decision rather than a defensive one. The ability to shoot down any nation's missile at any given time, regardless of the target suggests that space-based missile defense could be perceived by adversaries (or allies) as a strategic offensive system, rather than a tactical defensive one. Space-based systems negate a weapon's delivery system before the purpose or target of the weapon's deployment can be determined and therefore cannot be considered a defensive system, as the criteria for self-defense have not been met, primarily proving that one is the intended target of an impending attack. Space-based missile defense fails to meet the criteria as a homeland defense mission if it cannot be proven to be purely defensive, and in fact, could even be used offensively to strike missiles on the ground before they are launched and pose a threat (this is a particular concern for space-based laser boost-phase technology). Whereas GBMD can only provide defense against an attack on the homeland, space-based missile defense has the ability to deprive other countries of the right to defend their territory, and the ability to attack and deter through preemptively destroying delivery systems, rather than simply negating an established attack already in progress.⁶⁴ Laser space-based systems in particular, are considered particularly worrisome in terms of defining their nature as offensive or defensive because they are capable of shooting down an unlimited number of missile launches through repeated firing of energy, a rechargeable source of ammunition. Laser space-based boost-phase missile defense, if successfully developed, could negate countries' entire arsenals before a missile even breaks the stratosphere or even leaves the ground. In other words, space-based

missile defense can destroy weapons in a pre-emptive strike before they are employed in an attack, an aspect of the system which is in no way defensive, a characteristic unique to space-base systems.

Space-based missile defense is, by its very function, global. In order to shoot down a missile in the boost phase, space-based assets must be located above or very near potential threats. The laser or kill vehicle's requirement to intercept the missile so early in its flight path requires the space-based capabilities to be in geosynchronous orbit near the launch point (of any suspected adversaries).⁶⁵ GBMD's kill vehicles, by contrast, are located only in the continental US, making it a homeland, rather than global, system.

The American command structure is built on a system of geographic and functional commands, meaning missions are assigned according to their geographic location and their function. As demonstrated above, ground-based and space-based missile defense systems are geographically and functionally different. Space based systems are global in location and execution and arguably strategically offensive. GBMD is located on and defends only the homeland. The GBMD system can only be used to defend against a confirmed attack in progress making it defensive. If the usual pattern of logic is followed in mission assignment, the two missions will not only be assigned to separate commands, but completely different types of commands. Canada's involvement in a defensive, North American command along the lines of USNORTHCOM or NORAD would not result in an automatic link to all other missile defense commands, especially space-based ones. GBMD will be tasked to a defensive homeland defense command, while space-based missile defense will be tasked to a global, strategic command – most likely USSTRATCOM.

United States Strategic Command is the command tasked with space force support, space force enhancement, space control and space force application.⁶⁶ The official mission of USSTRATCOM is to:

*Provide the nation with global deterrence capabilities and synchronized DoD effects to combat adversary weapons of mass destruction worldwide. Enable decisive global kinetic and non-kinetic combat effects through the application and advocacy of integrated intelligence, surveillance and reconnaissance (ISR); space and global strike operations; information operations; integrated missile defense and robust command and control.*⁶⁷

USSTRATCOM's role as the command responsible for global strategic strikes and military space operations in the form of space control and space force application as well as the explicit integrated missile defense duty suggests the

command could be chosen as a logical home for space-based missile defense. It is important to note that in many ways USSTRATCOM is an umbrella command, which has absorbed many smaller commands with space missions, such as Air Force Space Command, in the interests of rationalizing command structure under the Unified Command Plan. Given that USSTRATCOM now houses most commands with a space mandate and STRATCOM itself is the command responsible for global, strategic, space missions, it is the most likely home for space-based BMD.⁶⁸ The inherent differences between the nature and function of space-based missile defense and GBMD will see them assigned to separate commands under the US command system. The location of the two systems in different commands should allay the fear that participation in GBMD will result in Canada being forced to participate in space-based missile defense, an activity that will be undertaken at a completely separate, American-only command, unrelated to NORAD, USNORTHCOM or Canada. GBMD a ground-based, homeland defense system will remain at USNORTHCOM or possibly shift to NORAD, while space-based BMD will remain with commands with global, strategic space responsibilities like USSTRATCOM and its subordinate Air Force Space Command.

An important point of clarification arises in regards to the implications of USSTRATCOM's integrated missile defense mission for Canadian participation in GBMD and worries about subsequent Canadian weaponization of space. Strategic Command's integrated missile defense mission is often confused with command over all BMD systems leading to fears that even a bi-national GBMD under the auspices of NORAD or USNORTHCOM could be absorbed by Strategic Command. USSTRATCOM will provide operational support to all missile defense systems, including GBMD, through providing raw data on launches and the trajectories of man-made objects in space. However, this mission is no different from USSTRATCOM's current provision of support to DSP satellites responsible for transmitting information to NORAD to facilitate the ITW/AA function (USSTRATCOM provides the information officially, the actual DSP satellites are operated by Air Force Space Command). Operational support refers to providing this same sort of information to theatre or strategic missile defense systems, not command or control. Operational control and command of each missile defense system will remain with its designated command authority.

The issue of current Canadian involvement with USSTRATCOM is a source of further confusion on the issue of GBMD. As previously discussed, under the NORAD agreement Canada participates in ITW/AA which receives information from USSTRATCOM controlled DSP satellites and can be passed back to Strategic Command in ITW/AA format.⁶⁹ To construe Canadian participation through NORAD's ITW/AA role as de facto participation in Strategic Com-

mand is a misinterpretation of the situation. Canada merely accesses strategic command's resources in the same way that multiple other unrelated American commands do every day. Another potential area of confusion in the realm of ITW/AA and USSTRATCOM is NORAD's provision of ITW/AA to USSTRATCOM—information necessary to initiate the decision making process of civilian leadership that could lead to retaliatory nuclear strikes. The mere provision of ITW/AA is not tantamount to Canadian involvement in strategic command or its mission of nuclear retaliation; to claim it is ignores the history of North American continental defense. Since NORAD was formally established in 1958, it has been responsible for providing respective National Command Authorities with the information necessary to react to a threat, including the shooting down of incoming cruise missiles and providing information necessary to facilitate US authorities decision on the launching of retaliatory strikes.⁷⁰ Providing NORAD information to USSTRATCOM that could be used in planning a nuclear strike is unrelated to missile defense, and it has been an integral part of NORAD's function since the Command's inception. Canadian participation in missile defense would likely not change the nature of this function. Several prominent scholars, including Joseph Jockel, contend that NORAD was formed with the explicit and primary intent of protecting the American strategic deterrent forces, rather than the provision of protection to civilian population centers. In this light, the possibility of Canadians in NORAD providing information to STRATCOM knowing it could be used for the purposes of a retaliatory strike is hardly revolutionary; rather, it is well-established Canadian policy.

Is BMD Militarily Necessary?

Terrorism is, without a doubt, the most immediate and lethal threat to American national security. The sheer number of permutations and combinations of potential devastating asymmetric terror attacks is phenomenal: terrorists lobbing a nuclear-tipped cruise missile at San Francisco; detonating a radio active device stored on a cargo ship in Boston harbour; or, dispatching a smallpox-infected martyr through Manhattan's busy streets during their lunch hour. Canadian critics point out that missile defense would serve no purpose in any of these or many other devastating scenarios, and, therefore, BMD should not be pursued as it is a wasteful and dangerous diversion of resources.

It is true missile defense provides no defense against suitcase bombs, food contamination, or suicide bombings. However, it was not designed to deal with any of these threats. The fact BMD cannot protect against the preponderance of terrorist attacks is a legitimate argument for asserting that it should not dominate the US defense budget. However, it is also not an argument for abandoning long-term plans to deal with potential future threats, such as terrorists armed with

ICBMs, in favour of shortsightedly diverting all resources to immediate threats only.

Canadians are fortunate to have never experienced a significant foreign attack on Canadian soil, a condition that has likely contributed to the sense of invulnerability many Canadians exhibit today. The belief that Canada is immune from attacks or the effects of such attacks drives the line of argument that Canada should not participate in BMD, since ICBMs pose no threat to Canada. Furthermore, opponents argue that the development of a BMD system will generate renewed arms races around the world, resulting in a more insecure Canada than existed before the advent of a BMD system.

It seems implausible that other countries would deliberately seek to strike Canada.⁷¹ However, the Canadian assumption of invulnerability to ICBM attack vastly over-estimates the capabilities of rogue state technology to successfully and accurately strike an intended target. Technological advances have facilitated accelerated and covert proliferation of both weapons of mass destruction (WMDs) and their ballistic delivery systems. That said, the availability of materials and technological know-how is no guarantee of accuracy. Current-day proliferation differs from that of the Cold War in that it is uncontrolled and unconstrained. Proliferation has become horizontal, accelerated, covert and untested, in sharp contrast to the deliberate, overt, vertical proliferation of the Cold War. North Korea, for example, has never tested its nuclear weapons in conjunction with a delivery system, so no one actually knows how accurate or how effective their weapons delivery systems are.⁷² It is conceivable that in a nuclear attack scenario, Kim Jung Il could launch a missile at San Francisco, which could then miss and hit Vancouver. Even if Canada was never attacked, a nuclear strike upon the United States would have a devastating impact on Canada – neither radiation nor economic collapse recognize the 49th Parallel as a boundary.

Accepting that Canada would face a risk if the United States came under attack, one might still ask who would be irrational enough to strike the United States? The Americans have always maintained a policy option of responding to a nuclear attack with devastating force. Arguably, the main utility of strategic nuclear weapons lies in the deterrent value of their non-use: that is to say, the threat of use of nuclear weapons is a more powerful negotiating tool than their actual use. After all, it was this constant threat of use that established the concept of Mutually Assured Destruction (MAD), one of the nuclear policy elements that kept the United States and USSR from attempting any preemptive strikes during the Cold War. The reality is that while MAD was a useful concept when it existed between two countries with roughly equivalent arsenals, it does not apply to re-

relationships with a massive nuclear dissymmetry, such as the USA and any rogue state.⁷³

While no “rational” (wishing to survive) leader would attack the United States with a nuclear-tipped ICBM, the Americans cannot and will not take the chance of assuming all leaders are rational. The presence of al-Qaeda and various other martyrdom seeking (suicidal in Western terms) terrorists around the world has undermined the very principles of deterrence—fear of retaliation. In the political climate that follows 9/11, the US will be unwilling to risk the scenario of an undeterrable actor possessing a nuclear trigger finger.⁷⁴ Even if Americans believe that no one would ever deliberately use a nuclear weapon against their homeland, they will be unwilling to have their foreign policy held hostage by the threat of that use. One can only guess whether the Americans would be willing to risk confrontation with a nuclear-armed adversary such as Iran, a long-time adversary currently in the process of becoming a nuclear state. It may also be that the likely North Korean possession of nuclear weapons has influenced the nature of American policy toward that country somewhat. The possession of a countering missile defense system for the North American homeland significantly diminishes the urgency for such potential confrontations, and is therefore a stabilizing factor.

Participating in GBMD, the most limited of all missile defense systems, will not undermine Canadian non-proliferation policy. Canada is not abrogating any treaties or changing its stance on the unacceptability of nuclear weapons. No matter how much Canadians might wish it to remain a legitimate entity, the ABM Treaty is now null and void, a relic of the Cold War that has been renounced by the Bush Administration. This is hardly a drastic move, since one of the principal signatories, the Union of Soviet Socialist Republics (USSR), has ceased to exist. Also of note, and in spite of concerns prior to the American renouncement of the ABM Treaty, Russia has not even made public comment on the American position.

Evidence suggests that nuclear and ballistic proliferation is occurring independently of any US missile defense system. Evidence of this can be seen in Pakistan’s activities, where A.Q. Khan’s private proliferation initiatives commenced as early as 1987.⁷⁵ North Korea started building nuclear weapons while Bill Clinton was still in power and India and Pakistan appear to be far more concerned with each other than they are with the American missile defense system. North Korea is already capable of striking the United States with an ICBM and multiple other nations are pursuing at least mid to long range ICBM capability.

The proliferation of ballistic missile technology reflects the change that has occurred in the strategic environment.⁷⁶ The world is no longer bipolar with two stable and relatively predictable super powers controlling the dissemination of

ballistic missile technology. States are now able to acquire ICBM capability independently and do so for a number of reasons that simply did not exist to motivate them to proliferate during the Cold War. Smaller states are no longer able to rely on a super power to guarantee their security and, as such, must pursue unique national security and deterrence strategies, as well as participate in bids for regional dominance. ICBM capability offers states a way to solve multiple security dilemmas with a single weapons system.

One of the major reasons state actors, especially 'States of concern', pursue ballistic technology is because of the unique international prestige and profile associated with ICBMs. The prestige that ballistic missiles accord stems from their political, military, coercive and technical characteristics. Lieutenant General George E.C. Macdonald argues that it is the unique prestige, deterrence and international profile that states gain from ballistic missile capability that drives proliferation.⁷⁷ Even though there are a multitude of weapons that are easier, cheaper and more reliable to develop, states will pursue ICBM capability instead because of the international profile associated with ballistic missile capability.⁷⁸

Robert Walpole, the National Intelligence Officer for Strategic and Nuclear Programs testified to the Senate Foreign Relations Committee that ballistic missiles allow states to achieve three things they normally could not: the ability to deter action or external intervention in state or regional affairs; the ability to constrain conflict; and the ability to inflict a great deal of harm. Furthermore he pointed out, the capabilities, uses and prestige associated with ICBMs mean that states do not need to develop large, accurate or reliable ICBM systems to be able to reap the benefits of possession. This is because the point of developing ICBMs is often not their actual use - ICBMs are equally effective in their threat of use as they are in use.⁷⁹

The National Intelligence Council of the Central Intelligence Agency agreed with the above assessment that the threat of ICBMs is often a more powerful tool than their actual use. A National Intelligence Council (NIC) report stated that in particular Iran, Iraq and North Korea "view their ICBMs more as strategic weapons of deterrence and coercive diplomacy than as weapons of war."⁸⁰ States pursuing ballistic missile capability believe that possessing ICBMs will enable them to deter foreign, and more specifically, US intervention.⁸¹ The deterrent of an ICBM threat could have a significant impact on Canada and the United States' ability to realize their foreign policy goals.⁸² The ability to deter American intervention in national and regional affairs is cited as the major driving force behind Iran's Shahab missile acquisition program.⁸³

Intercontinental Ballistic Missiles clearly have a great deal of prestige, profile and deterrent value associated with their acquisition, but why is that ballistic

missiles have power associated with them that other weapons systems do not? There are four characteristics that give ICBMs their tremendous perceived value: technical, military/strategic, coercive/deterrent, and political. Each of these areas creates a set of drivers that make ICBM acquisition increasingly desirable and explains why they are so valued as tools of leverage in the international system.

Technical Drivers⁸⁴

Intercontinental Ballistic Missiles offer three technical benefits that make them attractive weapons: speed, assured penetration, and military effectiveness. ICBMs travel at a tremendous speed, and once launched onto their course are generally irreversible. Assured penetration is another benefit of using a ballistic missile. ICBMs rate of speed, combined with the current lack of effective countermeasures makes them nearly impossible to defend against. Finally ICBMs are considered to be militarily effective. While rudimentary ICBMs lack precision strike capability, their military targets are generally military bases, cities, or other highly-populated areas where generalized destruction is desired rather than a pinpoint hit. ICBMs are designed to carry warheads which could be armed with nuclear, radiological, chemical or biological payloads. The military effectiveness of an ICBM armed with a nuclear warhead is extraordinarily high as it will completely destroy its target.

Military Strategic Drivers⁸⁵

Psychological effects of ICBM use is a motivating military/strategic driver for ICBM development. ICBMs create an atmosphere of desperation and exhaustion in the areas they attack. Furthermore, the common association between nuclear payloads and ICBMs gives them an additional psychological fear factor, even if the ICBM is only armed with conventional explosives.

Military modernization is another driver for ballistic missile proliferation. A desire for modern forces and the ability to deter against foes and ensure regional dominance or stability has seen the modernization program of militaries like China updating, or in North Korea's case, acquiring ICBM capability. ICBMs are increasingly becoming part of state's military strategy.

Coercive and Deterrent Drivers⁸⁶

ICBM usefulness as tools of coercion and deterrence stem from their military and technical value. The inability to intercept and destroy ICBMs as one could a traditional attack, and their association with a nuclear payload, make them a threat policy makers are more likely to respond to than conventional threats.

Political Drivers⁸⁷

The overarching drive for ICBM acquisition is political and shapes the context for the other drivers. Political power and prestige is derived from ICBM's technical, military and coercive capabilities. In unstable regions of the world, like South Asia, ballistic missiles are of increased value because beyond ensuring state security, they aid in states' bid for regional dominance.

A number of states wish to acquire ballistic missile capability, however some are more determined and advanced in their acquisition programs than others. Iraq (prior to Operation IRAQI FREEDOM), Iran and North Korea stand out on the list of states pursuing ballistic capability as being particularly advanced and determined in their programs. It is estimated that within fifteen years Iraq (previous regime), Iran and North Korea will be able to strike North America with an ICBM.⁸⁸ Fifteen years may overestimate the amount of time it will take these states to acquire ICBMs as it is the estimated time required to achieve ballistic missile capability through indigenous programs not direct acquisition.

North Korea currently presents the greatest threat to North America of all the proliferating 'states of interest'. North Korea's ballistic missile program is more advanced and dangerous than other such states. The program is more advanced because of the possession of the Taepo Dong II Missile. The Taepo Dong II is an intercontinental ballistic missile, with a 6,000 km range – making it capable of striking Hawaii or Alaska.⁸⁹ The ballistic missile threat from North Korea is considered to be growing. The North Koreans have successfully launched a rocket used to put satellites into space, the same kind of rocket used to launch long range ballistic missiles.⁹⁰ This launch not only demonstrated North Korea's ICBM capability, but illustrated a far more advanced ability than the intelligence community had anticipated. Two significant and unexpected elements were demonstrated in the launch: multiple rocket separation capability and a three stage rocket launch, proving the Democratic Peoples Republic of Korea's (DPRK) ballistic missile threat was far greater and more immediate than previous intelligence estimates had indicated.⁹¹

Missile defense offers a strong economic deterrent to nuclear proliferation in rogue states, as these states would have to invest a massive amount of resources into constructing enough ICBMs to overcome even a limited missile defense system. This could financially exhaust a rogue state before it achieved even a measure of credible threat.

China and Russia remain states of major concern; states who's arsenals the current missile defense system is not designed to counter, save in a situation involving an accident or an unauthorized launch. Both accidental and unauthor-

ized launches are doubtful scenarios in China but much more conceivable in Russia considering the dilapidated systems and command structure as well as the presence of terrorist groups.⁹² In spite of the fact that GBMD is not specifically designed to (and furthermore could not) counter the full Chinese or Russian arsenals, there is a significant amount of concern that building the BMD system could lead to an arms race with China and Russia, as well as domino effect regional arms races with surrounding countries. China and Russia are both seeking to modernize their nuclear and ballistic arsenals, not because of missile defense, but from a desire to keep their nuclear capability relevant. In the case of Russia, it need not modernize or produce additional weapons to overcome the US missile defense system. China, has been actively expanding its nuclear weapons arsenal and ICBM capability for a decade, independent of missile defense developments.⁹³ The presence of GBMD would likely drive China and Russia to keep their arsenals relevant and up to date, but neither would need to engage in an arms race to overcome the BMD system and therefore is unlikely to waste resources on such an effort. Furthermore, both Russia and China are technologically sophisticated enough to possess ICBM countermeasures which could overwhelm the GBMD system.

Ultimately, Canada will face the unalterable reality that the United States has the right to defend itself and will react to threats—real or perceived. Nuclear weapons offer a prestige and weight in the international system that no amount of diplomatic negotiation can trump. The United States perceives missile defense as a response to the modern international environment of accelerated, covert, horizontal proliferation, and for better or worse, Canada will be affected by American plans. Ignoring the ‘stampeding elephant’ of the world’s only hyperpower reacting to perceived threats will not render Canada safe or secure. Canada must recognize and respond to the United States’ plans in a way that is considerate and supportive of Canada’s national interests.

Will Canada be Asked to Help Fund BMD?

The cost and effectiveness of missile defense are two of the most hotly contested contentions dominating the BMD debate in Canada. Critics charge that GBMD is a multi-billion dollar ticket item, and therefore a project that Canada cannot and should not fund in an era of limited defense budgets and a long list of other socio-economic priorities. Ernie Rehger argues that Canada will be required to fund additional interceptors capable of protecting Canadian territory, requiring a minimum investment of several billions of dollars.⁹⁴ Rehger then posits that Canada cannot afford to build these GBMD components, namely interceptors on a limited defense budget that he argues would be better spent on peacekeeping. Rehger’s criticisms fit with a larger class of argument against participation

in GBMD: that in an era of terrorism, Canada cannot afford to waste its money on futuristic systems when it should be focusing on port security and foreign aid. These are perfectly legitimate arguments, but they fail to address a critical point: Canada is not and never has been asked for money to fund any form of BMD.

The Bush administration is well aware of Canada's limited resources, as evidenced by criticism leveled at Canada's military spending from American Ambassador Paul Celluci who has repeatedly called upon Canada to increase defense spending. Knowledge and criticism of Canada's military decline and limited defense budget expands well beyond the five walls of the Pentagon and the Oval Office demonstrated by a number of public incidents involving influential media commentators and politicians. The most memorable and oft repeated of such incidents south of the 49th parallel being Pat Buchanan on MSNBC coining the term "Soviet Canuckistan," intended as a slight on Canadian defense spending, capabilities and social attitudes.⁹⁵ Knowledge of Canada's limited military finances combined with the current success of the quid pro quo model at NORAD suggests any Canadian future contribution to missile defense could be in the quid pro quo manner of past contributions to NORAD.⁹⁶ At NORAD, Canada pays 7-10 per cent of the total operating costs through personnel, not through direct financing. The US provides the majority of resources and the capabilities, and Canada retains 50 per cent of the command and control of this defensive alliance. This set up offers Canada the best of both worlds—access to world class facilities, maintaining sovereign access to threat information and decision making at a very minimal financial price.

Further evidence that Canada will not be asked for a direct monetary contribution is evident in examining Canada's current participation in GBMD. NORAD Canadians presently provide warning of a missile launch and vital tracking information through the ITW/AA function, at no additional cost to the Canadian taxpayer. Directing NORAD Canadians in the Missile Correlation Center to play a role in GBMD would not raise the cost of missile defense, it would simply permit the Canadians present to launch interceptors if an ICBM attack occurred on their watch, rather than simply warn of it.

Will BMD be Effective?

The effectiveness of Ground-Based Midcourse Defense is the topic of heated debates in the United States. Credible scientific organizations, such as the Federation of American Scientists and the Union of Concerned Scientists, have raised serious and legitimate concerns with respect to whether missile defense can work.⁹⁷ They point to highly controlled, even scripted tests under unrealistic conditions that still exhibit a 50 per cent failure rate. Prominent scientists, such as MIT's vocal Theodore Postal, worry about the inability of the current system

to distinguish decoys from genuine warheads. This is, indeed, a serious issue, considering that any nation serious enough to contemplate an ICBM attack would most likely account for BMD by adopting some form of countermeasures. The mid-course phase, while it is the longest and most predictable phase of flight for an incoming missile, also provides the perfect environment to deploy countermeasures. Possible countermeasures could include technologies that employ multiple reentry vehicles (MIRVs) in a greater number than the available kill vehicles; the release of decoy warheads to confuse or overwhelm kill vehicles; and propulsion systems onboard the warhead capable of producing an erratic flight path, or a secondary midcourse launch of a smaller warhead. It is important to note that all of these countermeasure technologies are sophisticated and extremely expensive initiatives making them challenging for adversaries to acquire on top of already expensive ballistic and nuclear technology. However, after spending so much money on the weapon and delivery system, a determined antagonist would have no reason not to employ at least basic measures to overcome GBMD and make the nuclear, ballistic investment credible and worthwhile.

The Missile Defense Agency points out that failed tests were the result of minor flaws in already established technology, not flaws in the actual missile defense system. Explanations for failed tests range from clogs in the coolant plumbing, not dissimilar to the type one might experience in the family car's engine, to failure of the booster rocket to separate – the same problem NASA faces in satellite launches. These problems are not specific to GBMD, but rather to components of the overall system such as the launch vehicle. It is correct that all failures thus far have been components of the system, not the system itself; however, it is not necessarily comforting that the system fails repeatedly for any reason – whether those failures be due to a single component or systemic.

Even if the technology cannot accurately distinguish decoys today, it is still reasonable to argue that future developments in radar and in the EKV's infra-red acquisition capabilities will ameliorate the problem and produce a system that can discern a Mylar balloon from a nuclear warhead. This is part of the rationale for developing a test-bed concept for the current GBMD system. The test-beds in Alaska and California allow the US to provide a modicum of defense against immediate threats, while simultaneously continuing to develop the technology, rather than prematurely fielding an under-developed system.

The concerns with respect to the accuracy of current technology are valid, but they are challenges facing the Pentagon, not the Canadian government. As long as Canada is not being asked to develop or fund the system, which is too far advanced and too expensive for our nation to fund at any rate, the shortcomings in the present technology are not issues Canada is being asked to, or will be invited

to, deal with. In time, the technology will likely develop – it is worth noting that the historical average failure rate of all new weapons systems is approximately 50 per cent—and given the resources behind the system and American determination to prevent attacks on the homeland, a strong desire to achieve the most effective technology is certainly present. However, even if the technology faced insurmountable difficulties, the Americans would develop it regardless of Canadian opinion, if it were in their interest to do so. At the end of the day, the United States is responsible for developing its systems of national defense and for being responsible to ensure their effectiveness.

Canadian pundits and lawmakers have no authority to control what weapons systems or national security policies the United States chooses to pursue. As long as Canada is not being asked to fund the system, which it is not, it has no right to instruct the elected members of the United States Congress on how to spend their nation's treasury. One can imagine the outrage in Canada if the situation were reversed based on the indignant, negative reaction to Ambassador Celluci's critiques of the Canadian military as "inappropriate" and "undiplomatic."

What Will BMD's Impact be on Canadian Sovereignty and the future of NORAD?

Historically, Canada has pursued joint continental defense with the United States as much out of security as sovereignty concerns. In 1938 President Franklin Roosevelt swore "the people of the United States will not stand by if domination of Canada is threatened by any other Empire," effectively communicating that the United States would not tolerate Canada being dominated by a foreign power and thereby presenting a security threat to the United States.⁹⁸ Recognizing the potential sovereignty concerns presented by Roosevelt's statement and wanting to ally American security concerns, Mackenzie King reassured that "enemy forces should not be able to pursue their way either by land, sea or air to the United States across Canada."⁹⁹ This exchange, known as the Kingston Dispensation is one of the first examples of Canada's sovereignty-security dilemma.

In order to respond to American security concerns, while ensuring Canada's sovereignty, Canada began to pursue a strategy of 'defense against help.' Originally conceived as a security strategy for small states, defense against help postulates that in situations of geostrategic interdependence of two militarily asymmetric states, the larger more powerful state will make incursions on the smaller state's sovereignty to the degree to which it perceives the smaller state to be a security risk and therefore a threat to the larger state's interests. In order to prevent sovereignty incursions, the smaller state must adapt a strategy of controlling the larger state's 'help' by demonstrating that it is not a security risk. Help can be controlled by producing unilateral military credibility in the form of independent

capabilities sufficient to satisfy the larger state, or through conjoint efforts to address specific security threats in the form of bi-national military organizations, committees, and commands.¹⁰⁰

Canada has primarily pursued conjoint defense against help in the form of continental defense. The evolution of Soviet Strategic Bombers and subsequent implications for the importance of Canadian geography drove Canada to pursue military cooperation on a number of fronts to address America's "unhealthy" preoccupation with the North.¹⁰¹ References by senior American officials, such as Secretary of State John Foster Dulles' statement that Canada had become "a very important piece of real estate" underscores the importance of Canada's geography to US security.¹⁰² Cooperation coupled with the necessity for rationalizing air defense eventually led to the creation of NORAD, successfully reassuring the US of Canada's military credibility while simultaneously maintaining Canadian command of all military assets in Canadian territory.

The core of the missile defense debate is really about maintaining Canada's sovereignty through NORAD. This enduring defensive alliance has evolved significantly since the Command was formally signed into being on May 12th, 1958. Over the years, the Command has taken on additional responsibilities, ranging from aerospace monitoring with the advent of ICBMs, to intra-continental air warning and defense in the post 9/11 era. NORAD is fundamentally responsible for North American aerospace warning and aerospace control. Aerospace warning refers to the NORAD mission of ITW/AA – the process through which NORAD detects, characterizes and warns of potential air breathing (planes, UAVs) or ballistic missile attack.¹⁰³ Aerospace control refers to NORAD's mission to monitor and defend against airborne attacks on North America, including both perimeter and internal airspace.¹⁰⁴

Under NORAD's current aerospace control mission, the Command monitors and warns of impending ICBM attack, but is unable to defend against it. There is an undeniable irony that the Command is able to shoot down a hijacked airliner carrying innocent civilians, but not unmanned nuclear weapons. Lieutenant-General (ret'd) George Macdonald, former Deputy Commander of NORAD, has repeatedly made the argument that NORAD is a logical home for GBMD as it is the natural extension of the aerospace control mission and would parallel the current aerospace control and defense mission.¹⁰⁵ Missile defense is a natural extension of missile warning in the same way that air defense is the logical extension of air warning, a warning-defense partnership the command currently executes. Many Canadians and Americans might be surprised to learn that before the first interceptors were placed in Alaska and California, NORAD could only monitor an incoming nuclear warhead and predict its point of impact. The natural

tendency of most civilians is to assume that their government has some means of defending against missiles and therefore missile defense is unnecessary.¹⁰⁶

Canadian indecision and American political pressure to erect the system as soon as possible were both factors in GBMD being assigned to USNORTHCOM, as the United States was unable and unwilling to wait for a Canadian decision on the issue.¹⁰⁷ In August 2004, Canada amended the NORAD agreement to allow for Canadian support of GBMD through NORAD's ITW/AA mission. Essentially, this amendment was a band-aid solution to prevent Canada from being physically in the way of the American ability to utilize missile defense, which NORAD Canadians were previous to this decision.¹⁰⁸ Previous to the decision to act in support of missile defense, a Canadian on duty during an ICBM launch would have been technically unable to provide essential information for the operation of GBMD to American officers in the MCC. The possibility of the United States being deprived of ITW/AA information because a Canadian was unable to pass information on in a crisis is a scenario that would have undoubtedly seen Canada unceremoniously removed from ballistic missile warning function as it was transferred to NORTHCOM.¹⁰⁹ In the days preceding the American election, the Bush Administration would have been unwilling to face criticism for failing to erect the promised missile defense system because Canadian wavering got in the way. Accurately reading the political climate in the US, the Canadian government acted before it was too late, allowing NORAD to operate in support of missile defense. However, the current situation is no permanent solution to the threat of Canadian exile from the ITW/AA mission.

The result of GBMD being assigned to USNORTHCOM is an awkward interaction of Commands in case of ballistic missile attack, a situation the Americans may not be willing to sustain. The military rationale for leaving ITW/AA (a critical component of GBMD) with NORAD is questionable. Thus far, ITW/AA has remained with NORAD for a number of pragmatic reasons. NORAD has historically performed ITW/AA extremely well. Furthermore, it lays claim to ITW/AA as the traditional home of aerospace monitoring and warning. Additionally, the US has been busy standing up new Commands and Departments, therefore, it has been loath to burden itself with any additional non-essential shifts in command structure.¹¹⁰ This is not to say, however, that when the US gains stride with the new Command arrangements it will not decide to further rationalize command structures by removing ITW/AA from NORAD and assigning it to USNORTHCOM to streamline battle management.¹¹¹

It certainly would not be difficult for the US to shift the command structure in this way. NORAD Americans are de facto USNORTHCOM Americans who 'double hat' while inside Cheyenne Mountain, a result of the decision to double

hat CDRNORAD as CDRUSNORTHCOM. All that would be required to move ITW/AA to NORTHCOM would be to remove Canada from the Missile Correlation Centre, previously known as the Missile Warning Centre, in Cheyenne Mountain. Arrangements have long been in place to facilitate this transfer if necessary.¹¹²

NORAD would not cease to exist in such a scenario, however, NORAD's relevance would be reduced and Canada would sacrifice its aerospace sovereignty.¹¹³ NORAD would retain responsibility for air monitoring and defense and could possibly be expanded in the future to deal with maritime and terrestrial threats, a possibility the Bi-National Planning Group is currently examining.¹¹⁴ Regardless of potential future plans or the relevance of airspace monitoring and defense in an era of suicidal hijackers, if the United States shifts ballistic missile warning to USNORTHCOM, Canada will have lost a critical component of sovereignty; the ability to take part in North American activities that monitor and defend Canadian aerospace.

NORAD provides a litany of benefits to Canada, most of which are byproducts of the Command's fully integrated structure. The total integration of Canadian and American officers not only provides a coordinated, rational and effective capability to monitor and defend against threats, but also provides Canada with tremendous access to resources, a voice at the American table and privileged access to information.

Canada pays less than 10 per cent of NORAD's cost of operations, and the preponderance of that is comprised of quid pro quo contributions to the Command via personnel. In exchange for this meager contribution, Canada maintains 50 per cent overall command and control and also retains full national command. This allows Canada to retain sovereign aerospace defense on a very limited budget. If NORAD's aerospace mission is moved elsewhere, Canada will have two choices: either to hand Canadian aerospace defense over to the Americans and maintain bilateral air defense, or to spend untold but enormous sums establishing a national Canadian aerospace command.

It is implausible that the government will allocate billions of dollars to construct a new purely Canadian aerospace command, particularly given recent government distaste for military spending. In fact, Prime Minister Paul Martin cited increased military spending in the Fiscal Year 2005 budget as the reason why Canada would decline participation in missile defense. This suggests that if Canada lacks the funds to participate in BMD at a vastly reduced price tag, Canada certainly lacks the resources to build an independent aerospace command. Recognizing that an independent aerospace command is not a viable option, the likely option in a scenario of ballistic missile warning relocation,

would be Canada handing aerospace defense over to the United States. The Americans would likely be courteous enough, keeping up consultations with the Canadian government and providing some information. However, Canada would be reduced to the status of Iceland or Luxembourg, with an outside power largely responsible for the country's air defense. While Lieutenant General Rick Findley argued that nothing had fundamentally changed at NORAD after the Canadian decision to decline participation was made, Ambassador Paul Celluci had another view, stating "We simply cannot understand why Canada would in effect give up its sovereignty—its seat at the table—to decide what to do about a missile that might be coming towards Canada."¹¹⁵ Whether or not the Americans will have Canada's best interests at heart in defending Canadian aerospace is irrelevant. If this scenario plays out, Canada will have ceded a defining feature of nationhood and deprived the Canadian people of the ability to elect those who make significant portions of their defense policy.

As it stands, Canada's current involvement allows NORAD Canadians to provide information in support of the missile defense mission. However, no Canadians are involved in the missile defense decision-making process or the execution process of launching interceptors. In this way, Canada has already ceded sovereignty in terms of access to the decision making process, much less the actual decision to shoot down a potential nuclear missile. While NORAD Canadians can warn of the launch, they can do nothing to control how the interception is handled, regardless of whether or not it occurs over Canadian aerospace. There is a possibility that greater and more public support for GBMD by the Canadian government may result in missile defense moving to NORAD or Canadian involvement in the decision making loop. However, senior NORAD advisors point out that the system may have developed beyond the point where Canada can reasonably expect to see the mission assigned to NORAD, or to ask to be included in the decision-making process.¹¹⁶

NORAD provides disproportionate Canadian influence and access to information. Continuing or expanded involvement in missile defense might build on this positive relationship and prove invaluable for protecting Canadian national interests. Evidence of the benefits of collocation in maintaining Canada's influence and voice are demonstrated by the events of September 11th. Canadian Major-General Rick Findley, then NORAD now Lieutenant-General and Deputy Commander NORAD, had a critical role in defending the United States and indeed all of North America during the greatest crisis of American national security in history.¹¹⁷ No other ally would have been permitted to occupy a position of such trust, and it is unlikely any other ally would have retained it during a crisis of such magnitude without being immediately replaced by an American officer.¹¹⁸ Canada was afforded the opportunity to contribute in a tremendously meaning-

ful manner to American security because of the pre-existing NORAD agreement demonstrating the value and influence of such bi-national cooperation.

Supporting Major Canadian Defense and Foreign Policy Objectives:

Coherent defense policy capable of achieving national strategic objectives is a fundamental of good strategy. The question arises then of whether current support for, or future direct participation in, GBMD would support national strategic objectives. The discussion below argues that current support of GBMD and any future further participation is in keeping with national strategic goals identified in the two defining defense documents of the last decade: the 1994 Defense White Paper and the 2005 International Policy Statement. Both the 1994 Defense White Paper and the more recent International Policy Review set out several strategic goals for Canada among them: maintaining sovereignty and security of the nation, reducing the spread and use of weapons of mass destruction and maintaining a positive relationship with the United States through bi-national institutions and cooperation, such as NORAD. Participation in GBMD provides a policy capable of achieving all three of these goals, while maintaining Canada's policy and political sovereignty.

Slowing the Nuclear Trigger Finger

Canadian strategic goals on the topic of nuclear exchange have been clearly articulated for as long as nuclear weapons have been present in the international system—it is in Canada's interests to prevent potentially catastrophic nuclear exchanges. This strategic goal has been articulated through a number of policies, international initiatives and morassuasion, which Canada has proudly employed for decades. Canada has undertaken to formulate, support, implement and promote supported measures such as arms control and non-proliferation to reduce the chance of a catastrophic nuclear exchange. As new nuclear threats have appeared since the end of the Cold War, Canada has worked diligently to formulate, contribute to, support and implement solutions. It is clearly in Canadian strategic interests that Canada undertake a policy to reduce the threat of nuclear warfare.

A range of complex modern nuclear threats must be addressed by Canadian policy makers wishing to reduce the chance of nuclear war, such as: the emergence of non-state actors; the presence of insecure arsenals in new nuclear weapons states; and Russian ICBMs that remain on hair trigger alert status that are controlled by an increasingly disintegrating command structure. Canada must not allow reducing the chance of something as serious as nuclear catastrophe to be reduced to a simple "us" (the West) vs. "them" (Russia, China, Pakistan and other potentially adversarial nuclear states) equation. Just as Canada must strive to formulate policy that reduces the spread of nuclear weapons, encourages states

to disarm and reduces the chance of nuclear exchange, it is equally important to seek ways to slow the Western nuclear trigger finger.¹¹⁹ Recognizing that preventing a nuclear exchange requires as much work and self restraint on the “us” side of the equation as aid and international pressure to moderate the “them” side. If Canada is truly interested in reducing nuclear Armageddon, it must undertake policies that will not only prevent attacks on “us” by “them,” but will seek to moderate, reduce and, when possible, prevent nuclear retaliation to those attacks by “us,” including by the United States.

Participating in GBMD supports slowing the American nuclear trigger finger in scenarios of nuclear retaliation. Current American policy states that if the United States is hit with a nuclear missile, it will launch a massive nuclear attack in response. Retaliation is to be swift and brutal. The problem with this policy is that it fails to consider accidental or non-state actor launches, major problems in the Post Cold War and Post 9/11 international security environment. Executing massive nuclear retaliation on a country that has not deliberately launched a nuclear attack would be devastating and tragic for the millions of innocent lives lost. Missile defense provides a way for the United States to halt a limited attack, assess where the attack came from and the intent of the attack before responding with maximum force. Slowing this kind of nuclear knee jerk response is certain in keeping with Canadian sensibilities.

The 1994 Defense White Paper

The 1994 Defense White Paper is relevant to the discussion, even though it has since been replaced by the 2005 International Policy Statement on Defense because it formed the context for all discussions and decisions about involvement in GBMD until the spring of 2005. The decision allow ITW/AA to be employed as part of the GBMD system, as well as the decision not to join GBMD as a full partner were both made under the context of the 1994 Defense White Paper.

The 1994 Defense White Paper states, “sovereignty is a vital attribute of a nation-state ... Canada should never find itself in a position where, as a consequence of past decisions, the defense of our national territory has become the responsibility of others,”¹²⁰ demanding that Canada seriously consider the sovereignty consequences of non-support of missile defense for Canadian aerospace. While the decision to support GBMD through ITW/AA partially protects against Canada To fail to support GBMD and sacrifice aerospace sovereignty flies in the face of long established Canadian policy. Furthermore, the White Paper argues that Canada has three central goals, the top two of which are the defense of Canada and the defense of North America. Support of GBMD is de facto supporting both of these goals.

The International Policy Statement - Defense

The International Policy Statement on Defense (IPSD) articulates clear strategic goals that support for missile defense and future direct participation in GBMD could help to achieve.

The defense of North America is one of the three primary roles for the Canadian Forces set out in the IPSD, which states “The Canadian Forces will continue to perform three broad roles: protecting Canadians, defending North America in cooperation with the United States, and contributing to international peace and security.”¹²¹ The IPSD clearly asserts the importance of defending North America to Canadian security, sovereignty and interests. The document goes on to insist that Canada not only participate in continental defense, but seek to strengthen relations and institutions with the United States to facilitate that goal, suggesting Canada must seek, “... new and innovative ways to enhance relations with the United States to defend the continent.”¹²² The importance of a strong and positive relationship with the United States to achieving Canadian security is frequently highlighted and most clearly articulated when the IPSD states, “A strong Canada–US defense partnership remains essential to our security.”¹²³

The IPSD argues that the importance of a strong and continued Canada–US relationship lies in history, shared experiences, values and economic interdependence. The document recognizes the sixty-five year old historical roots of continental defense, and argues that the understanding produced by the 1940 Ogdensburg Declaration—that “North America’s security is indivisible”¹²⁴ and must be defended as a single theatre of operations – remains true today and should be treated as the foundation upon which to renew previous institutions and understands and to initiate new ones. The IPSD explicitly recognizes the importance of Canada–US cooperation in regards to security stating, “Our bilateral cooperation continues to provide us with a degree of security that we could never achieve on our own.”¹²⁵ In the post 9/11 environment, Canada and the US are more closely linked than ever before, according to the IPSD, especially in the domain of security. It is with this in mind that the document lays out a number of new and creative ways to pursue improved Canada–US relations and institutions.

As a part of the new, enhanced and creative ways to improve the Canada-US relationship, the IPSD lists specific initiatives as well as broad policy directions to pursue including: the recommendations of the Bi-national Planning Group to expand the NORAD model into maritime and terrestrial security; the modernization of forces through doctrinal concepts, technology, exchange programs and training to increase interoperability with US forces; to improve coordination between Canadian and American government departments to prevent and respond to terrorist attacks. All of these initiatives and policy prescriptions point

towards a common goal: improving and increasing the Canada-US relationship to protect Canada and North America. Support for GBMD through ITW/AA and possible future direct participation in GBMD are both policies which would help to achieve the aforementioned strategic goals.

In the post 9/11 era, the IPSD notes the US focus on homeland security and willingness to go to great lengths and even greater expense to defend its people, territory and interests. The document clearly recognizes the potential implications of American determination to protect the homeland at all costs on Canadian sovereignty stating, “It is clearly in our sovereign interests to continue doing our part in defending the continent with the United States,”¹²⁶ rather than leaving that defense up to the United States alone to be handled as they see fit. In light of these concerns, the document considers the importance of NORAD, the keystone of the Canada–US relationship, clearly linking participation in and the survival of NORAD to not only Canadian security but more importantly, sovereignty. Chief of the Defense Staff, Lieutenant General Rick Hillier notes, “These initiatives, while significant, are not enough. As part of our new, more sophisticated approach to our relationship with the United States, we will renew our commitment to continental defense.”¹²⁷ The CDS confirms Canada’s support for NORAD and declares that Canada’s support for missile defense through ITW/AA was in fact a means of demonstrating support for NORAD and continental defense and, more broadly speaking, for the sovereignty and security that continental defense brings to Canada.

Throughout the IPSD, the CDS (the primary author of the document) consistently uses strong language to emphasize support for the Canada–US relationship, continental defense, NORAD and technical support of missile defense through ITW/AA. In light of the greater emphasis and support for North American defense and the security and sovereignty benefits such defense provides, it is not unreasonable to posit that potential future further direct participation in GBMD would support all of the above policy goals as a new and enhanced bilateral security initiative—maintaining Canadian sovereignty, supporting the NORAD mission, and strengthening the Canada–US relationship.

The IPSD reaffirms support for the military use, although not weaponization of space. The document states under the section Transformation Initiatives “Aerospace Capabilities,” that CF-18s will acquire “a satellite-guided air-to-ground weapons capability,” which clearly demonstrates support for the military use of space-based assets, reaffirming Canada’s distinction between weaponization of space and militarization of space. Even more explicitly, the International Policy Statement on Defense argues that it is essential to “pursue the use of satellites to support domestic and international operations.”¹²⁸ The IPSD make a

clear commitment to the use of satellites and space-based assets in the interests of the betterment of the Canadian Forces, more effective operations and intelligence and surveillance capabilities.

Canadian Sovereignty and Interests

There has been a great deal of concern that direct participation in, or support for, GBMD will see Canada bullied by the United States and will quash Canadian sovereignty as the US requires Canada to alter policies vital to Canadian national and international interests. Even in the most extensive scenario of political and operational support (assuming the US allows this), Canada would only be involved in NORAD. To claim that NORAD has seriously altered or prevented Canada from achieving national policies the US disagreed with is historically inaccurate. There are numerous examples of Canada pursuing routes and policies the US disagreed with while maintaining NORAD membership. Prime examples of Canada independently pursuing policies while a member of NORAD are as follows:

- Canadian Forces at NORAD did not join their American counterparts in shifting to an increased state of readiness following John F. Kennedy's October 22nd, 1962 speech.¹²⁹ Instead, Canadian Forces at NORAD waited two full days before upgrading to the alert state of Military Vigilance, when Prime Minister Diefenbaker finally authorized such a transition. This is evidence that forces at NORAD remain under national command at all times, part of the sovereignty benefits the bi-national command offers. Here, Canada clearly exercised its sovereignty in disagreeing with the American military alert upgrade (for political and personal reasons) and rather than being dragged along with the American response, made an independent decision in choosing the time and nature in which Canadian forces would upgrade. When NORAD was established the key factor in its formation was the retention of national command over forces. Only joint operational control of forces was sought for the purposes of rationalizing defense (quick response to a threat). Canadian Forces under American control are no more beyond DND's command than Canadian Forces under UN commanders in the field.
- Canada both designed the Anti-Personnel Landmines Treaty and solicited the support of the international community. Although the US refused to sign the agreement, the US never attempted to stop Canada from constructing or pursuing it.
- The Canadian decision not to join the US led invasion of Iraq in 2003.

- A previous and similar historic Canadian decision not to join the Vietnam War.

These are only a few examples available that demonstrate Canadian participation in NORAD is an exercise in sovereignty that in no way impinges upon Canadian sovereignty or national interests. Participating in and supporting GBMD through NORAD (assuming it is consistent with previous types of participation in NORAD) will in no way prevent Canada from pursuing relevant policies or national interests.

Conclusion

In February of 2005, after sixty years of consistently treating North America as a single theater of operations, Canada reversed policy on continental defense with its refusal to formally participate in Ground-Based Midcourse Defense. For the first time since the Ogdensburg Agreement and the tradition of defense against help, Canada ceded its ability to defend against a threat to the United States: the ability to defend against Intercontinental Ballistic Missiles. As a result of this decision, Canadian sovereignty, as well as Canadian access and influence in continental defense are in the process of being marginalized.

There are many powerful arguments against missile defense including: the expense of the system, the questionable military necessity of constructing it and the effectiveness of a deployed system. None of these arguments are arguments against Canadian participation, however. Canada was not asked for territory, funding or significant input into the system and therefore these factors should not weigh upon a Canadian decision regarding participation in GBMD. GBMD clearly militarizes space, although it does not weaponize it allowing Canada to participate without violating the traditional Canadian stance against weapons in space. Furthermore, participation in GBMD in no way compromises Canadian policies or initiatives, in fact it supports many of them specifically articulated in the International Policy Statement of 2005.

Canada should reconsider invitations to join missile defense and decide whether or not it wants to be further involved in the system and politically support GBMD on the basis Canadian national interests. The Americans do not need Canada to be on-board, but the fact that they would certainly like it was made clear during President Bush's 2004 visit to Canada and Ambassador Celluci's marked disappointment following a Canadian refusal to participate. Canada's current bizarre de facto minimal participation without full support—the ability to track missiles without being involved in the decision making process to defend against them—ignores the interests that cooperation could serve for both countries.

BMD is progressing to the cost of Canadian sovereignty. It is time for the government to make a forthright decision on participation; one that is based on the best interests of the country and Canadians.

Notes

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**Stephenson Slide Addendum:
Ballistic Missile Defense: The Canadian Conundrum**

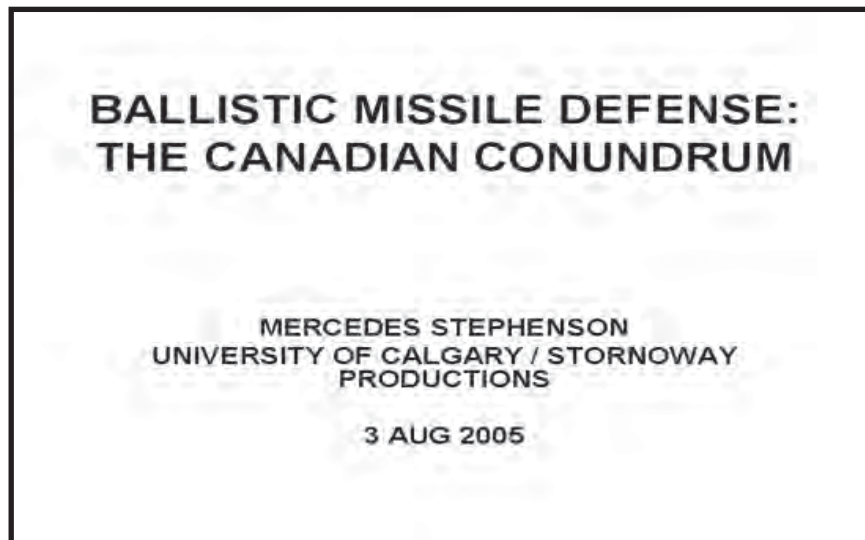


Figure 1



Figure 2

WHAT PART OF BMD?

- Ground-Based Missile Defense
- Utilize existing NORAD components

Figure 3

WHY SHOULD CANADA JOIN?

- Defense against help– sovereignty
- Tradition
- Rationalizing Defense
- Access to US tables
- Low Canadian cost for R&D (saves dollars for counter-terrorism)
- Logistical fit in NORAD mission and benefits
- High cost of saying "No"
- Policy
- Protection in world of proliferation

Figure 4

WHY NOT JOIN?

- Weaponization of Space (STAR WARS)
- “System won’t work”
- Concern about effects on proliferation
- Perception of no threat to Canada
- Anti-American venom

Figure 5

DUALITY OF CURRENT GOVERNMENT POLICY

- Effects on the Relationship
- August Amendment
- Band Aid solution turned into full-time policy
- Indecision – NORTHCOM – Future
- NORAD relevancy decreasing; poses challenges to expanding bi-national interoperability

Figure 6

ROLE OF POLITICS

- Minority Government
- Domination of irrationality in the debate
- Ambassador McKenna as trigger point for "No"
- Role of Quebec politics

Figure 7

A Canadian Citizen's Perspective of Officership in Canada: A Profession in Progress

Pamela Stewart

It matters little whether the Forces have their present manpower strength and financial budget, or half of them or double them; without a properly educated, effectively trained, professional officer corps the Forces would, in the future, be doomed to, at the best, mediocrity; at the worst, disaster.

— (General Jean Allard-The Rowley Report)¹

Introduction

Officer professional development, intermittently inclusive of education and training, has been a long-standing concern in Canada. The overall purpose of the Canadian Forces (CF)² and what Canadians perceive it to be is also a long-standing concern. The historical record finds such concerns intertwined throughout the officer professional development trials and tribulations of the last forty years. The concerns are justified for, as hypothesized by Carl von Clausewitz, there exists in human society, “a sacrosanct and symbiotic relationship between armed forces, governments, and the people” whereby the Trinity is at its strongest when each tri-entirety knows its purpose and understands its unique place in the Trinitarian relationship.³ In Canada, since at least the 1960s until recent times, the Trinity has been consistently undermined by an inadequate CF professional development system unable to sustain the intellectual health of the CF’s military due to two main factors: (1) the officer education-training dichotomy; and (2) the questionable existence of a Canadian “profession of arms”.

The paper shall follow a theoretical *military professional* approach which states that military professionalism must be based on the primary purpose of the military itself: war-fighting. As argued by Don Snider, military professionalism is neither relative nor subjective; but under objective civilian control. Senior military leadership’s obligation to uphold the tenants of a profession of arms “does not arise because those in the profession said so, [or those in government said so] but rather because it is necessary if the profession is to be effective in its purpose of war-fighting”.⁴ In the Canadian context, a healthy civilian-military relationship is, allegedly, achievable when the CF successfully “focus(es) on the function of managing violence” while simultaneously “remaining true to Canadian social values and national interests.”⁵

As such, this paper shall present a *historical chronology* with which to understand where CF professional development has been in the past and with which to surmise its future. This paper shall further imply that the main protection a military has against any Trinitarian contradictions is its ability to educate, to train, and to develop its leadership so that they have the intellectual competency to sift through the complexities of their professional/civilian-military function while still remaining militarily effective. Such a thesis is grounded by the following explanatory examples:

(1) Samuel Huntington:

The military skill requires a broad background of general culture for its mastery... just as law at its borders merges into history, politics, economics, sociology and psychology, so also does military skill. Even more, military knowledge also has frontiers on the natural sciences of chemistry, physics, and biology. To understand his trade properly, the officer must have some idea of its relation to these other fields and the ways in which these other areas of knowledge may contribute to his own purposes... he cannot really develop his analytical skill, insight, imagination, and judgement if he is trained simply in vocational duties. The abilities and habits of mind which he requires within his professional field can in large part be acquired only through the broader avenues of learning outside his profession... Just as a general education has become the prerequisite for entry into the profession of law and medicine, it is now almost universally recognized as a desirable qualification for the professional officer;⁶

(2) Major David Last (CF):

Professional officers are managers of violence. Their professional education must allow them to understand it. Violence has always been a part of the interconnected human conditions that we label war, conflict, and peace. In the complex world of today and tomorrow, our understanding of these conditions needs to be more comprehensive than in the past. This is more important than technology, doctrine, and strategy, because all are subservient to purpose. There is no purpose without understanding. Further, the officer's understanding must match that of society, otherwise he or she cannot serve it;⁷

(3) Michael Howard:

I am tempted to declare dogmatically that whatever doctrine the Armed Forces are working on now, they have got it wrong. I am also tempted to declare that it does not matter that they have got it wrong. What does matter is their capacity to get it right quickly when the moment arrives;⁸ and,

(4) Dr. David Bercuson:

That the preponderance of the military and defence analysts now make about future war-and what changes armies must make to prepare for that future-will most likely largely be wrong. The only real preparation that militaries can make for future war is to select and nurture soldiers who are intelligent, flexible, thinking, well educated-and not just in business administration and engineering-and capable of adapting quickly.⁹

As such, using the above noted examples as points of reflection, this paper shall ultimately portray a Canadian citizen's understanding of the CF's ability to apply such wisdom in relation to officer professional development, education/training, and the overall "profession of arms" in Canada. The resulting paper is as much a conglomerate of questions, as an attempt to arrive at any definitive answers.

Historically, several studies have attempted to address the educational and professional development problems of the Canadian Officer Corps.¹⁰ Until the period 1997-2001, to the great detriment of the CF profession, and the Canadian public, senior political and military command had implemented only a few of them in part and none in their entirety.¹¹ The result was a 1990s Canadian Officer Corps remit of higher strategic thinking, politically distrusted and constantly scrutinized, totally disconnected from Canadian society, and lacking a comprehensive understanding of what it means to be a part of the "profession of arms". Specifically, this paper begins with a broad review of CF officer professional development and its officer education/training dichotomy from the 1960s through to the 1990s. Next, an examination of the turbulent years of the 1990s through to the present addresses current CF leadership attempts to "heal" the past while preparing for the future. Within the confines of the Trinitarian relationship, final analysis attempts to understand the strategic issues facing the Canadian "profession of arms" of today and tomorrow.

An Overview of The Past-1960s to 1990s

From 16 October 1967 through to 1969, the Officer Development Board (ODB), chaired by Major General Roger Rowley, conducted the most extensive professional development review of Canadian officer development ever attempted to that date. The Chief of Defence Staff, General Jean Allard directed Rowley to examine all phases of the regular officer profession from selection, through training, from the lowest to highest rank. *The Rowley Report* called for a professional development delivery system to ensure the viability and sustainabil-

ity of the Forces' leadership during the turbulent social upheavals of the 1960s and the trials of Canadian Armed Forces' (CAF-as the Forces were named then) service unification and integration.¹² The formal, well researched, three volume, 500–page *Report of the Officer Development Board* strategically outlined a comprehensive plan encompassing officer professional qualities, course contents, and a centralized/ decentralized governance structure for a professional Canadian officer development system.¹³ The guiding precepts of such a professional system included:

- Preparing officers, at every rank, to contribute to a Canadian national strategy;
- Imparting a Canadian military ethos;
- Remaining in consonance with scientific, technological, sociological, economic, educational, and military/strategic changes;
- Accepting the baccalaureate as the basic educational level for entry to the officer corps;
- Ensuring that courses taught at the military colleges are relevant to the technical and operational requirements of the military;
- Providing the appropriate professional development course material at the right stage to assist the officer in the orderly development of the qualities demanded of him at succeeding levels;
- Encourage original research on military matters within the officer corps;
- In doing so, permit no degradation of operational effectiveness upon creating and implementing an efficiently organized, well integrated, and effectively commanded development system.¹⁴

Such a grand professional development system would have, hypothetically, ensured the professional long-term stability of the Canadian Forces. However, instead of attempting to implement Rowley's recommendations, senior command developed a much more restrictive, bureaucratic, training construct, the Canadian Defence Education Establishments (CDEE), on 1 January 1970 and then, in 1972, the Directorate of Professional Education and Development (DPED).¹⁵ Generally, the CDEE/DPED supported independent military college control of professional development and reaffirmed the primary of operational training in the minds of CF leadership. For example, the OPDP ("opeydopeys") professional development courses were delivered in *ad hoc* fashion, with little consistency between the course contents. More importantly, the courses in no way compen-

sated for a lack of a university education and did not have nearly the content size or strict policy parameters as similar courses taught in Canadian universities.¹⁶

Regretfully, an unadulterated version of the DPED existed on through the 1990s with little revision. As a result, throughout the 1970s and 1980s, officer professional development was *ad hoc* at best, with many highly qualified operational officers never having the opportunity to attend the higher-level Staff College. Those that were lucky enough to attend soon found that Staff College course contents were not tied to past junior courses and had limited strategic value in relation to their operational duties. The result was a dysfunctional professional development system with many officers leaving the CF for private citizen employment.¹⁷

Ultimately, the operational “Cold War” stability of the 1970s and 1980s, the political “mind-think” of the elected Federal parties in power, and inconsistent CF leadership, solidified the erroneous belief that officer operational/ tactical training was sufficient on its own; education and ongoing officer professional development were deemed unnecessary.¹⁸ Tactical training excellence developed over years of successfully deploying on NATO operations soon came to trump education and the requirement for a critical thinking Officer Corps.¹⁹ Consequently, as the anguishing upheavals and vast changes of the 1990s occurred, long standing indecisiveness on the part of military leadership to understand its “profession of arms” came to a head with the Somalia Affair triggering a CF military identity crises. The entire CF “profession of arms”, so strong and healthy after the Second World War and the triumphs of the 1950s, was slowly unraveling: an issue of professional leadership or lack thereof.

As assessed above, the underlying reasons behind the stagnation of officer professional development during this Thirty year time period are difficult to ascertain for as Colonel Randy Wakelam explained:

One is left to wonder whether or not more could have been done at the time to ensure the success of officer professional development. If one accepts the tumultuous reorganization of the services into one unified force, the desires of politicians and senior commanders to downsize the military footprint in Ottawa, the aspirations of the military colleges to continue with their traditional mandates and programmes and the general lack of support for the Canadian Forces by government and Canadians ... then a system such as that which was created and operated seems the best that might have been hoped for.²⁰

The 1990s

As just stated, the pivotal event that finally shocked the Canadian Forces, the political powers, and the Canadian public out of their malaise occurred in the East African country of Somalia in 1993. The ramifications of the resulting *Somalia Affair* have continued to resonate throughout the CF, the Department of National Defence (DND), and Canadian society until present day. In essence, the above introduced “disaster” premonition, articulated in 1968 some fifteen years before, by then Chief of Defence Staff, General Jean Allard, had finally come to fruition.

Adding fuel to fire, the calamity occurred during a time of great global, political, technological, social, and economic change. As evidenced by the following comprehensive timeline, due to a “weak” or non-existent “profession of arms” foundation, the CF has found adapting to such massive change extremely difficult. Subsequent analysis is founded on General Allard’s implied assertion that a highly educated, effectively trained officer corps would have prevented his forecasted “disaster”. Therefore, logic dictates that heeding his advice should negate any similar “crises” from impacting the CF in the future, thus ensuring a strong and healthy “profession of arms” in Canada.

There is no gain in laying blame. Each side of Clausewitz’ Trinity has an equal part to play; albeit, the political power’s continued refusal and outright abandonment in deciding to not finance a professional officer development system over some thirty years has much to answer for. The inability of uneducated CF command and/or outright negation of senior, fragmented, CF leadership to advise the government on the benefits of such a revised system goes much to the issue of “professionalism” in the CF and its relationship with Federal political power in Canada.

The Somali Affair Factual TimeLine

On 16-17 March 1993, Shidane Arone, was tortured and murdered by Canadian soldiers of the Canadian Airborne Regiment (CAR) deployed on a United Nations mission in Somalia. Prior to this “significant incident”²¹, on 4 March 1993, CAR soldiers shot at two Somali males, who had entered the Canadian compound, killing one and severely injuring the other. Although a review of the 4 March “shootings” determined that the soldiers, who fired, were within the bounds of Canadian military legal authority, “there is no doubt the two men were shot in the back running away, that they had not actually stolen anything, and that they were unarmed.”²² Furthermore, the acquiescence of CAR command to the shootings, arguably, “paved the way for the tragedy that occurred on 16 March 1993.”²³ As a result of these events, both the Canadian government and

the Canadian people finally became interested (albeit for negative reasons) in the CAR and its mission in Somalia with the subsequent investigations, media coverage, and public inquiry shaking “the Canadian military establishment to its very core.”²⁴

Specifically, the Commission of *Inquiry into the Deployment of Canadian Forces (CF) to Somalia*, begun in May 1995, had its proceedings broadcast almost daily on Canadian national television. As well, several magazines and newspapers ran special editions on the progress and findings of the Inquiry delving into the events surrounding the Somalia Affair and, by association, the very essence of the CF entity.²⁵ In December 1996, after almost two years of ongoing publicized investigative, political, and legal rhetoric, the government shortened the life of the Inquiry’s existence when then Minister of National Defence, The Honourable M. Douglas Young, refused to grant the Inquiry’s request for a further time extension implying the Inquiry’s ongoing investigation was seemingly endless and its existence no longer considered as in Canada’s best interest.²⁶ As a result of the Minister’s statements, under duress, the Inquiry completed its public hearings between January-March 1997 providing its final findings to the Government on 30 June 1997.

The Inquiry’s extensive findings were published within five primary volumes along with ten additional monographs.²⁷ The author’s review of the Inquiry findings determines that although the systemic causes leading to the death of Shidane Arone, and the other questionable incidents occurring in the CF throughout the 1990s, were remarkably identifiable and founded strongly on a lack of political and military leadership, the truthful facts behind who was to “blame” for the creation of such an alleged unprofessional military, the exact details surrounding the death of Shidane Arone, and the proposed National Defence cover-up were never completely revealed.²⁸ Although the “illness” was never completely diagnosed, the signs and symptoms were identified, and a cry for “healing” was heard by the Canadian Federal government and the Canadian peoples.²⁹

Ultimately, the Commission’s Final Report raised concerns regarding the degradation and total lack of “professionalism” in the CF. As a remedy, the Commission rightly called for a reinstatement of professionalism in the CF via:

- A renewal of the military ethos and its traditional core values of integrity, courage, loyalty, selflessness, and self-discipline;
- A strengthening respect for the rule of law and all that it connotes;
- An integration of core Canadian societal values, such as fairness, decency, respect for human rights, compassion, and justice, into the professional

self-image.³⁰

Inherent in the Commission's remedy is the point that militaries must exist, not in tandem with governments and its society, but as professional servants "under objective civilian control", managing the realm of violence while understanding the social values upholding the society it serves.³¹

The Continuing Historical Chronology

While "shutting down" the Somalia Inquiry, the Minister of National Defence formed two independent panels; one panel of senior academics to produce reports on areas the CF needed to reform to function effectively into the future, and the second panel to recommend changes to the Canadian military justice system. The Minister asked the panellists to prepare recommendations for instilling overarching positive professional change into the Canadian military institution.

Of specific interest to this paper are the resulting Reports' assertions that there existed a fundamental need for a highly educated Canadian Officer Corps.³² Specifically, Desmond Morton and Albert Legault stated that changes to the military educational system must occur so that the CF is able to meet the uncertain challenges of the Twenty-First Century.³³ As well, Jack Granatstein noted, "the CF has a remarkably ill-educated officer corps, surely one of the worst in the Western World," with only 53.29% of its officers holding university degrees, of which only 6.79% were graduate degrees.³⁴ Finally, David Bercuson argued that all commissioned officers should have a university degree and that all senior command officers should hold a Master's degree.³⁵ He also negatively asserted that within the CF, "there is a dearth of both strategic thinking and forward planning. Almost all Canadian military intellectual activity concentrates on the practicalities of doctrine, on tactical matters or on administration."³⁶

As a direct result of these statements, the Minister prepared his 1997 Report to the Prime Minister on the Leadership and Management of the Canadian Forces detailing eleven recommendations "to improve officer development and to inculcate a professional ethos appropriate to the Canadian Forces."³⁷ Generally, he ordered "across the board reforms" for the entire CF addressing leadership issues on "inadequate officer professional development, a failure to adapt to changing conditions, a lack of Canadian strategic thinking, disciplinary difficulties, isolation from Canadian society, and problems of values and ethics".³⁸

Next, to ensure the ongoing transformation of the CF and to mend the contract of trust broken between Canadian society and its military, the Minister of National Defence, The Honourable Mr. Douglas Young, along with his successor, The Honourable Art Eggleton, established the Minister's Monitoring Committee

on Change in the Canadian Forces and the Ministry of Defence (MMC).³⁹ The MMC was activated as of 20 October 1997, with a mandate to first “watch over” both the CF and DND, and secondly, to publicly report on their progress in effecting the required changes.⁴⁰ The MMC operated until November 2003, producing three all-encompassing reports.⁴¹

Throughout its existence, the MMC constantly referred to the need for highly educated leadership to effectively bring the CF into the Twenty-First Century. For example, in *Interim Report*, (1998):

The Committee stressed the importance of a focused and effective education, training and development program as an engine for change. It called upon the senior leadership of the CF to participate actively in the ‘visioning’ of the kind of officer needed in the future...as dynamic leadership must drive the necessary transition in attitude and defence culture.⁴²

Next, in *Interim Report* (1999), the Committee noted with dismay that there was still a distinct absence of an overall visionary plan with little or no direction received from Ottawa/NDHQ on the CF strategy for change.⁴³

DND/CF has not been sufficiently ‘strategic’ in managing their reform program.... The Department and the CF were given the task of implementing hundreds of recommendations... The implementation of individual recommendations was accepted as a series of tactical jobs... Put simply, the defence team has applied tactical solutions to what it considers to be tactical problems. What the Committee has stressed over its tenure is that the reform program is a strategic challenge that requires strategic solutions.⁴⁴

Finally, in the Monitoring Committee’s *Final Report* (2003), the Committee recognized the renewed efforts of the CF to establish a strategic visionary plan by noting that, “throughout 2001 and 2002, the Committee conducted numerous consultations, with senior officials, in its continuous monitoring of the implementation of government approved recommendations related to CF professional development, education, and leadership.”⁴⁵ *The Final Report* also applauded the establishment of the new Canadian Defence Academy (CDA) tasked with the mission to create, implement, and integrate a professional development strategy throughout the CF.⁴⁶ With the establishment of the CDA, the Committee’s monitoring task was “reassigned” to the military leadership at CDA and, as such, the Committee was disbanded. Self-regulation and control of the “profession of arms” in Canada was, once again, entrusted to its leadership: a professional test,

of sorts. Finally, the singular, centralized professional development system envisioned by *The Rowley Report* twenty-five years ago has come into existence with the full support of both political and military leadership.

The Present – 2000-2005

CDA and Officership 2020:

According to its website, the CDA is a military formation stood up on 1 April 2002. It is mandated to promote, facilitate, and harmonize common professional development for all CF members. Its guiding principle is to provide every CF member an opportunity to develop the intellectual ability, critical thinking skills, and understanding of national policy and military doctrine that will enable him or her to function effectively in a complex and information rich environment today and tomorrow.⁴⁷

Ultimately, the CDA is tasked with the successful implementation of the strategic document, *Canadian Officership in the 21st Century, (Officership 2020)*⁴⁸. As it is a *living* document, CF leadership hopes to solve Canada's "profession of arms" quandary of past stagnation and inertia by providing strategic guidance for the future professional development of all CF members.⁴⁹ Briefly, representatives from all ranks (Officers and Non-commissioned) as well as civilian experts created *Officership 2020* during the first six months of 2000. It has a five-year foundational implementation phase to 2005/2006 with an imagined lifespan to the year 2020.

As noted by The Honourable Mr. Art Eggleton in the foreword of the document, *Officership 2020* "represents another progressive step in the Department's continuing reform program."⁵⁰ The document supports a strategic vision that the Officer Corps of the future CF will be made of "exemplary leaders, serving Canada, and devoted to the profession of arms."⁵¹ *Officership 2020* outlines eight strategic objectives necessary to fulfil the overall vision.⁵²

Officership 2020 subsequently outlines the actions necessary to fulfill all of the strategic objectives.⁵³ How each key initiative applies to its corresponding relevant strategic objective is portrayed in the document's implementation matrix. Consequently, the strategy's success depends on CF leadership's ability to make their strategy work. "The Implementation is powerful because it reflects all dimensions of the overall strategy, its goals, and how to achieve them."⁵⁴ Arguably, a well-thought out strategic plan is fundamental to any plan's ultimate success for:

It makes no sense to have a strategy that no one understands, commits to, or acts on. Interdependent communication has many benefits, including

a strengthened connection between individual and organizational goals, a shared context for action throughout the organization, and increased confidence that leaders have really thought about and taken advice on the best direction for the company to follow.⁵⁵

A Canadian Citizen's Perspective –So Far

It is far outside the bounds of this paper to provide a detailed examination of the progress the CF may or may not be making in implementing its pivotal professional development strategies: *Officership 2020* and *NCM Corps 2020*. However, important to this thesis are the earlier introduced factors: the education-training dichotomy and the intertwined “profession of arms” issue. As such, a cursory understanding of *Officership 2020*'s first and third strategic objectives and its capstone “profession of arms” manual is deemed extremely relevant to this professional development study and any required subsequent elaborations. Respectively, *Officership 2020*'s premier strategic imperative is the “ordered application of military force”.⁵⁶ In realizing this objective, the strategy is set to:

Develop an Officer Corps that is capable of orchestrating the application of armed force at the strategic, operational, and tactical levels in pursuit of national interests and objectives. All officers must be able to dominate the battle-space physically and intellectually by integrating the rule of law, military doctrine and technology in joint and combined operations.⁵⁷

Next, the Strategy's third strategic objective is to create an Officer Corps with “the highest standards of professionalism”.⁵⁸ In realizing this objective, the strategy is set to:

Develop an Officer Corps that exemplifies the highest standards of professionalism through expertise and dedication to Canadian society... The components of a Canadian profession of arms – expertise, corporate ness, and societal responsibility - will be clearly defined and codified.⁵⁹

As noted above, the Strategy includes an initiative plan of action for achieving its strategic objectives. A review of its implementation matrix depicts that the first and third strategic objectives are directly connected to several of the strategy's key initiatives. For example, the first Key initiative states “officers will learn the required knowledge and skill-sets through education, training, experience, and self-development”.⁶⁰ As noted by Lieutenant-Colonel Bernd Horn, “the basic tool required [for a professional officer corps] is simple: a solid educational base balanced with operational experience.”⁶¹

The perceived balance and course of action may not be so simple or clear to CF officers nor to interested Canadian citizens when the *Officership 2020* strategy seemingly sets the single pillar of operational experience against the other three. In 2001, then Colonel Beare argued:

Giving the responsibility to ensure the intellectual development of the overall Canadian Officer Corps to the general and flag officer as a whole is so wide a mandate as to be no mandate at all. Like the OPDS, OPD 2020 does not provide the framework needed to direct and choreograph the balance between experience and the other three pillars of education, training, and self-development.⁶²

Beare continued by expressing the Army's overall concern that if the other three pillars successfully outweigh the need for the development of experience, then the CF's operational military effectiveness will suffer and the individual's career will suffer given that deployed time will impact against the requirement for professional development.⁶³ Such arguments are eerily reminiscent of arguments made during the 1970s and should have no place in the CF of the 21st Century but they still exist today.⁶⁴ The CF Officer Corps cannot return to a purely operational/tactical "mind-think" with no understanding of the connection between education and professionalism; and, according to the current command remedial actions of the Canadian Defence Academy, shall not do so.

In 2001, Lieutenant-Colonel Bernd Horn responded to Colonel Beare's concerns in a corresponding article within the same Army Bulletin, answering the pivotal question of whether soldiers can be both effective war-fighters and scholars with an emphatic affirmative.⁶⁵ Colonel Horn (PhD) is currently the commanding officer for the Canadian Forces Leadership Institute, a founding member of the Canadian Defence Academy, currently headed by Major-General P.R. Hussey. Their respective beliefs in a Canadian "profession of arms" made up of highly educated professionals is well known and fully supported by their command actions.⁶⁶ A summary of such actions includes the following points:

- A high percentage of CF officers have completed, or are in the process of completing, their Bachelor degrees via the Royal Military College student avenue, civilian universities, or the varied military education Continuing/Distance Study programs. Although accurate data is not available due to internal collection issues, there is a general understanding that the Canadian Forces currently has the best educated officers in its entire history;
- The Canadian Defence Academy shall continue to offer as many alternative teaching and learning venues as needed so that every CF member is given

the opportunity, regardless of their operational responsibilities, to further develop their intellectual abilities;

- The Profession of Arms manual is to be continually updated and revised. A new version will encompass civilian employees working within the National Defence Headquarters;
- The revised Profession of Arms manual will also encompass civilian employees and contractors when deployed, in theatre, alongside CF personnel;
- The Profession of Arms manual is a formal ethos document. It has been translated into Spanish and is being used by several Central and Latin American countries as a model template with which to develop their own professional military ideal;
- Non-commissioned member and officer courses have all been updated to include educational aspects of professionalism and leadership in the CF. Although the operational focus has not diminished, the educational additions have strengthened the educational professional development roots at both the recruit and senior member levels;
- Senior staff command courses shall include course content discussing the educational/training dichotomy;
- Senior staff command courses not easily available to all Canadian officers will be split into two versions; one catered to senior staff tracked officers and the other to senior operational tracked officers. The reasoning behind such a split is to ensure that all senior officers, regardless of career progression, receive the professional and educational opportunities required to ensure a healthy “profession of arms” in Canada; and
- There is an acknowledgment of the intellectual and experiential expertise of senior NCM’s so that an Executive Bridging Leadership course has been created allowing senior ranking members as well as senior officers the opportunity to interact with each other on an intellectual level.⁶⁷

This Canadian citizen’s ongoing perusal through the muddy waters of professional development in the CF comes up against another confusing mental road-block when trying to understand contemporary pressures existing on the profession of arms placed upon it through the Trinitarian relationship.

Specifically, the Canadian Defence Academy site states,

“Professional development is a priority – but with the myriad of challenges the CF is facing, ageing equipment, high operational tempo, and others—some may ask why? The answer is that we simply cannot afford not to. In a complex and information rich post cold war/post 9/11 security environment, the CF must adapt. Now more than ever, we need NCMs and officers with the intellectual ability, critical thinking skills, and *understanding of national policy* and military doctrine to effectively support operations.... Canadians look to their Forces for solutions. We must not let them down.⁶⁸

Canada’s new International Policy Statement was proclaimed on 12 May 2005. Arguably, many Canadians do not understand the policy or how Government will effectively implement it.⁶⁹ As such, individual CF officers are left to wonder how they are to understand a national policy based on such vague assertions.⁷⁰ Furthermore, of special note is the fact that only in one place does the new Defence portion of the International Policy Statement mention the importance of a truly “professional” military in Canada – within its conclusion: “The success of Canada’s military will ultimately depend, as it has in the past, on its people – their professionalism, their skill and their training.”⁷¹ Interestingly, the word “education” is missing from this governmental declaration.

To continue, recent CF forays into the realm of the Canadian news aptly shows that the Trinity is still in much need of repair. The Chief of Defence Staff, General Rick Hillier stated that the purpose of a military is to protect Canada and that killing was an acceptable means for ensuring such protection.⁷² In response, one amongst many, a Canadian citizen replied that the job of the CF was less about killing people then helping to keep the peace and that the CDS’s comments were pathetic.⁷³

The issue is not whether the CDS was correct in his statement but whether he should be attempting to educate the Canadian public, an equal yet separate third of Clausewitz’ Trinity. Further study should examine the impact of such forays into the realm of political responsibility for it is not the Chief of Defence Staff’s responsibility to prepare Canadian society for war’s inevitable death: Government has such authority and responsibility. A possible explanation for the General’s actions relates directly to the Minister of National Defence’s 1997 reactions to the CF’s problems: “Frustrated with its senior soldier’s outdated ideas, obfuscations and apparent dithering, an impatient civil government acted with its fullest authority.”⁷⁴ Perhaps in frustration, perhaps in a strong desire to prepare an ignorant and unresponsive Canadian public for “bodybags from Afghanistan”, General Hillier is attempting to bridge the gaps that currently exist between the

individual entities of Clausewitzian Trinity in Canada; however, in doing so, he may be weakening what he is attempting to strengthen.

Ultimately, this paper asserts that if they desire a strong “profession of arms”, CF leadership must establish the parameters for how CF members should professionally act and think when interacting with the other aspects of the Trinity; always remembering that a country’s military is in service to its citizens and subordinate to the direction of Government. According to senior CF leadership, such parameters are found within the CF’s capstone manual, *Duty with Honour: The Profession of Arms in Canada*.⁷⁵ However, according to LCol Bentley (ret’d), the CF is currently lacking a profession of arms identity because it does not understand the very premises of its professional ideology nor its place within Clausewitz’ Trinity.⁷⁶

This Canadian citizen becomes further confused upon absorbing this quote by Major David Last,

Exporting education is one of the most powerful tools [the CF has] to influence the world around us.... We should think strategically not only about developing effective education for ourselves as military professionals, but about exporting it within government, to Canadian society, to other military forces, and the international community.⁷⁷

By implication then, should it be up to the Canadian military to educate the Canadian public on CF strategic and operational issues? The traditional answer is: No. However, action begets speech.

To return to Snider’s *military professionalism* approach introduced at the beginning of this paper, the very essence of military professionalism is based on a military’s war-fighting purpose. As previously mentioned, Government has firmly set out this purpose in the new International Policy Statement. Regretfully, there is little mention as to how senior political leadership perceives the connection. Militaries that diminish the purpose of warfighting in lieu of other endeavours do so at their peril. When its political master does it for them, Clausewitz’ Trinity has little chance of attaining its purest form. Ultimately, the result for the CF is a “profession of arms” abhorring its past, unsure of its current professional foundation, and confused about its future:

Our society is more sceptical about the justifications for war, and is well placed to make a contribution to international security. If we focus only on fighting and winning wars with the latest technology, we will not be able to serve the purposes society will demand of our profession.⁷⁸

CONCLUSION

The perception of many of the problems facing the military profession in Canada has not varied significantly in 40 years albeit coming to a head during the *Somalia Affair* and multiplying in the 21st Century—the Trinity is still in much need of repair. As implied throughout this paper, a possible remedy is the professional understanding that all that members of the “profession of arms” in Canada can do to prevent another Allard “disaster” is to “control” itself. Such knowledge and understanding is, arguably, only attainable via the governance structure of the Canadian Defence Academy and its ongoing ability to successfully implement the strategic vision of *Officership 2020* and its capstone manual, *Duty with Honour: The Profession of Arms in Canada*. This Canadian citizen believes that Canada’s military effectiveness is dependent on the Canadian Defence Academy’s continued sustainability and is looking for a similar belief from the Chief of Defence Staff and the Federal Government of Canada: We shall wait and see.

As epitomized by *The Rowley Report*, a unified, centralized, professional development system is the first and foremost requirement for developing officers who are critical thinkers and highly adaptable believers in a “profession of arms”. Incorporated in such a requirement are the four pillars of Canadian professional development: experience, education, training, and self-improvement.

This paper has attempted to show that a “positive impetus” came out of the death of Shidane Arone. The horrific act awakened both the minds of the politicians and senior leadership’s mind to the CF’s absolute need to ground its existence in a formal professional ethos while preparing for the global, social, and technological uncertainties of the future. The journey is still in progress for recent excursions by the current Chief of Defence Staff, General Rick Hillier, into the realm of political mastery raises questions once again to the health of the “profession of arms” in Canada.

In presenting *Officership 2020* as the strategic answer to the illnesses of the past and the “light” of the future, this paper briefly examined two fundamental strategic objectives at issue: (1) the ordered application of military force, and (2) highest standards of professionalism. The paper’s final analysis implies that as the CF chain of command begins at the top, the CF’s ability to sustain *Officership 2020* during its development stages must begin at the top with the Chief of Defence Staff. If senior command do not understand and “live” the professional vision of *Officership 2020*, then all is lost for losing sight of the primary purpose of the CF creates confusion in the minds of CF members and Canadian citizens alike. Clausewitz’ Trinity must and cannot be ignored. The Canadian public and the Government in authority are as much responsible for the shaky “profession of arms” in Canada as are its military professionals. However, although it is easy

to argue that each entity must share in the other's purpose and responsibility, CF leadership must learn to understand that they cannot control or outright dictate the beliefs of the other entities. Continued actions by senior military leadership to attempt to educate/influence Canadian society and the political directions of the Canadian government only succeeds in weakening the "profession of arms" ideal in Canada to the detriment of its *raison etre*.

This Canadian citizen hopefully wishes for a highly professional, 21st Century Canadian Officer Corps, able to build on the lessons of the past, enthralled with the vision of a new professional development strategy, serving and protecting Canadian society with honour, actively responding to the changes of today, and anticipating those of the future.

Canadian Officership: A Profession in Progress - on a journey to who knows where!

Note: The issues implied in this paper were the focus of the 6th Canadian Conference on Ethical Leadership: Duty With Honour, 16-18th October 2005; www.cda-acd.forces.gc.ca/cce16/engraph/home_e.asp. This conference was sponsored by the Canadian Defence Academy, its Canadian Forces Leadership Institute, the Royal Military College of Canada, and Queen's University.

Notes

- 1 Foreword by Jean V. Allard, in Major General Roger Rowley, chairman, *Report of the Officer Development Board*, Department of National Defence, March, 1969, vol. 1, p. iii. [Hereinafter *The Rowley Report*]
- 2 For ease of reading, the Canadian Forces (CF) is meant to also include the Department of National Defence (DND). The author notes that while each is a separate entity, both are inherently interconnected.
- 3 Ronald Haycock, "The Labours of Athena and the Muses: Historical and Contemporary Aspects of Canadian Military Education," in *Military Education: Past, Present, and Future*, eds. Gregory C. Kennedy and Keith Neilson, (Westport: Praeger Publishers, 2002), 171.
- 4 For a further analysis of this traditional military professionalism approach, see Snider, Don, John Nagl and Tony Pfaff. *Army Professionalism, the Military Ethic, and Officership in the 21st Century*. Carlisle: PA: Strategic Studies Institute. (2000), www.usafa.af.mil/jscope/JSCOPE00/Snider/Snider00.html. (2 July 2004).
- 5 Lieutenant-Colonel Bill Bentley, *Professional Ideology and The Profession of Arms in Canada*, (Toronto: Canadian Institute of Strategic Studies, 2005), 27,41
- 6 Samuel P. Huntington, *The Soldier and the State* (Cambridge: Harvard University Press, 1957), 14.
- 7 Major David Last, "Educating Officers: Post Modern Professionals to Control and Prevent Violence," In *Contemporary Issues in Officership: A Canadian Perspective*, Ed. Lieutenant-Colonel Bernd Horn (Toronto: Canadian Institute of Strategic Studies, 2000), 26.
- 8 Allan English, *Understanding Military Culture: A Canadian Perspective*, (Kingston: McGill-Queen's University Press, 2004) English, Allan. p. 107. as quoted from Michael Howard, "Military Science in the Age of Peace," *RUSI Journal* 199, no, 1 (March 1974), 3-4.
- 9 David Bercuson, "What's Past is Prologue: The Global Soldier of the Future," A Paper Presented to the Pacific Armies Management Seminar, Calgary, Alberta, (29 August 2002), 15-16.
- 10 Studies such as *Report of the Study of Professionalism in the Canadian Forces*, Ottawa: CDEE, 1972; MGen C.G. Kitchen, *Out Service Training for Officers*, Ottawa: ADM (pers), 1985 [The Kitchen Report], Colonel David Lightburn, *Senior Officer Professional Development*, Ottawa, 1986 [The Lightburn Report], and LGen R. J. Evraire, *General and Senior Officer Professional Development in the Canadian Forces*, 1988 [Evraire's Study].
- 11 Lt. Gen. Robert W. Morton, chairman, *Report of the Officer Development Review Board* for the Chief of Military Personnel, NDHQ, August 1995. [Hereinafter *Morton Report*].

- 12 For a detailed explanation of the detrimental effects of unification and integration, see John A. English, *Lament for an Army: The Decline of Canadian Military Professionalism* (Concord: Irwin Publishing, 1998), 53-57.
- 13 See Footnote 1 –*The Rowley Report*, iii.
- 14 *The Rowley Report*, Vol. 1, 46-47
- 15 Randall Wakelam, “Officer Professional Education in the Canadian Forces and the Rowley Report, March 1969”, via personal email, 25-27. This author received personal copy of paper via email (5 August 2005). Published copy is available in the *Historical Studies of Education*.
- 16 Prof. Ronald G. Haycock, *Getting From Here to There: Trauma and Transformation in Canadian Military Education*, www.academic.sun.ac.za/mil/scienta-militaria/Internet (28 July 2005).
- 17 Haycock, *Military Education*, 177.
- 18 Haycock, *Getting From Here to There*, np.
- 19 Ibid.
- 20 WakelamIbid., 29.
- 21 Bercuson, David J. *Significant Incident: Canada’s Army, the Airborne, and the Murder in Somalia*. Toronto: McClelland and Stewart Inc. 1996.
- 22 Ibid., 237.
- 23 Minister of Public Works and Government Services of Canada, *Dishonoured Legacy: Report of the Commission of Inquiry into the Deployment of Canadian Forces to Somalia, Executive Summary*, (Ottawa: Canadian Government Publishing, 1997), 34. (Hereinafter Executive Summary).
- 24 Donna Winslow, “The Parliamentary Inquiry Into the Canadian Peace Mission in Somalia,” *A Paper presented at the 4th Annual Workshop on Strengthening Parliamentary Oversight of International Military Cooperations and Institutions*, Brussels, 12-14 July, 2002, <http://www.google.ca/search?q=cache:9xb3xeV13mQJ:www.dcaf.ch.news/PCAFjuly2002/WINSLOW.pdf> (9 June 2004).
- 25 Broadly speaking, see *The Globe and Mail* and *Ottawa Citizen* coverage throughout the Inquiry’s public hearings. The author notes that *Maclean’s Magazine* also ran articles in 1992, 1993, 1998 and 1999 pertaining to murder, racism, hazing, and sexual assaults within the CF. As the author does not specifically address these issues, these articles are not currently cited.
- 26 Winslow, “The Parliamentary Inquiry”. np.
- 27 The Commission of Inquiry in to the Deployment of Canadian Forces to Somalia [*The Somalia Inquiry*]. See *Dishonoured Legacy: Executive Summary*, Table of Contents for a listing of the topic areas, p. es-iii. In summary, the Somalia Inquiry identified ten

major areas for reform in the Canadian Forces: Leadership, Accountability, Chain of Command, Discipline, Personnel Selection, Training, Rules of Engagement, Openness, Military Justice System, Operational Readiness, Mission Planning, and Military planning. As well, see the *Report of the Somalia Commission of Inquiry*, V.1-5, http://www.forces.gc.ca/site/Reports/Somalia/index_e.asp (1 Dec 2003).

28 For a detailed explanation of the intricacies of the “cover-up” see Desbarats, Peter. *Somalia Cover-Up: A Commissioner’s Story*. Toronto: McClelland and Stewart, 1997.

29 *Executive Summary* ES- 51

30 *Dishonoured Legacy*, Vol. 5, p. 1451; as summarized by Karol W.J. Wenek, Project Director CF Leadership Doctrine, *Looking Back: Canadian Forces Leadership Problems and Challenges Identified in Recent Reports and Studies*, Kingston: Canadian Forces Leadership Institute, June 2002, 8.

31 Huntington, 189-192.

32 Minister of Public Works and Government Services of Canada. *Report to the Prime Minister on the Leaders and Management of the Canadian Forces*. Ottawa: Canadian Government Publishing, 30 June 1997. (Hereinafter *Leadership Report*). The Minister’s independent Reports were prepared with the assistance of David J. Bercuson, PhD, FRSC, University of Calgary; Dr. J.L. Granatstein, Canadian Institute of International Affairs; Professor Albert Legault, Laval University; and Desmond Morton, McGill Institute for the Study of Canada, etc.

33 *Report to the Prime Minister, A Paper Prepared for the Minister of National Defence by Desmond Morton, McGill Institute for the Study of Canada*, March 25, 1997, <http://www.forces.gc.ca/site/Minister/Morton/MORTON1e.html>. (Hereinafter Morton Report); Report to the Prime Minister, A Paper Prepared for the Minister of National Defence by Alfred Legault, Laval University, March 25, 1997, http://www.forces.gc.ca/site/minister/eng/Legault/Legault_cont_.html. (Hereinafter Legault Report).

34 *Report to the Prime Minister, A Paper Prepared for the Minister of National Defence by J.L. Granatstein*, <http://www.forces.gc.ca/site/minister/eng/Granatstein/gra2main.html>. (Hereinafter Granatstein Report).

35 *Report to the Prime Minister, A Paper Prepared for the Minister of National Defence by David J. Bercuson, PhD, FRSC*, University of Calgary, March 25, 1997, <http://www.forces.gc.ca/site/Minister/eng/Bercuson/berc4.e.html>. (Hereinafter Bercuson Report).

36 *Ibid.*, np.

37 For a complete list of the recommendations, see *Leadership Report*, 42-43.

38 Ronald G. Haycock, “The Labours of Athena and the Muses: Historical and Contemporary Aspects of Canadian Military Education,” *Canadian Military Journal* (Summer 2001), 7.

39 The Monitoring Committee was established on October 14, 1997. Its original members were John A. Fraser, David J. Bercuson, D. Bevis Dewar, Sheila Hellstrom,

Carole Lafrance, Laurier L. LaPierre, and John Rankin. The Committee prepared three main reports with its Final Report dated June 2003. The Monitoring Committee disbanded November 2003.

40 For a further explanation of the Monitoring Committee's mandate and areas of responsibility, see *The Minister's Report on the Committee on Change in the Canadian Forces and the Ministry of Defence*, Introduction, 31 March 1998, <http://www.forces.gc.ca/site/Minister/eng/Monitoring/preliminary/.htm> (5 June 2004).

41 For Interim Report 1998, *Interim Report 1999*, *Progress Report II 1999*, and the *Final Report 2003* see the Minister's Monitoring Committee Reports and Other Monitoring Committee Reports at http://www.forces.gc.ca/site/reports/mmcc/final_report_e.asp. .

42 *Minister's Monitoring Committee Final Report 2003*, Professional Development, Education, and Leadership at http://www.forces.gc.ca/site/reports/mmcc/final_report_e.asp (25 May 2004). [Hereinafter *Final Report 2003*]

43 Ibid., np.

44 *Minister's Monitoring Committee on Change in the Department of National Defence and the Canadian Forces: Final Report – 1999*, 8.

45 *Final Report, 2003*, np.

46 Specifically, under the Minister's direction, the Vice Chief of Defence Staff (VCDS) was directed by the Minister to develop a long-term professional developmental strategy. To ensure that the strategy was created and implemented, the Chief of Defence Staff appointed LGen Romeo Dallaire as Special Advisor on Professional Development (Feb 1999) tasked with the responsibility to prepare a strategic document addressing officer education and professional development. Research for the forthcoming strategic document was extensive and included a questionnaire survey, sent to over 800 officers, who responded with information about the leadership challenges that they had encountered throughout their operations in the 1990s. The statistical information was collected and processed through the Office of the Special Advisor resulting in The Debrief the Leader (Officer) Project and the subsequent creation of *Officership 2020 : -Canada*. Department of National Defence. *Canadian Officership in the 21st Century: Strategic Guidance for the Canadian Forces Officer Corps and the Officer Professional Development System*, February 2001. An equivalent non-commissioned member strategy was also created, *NCM Corps 2020*; however, due to the limits of this paper, that document is not specifically addressed. However, the author acknowledges its fundamental relevance and will proceed with its examination at a later date.

47 See Canadian Defence Academy, www.cda.forces.gc.ca.

48 ... and its sister document, *NCM Corps 2020*: see above.

49 Telephone Interview, Lieutenant-Colonel Bill Bentley, 10 June 2005.

50 *Officership 2020*, Foreword. For a full understanding, the author recommends a

thorough read of the document. The author notes that there is no further explanation provided in *Officership 2020* as to what the reform program entails or why it was implemented.

51 Ibid., 5.

52 These eight strategic objectives are: the ordered application of military force, the application of sound leadership, the highest standards of professionalism, an officer who thinks critically, an officer who embraces and manages change, the CF is a learning organization, the CF is a career of choice, and the CF will direct a flexible officer professional development system in a decentralized manner. Ibid., 6-7.

53 In summary, the key action initiatives include ensuring intellectual development, improving the common body of knowledge, developing policy, concepts, and doctrine, strengthening the military ethos, cultivating external relationships, providing OPD flexibility, providing organizational capacity, and establishing accountabilities. Ibid., 7-8.

54 Ibid., 14.

55 Ibid., 7.

56 *Officership 2020*, 6.

57 Ibid.

58 Ibid.

59 Ibid.

60 Ibid., 7.

61 Lieutenant-Colonel Bernd Horn, "Introduction," *Contemporary Issues in Officership: A Canadian Perspective*, ed. Lieutenant-Colonel Bernd Horn (Toronto: Canadian Institute of Strategic Studies, 2000), 3.

62 Colonel Stuart A. Beare, "Experience in Officer Professional Development: A Pillar of Peril", *The Army Doctrine and Training Bulletin: Canada's Professional Journal of Army Issues*, Vol. 4, No. 4, (Winter 2001), http://armyapp.dnd.ca/ael/adtb/vol_4/no4/eng_v4no4.pdf (June 5, 2004).

63 Ibid.

64 Telephone Interview; Serving CF Officer, Anonymous. (10 August 2005).

65 Lieutenant-Colonel Bernd Horn, "Soldier/Scholar: An Irreconcilable Divide?" *The Army Doctrine and Training Bulletin, Canada's Professional Journal on Army Issues*, vol.4, no.4 (Winter 2001), p. 3 at http://armyapp.dnd.ca/ael/adtb/vol_4/no4/eng_v4no4-pdf (4 June 2004).

66 Telephone Interview, Lt. Col. Wayne Douglas, Special Advisor to the Commander of Canadian Defence Academy, 6 June 2005.

67 Telephone interview, Colonel Wayne Douglas, Special Assistant to Commander of

Canadian Defence Academy, 16 August, 2005, and Telephone interview with Dr. Foot of the Canadian Forces College, 18 August 2005.

68 Canadian Defence Academy Website, "Command Cell", www.cda.forces.gc.ca/index/engraph/team/comd/Comd_e.asp (29 July 2005).

69 See, Canada. Canada's International Policy Statement –A Role of Pride and Influence in the World: DEFENCE, www.forces.gc.ca (12 May 2005).

70 Telephone Interview. Serving CF officer. Anonymous.

71 See Footnote 69, DEFENCE, 32

72 For a further clarification as to what was said and not said during an informal, on the record media luncheon, see "PM Defends Blunt General," Canoe Network CNEWS Online, (15 July 2005) <http://cnews.canoe.ca/CNEWS/Canada/2005/07/15/pf-1133695.html> (16 July 2005).

73 Linda McQuaig, *Linda McQuaig Says...*, *Toronto Star*, 7 August 2005.

74 Haycock, "Getting From Here to There," 60.

75 Telephone Interview. Colonel Wayne Douglas, Canadian Defence Academy, 14 August 2005. See, Her Majesty the Queen in the Right of Canada, *Duty with Honour: The Profession of Arms in Canada*, published under the auspices of the Chief of the Defence Staff by the Canadian Defence Academy-Canadian Forces Leadership Institute, 2003; www.cda.forces.gc.ca (10 July 2005).

76 See Bentley throughout.

77 Major Dr. David Last, "Educating Officers: Post-Modern Professionals to Control and Prevent Violence," in *Contemporary Issues in Officership: A Canadian Perspective*, ed. Lieutenant-Colonel Bernd Horn Toronto: Canadian Institute of Strategic Studies, 2000, 32.

78 Ibid.

**Stewart Slide Addendum:
Canadian Officership: Strategic Balancing of Education, Training,
Operational Experience, and Professional Development**

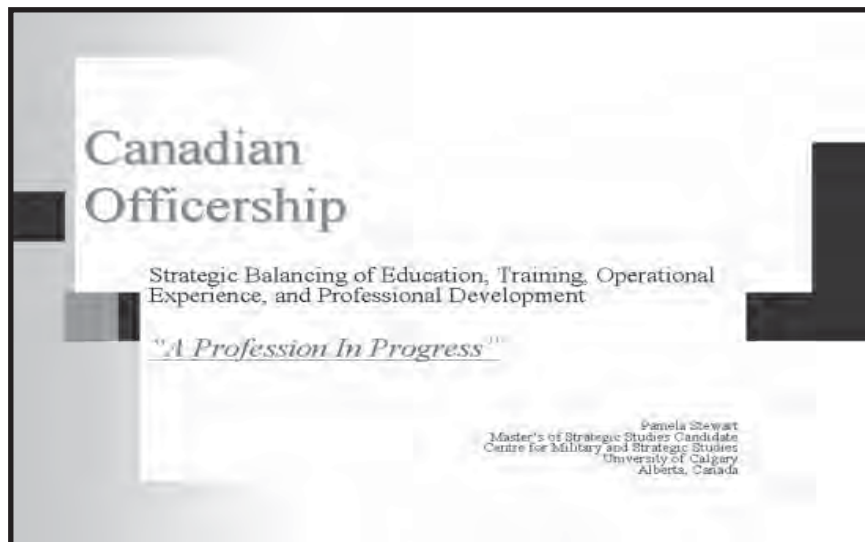


Figure 1

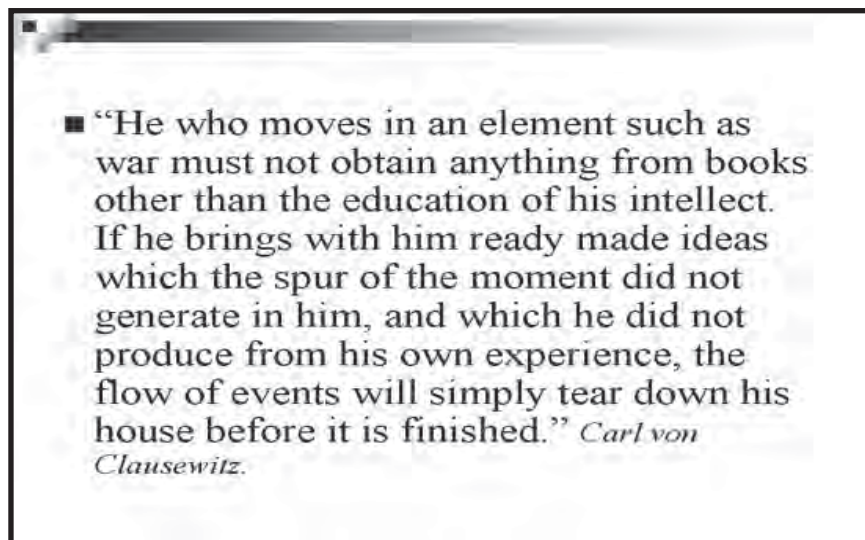


Figure 2

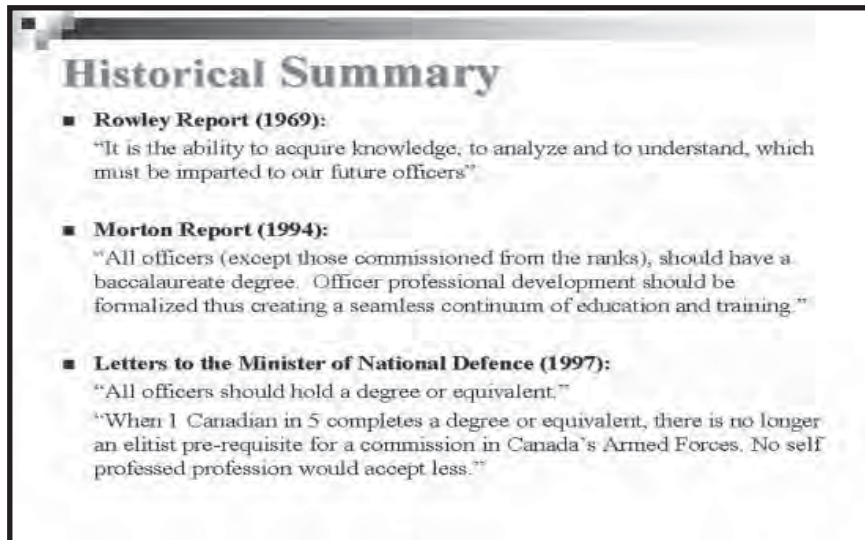


Figure 3

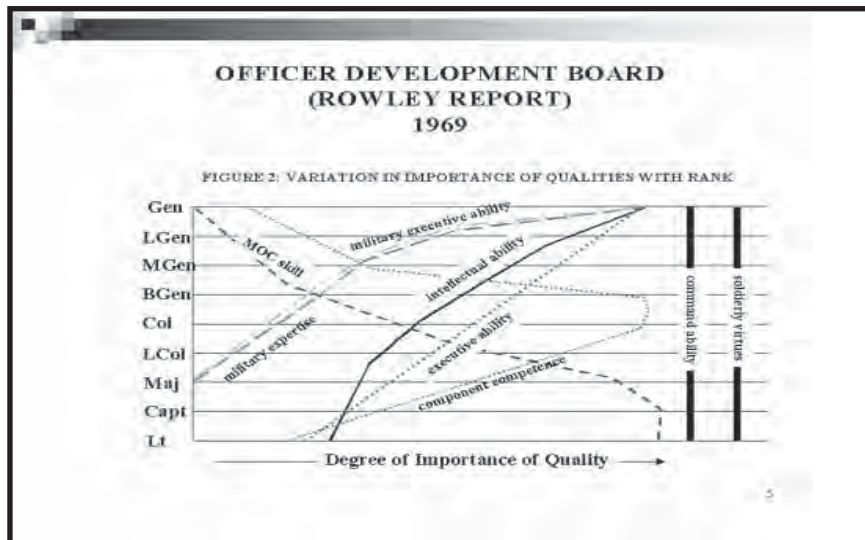


Figure 4

#1-Modern/Traditional Argument

“Education ensures a reasoned response to an unpredictable situation.”

“Training ensures a predictable response to a predictable situation.”

Where should each hold primacy over the other along the professional development continuum?

Figure 5

Education

<p>Pros:</p> <ul style="list-style-type: none"> ■ Demonstrated ability to learn and adapt upon Entry into Forces ■ Established Intellectual Intuition ■ Strategic Creativity ■ Career Building Block ■ Enhanced Leadership ■ Military Pers Respect and Acceptance ■ Public Respect and Acceptance ■ Allied/Coalition Respect and Acceptance 	<p>Cons:</p> <ul style="list-style-type: none"> ■ No Direct Connection to Military Operational Purpose ■ “Time” Killer-Quality of Life ■ Ticket Punching-Careerism ■ Blurred Chain of Command: <ul style="list-style-type: none"> -Degreed NCM (enlisted) pers. -Op skilled/high trained NCMs vs. educated jr. staff Officers ■ Budget Constraints ■ Recruiting, Selection, and Retention Issues
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Figure 6

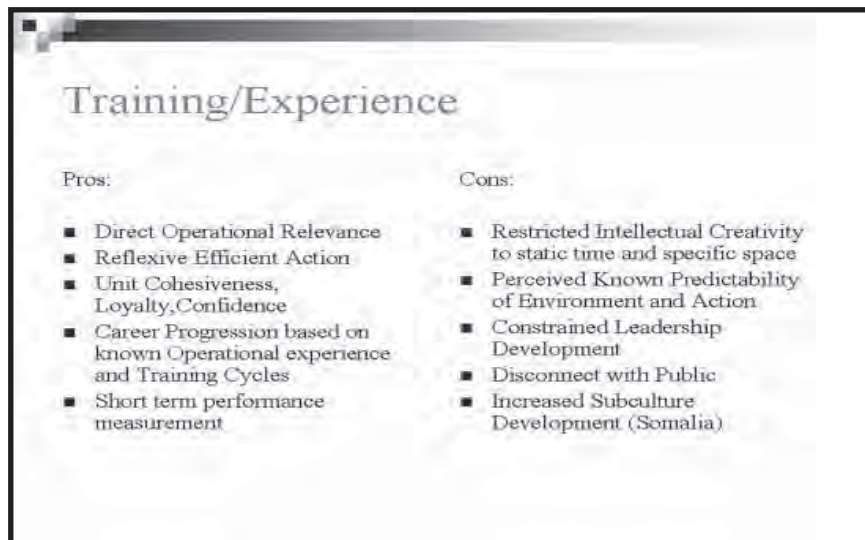


Figure 7

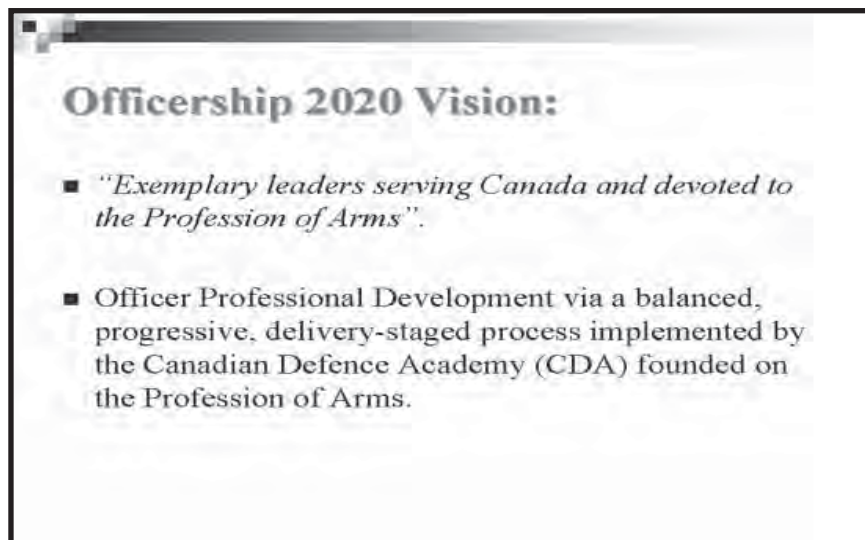


Figure 8

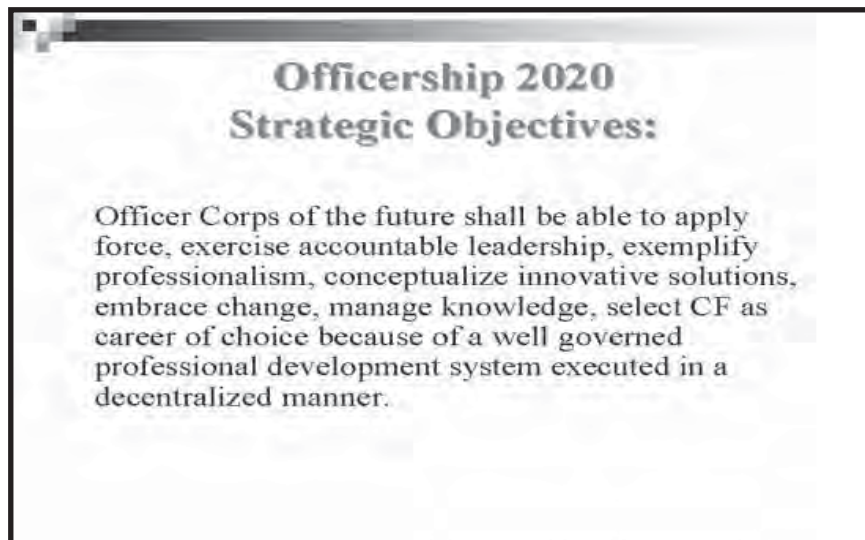


Figure 9

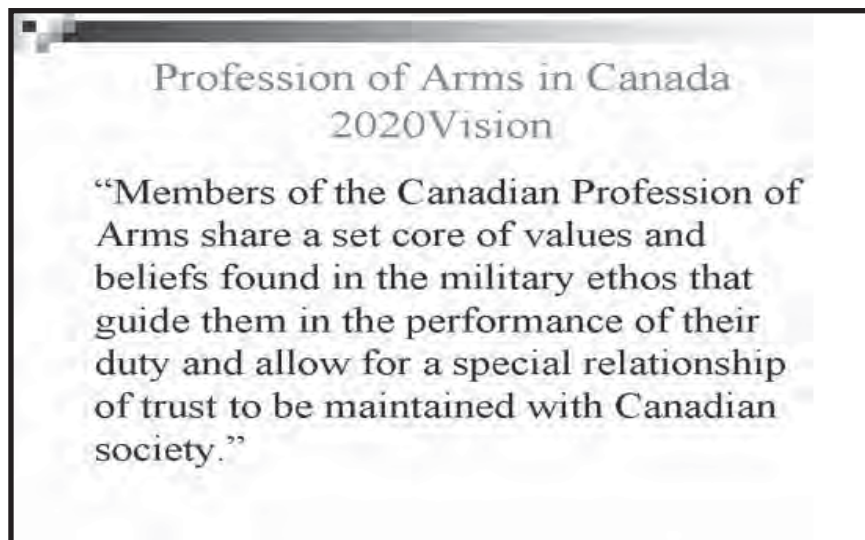


Figure 10

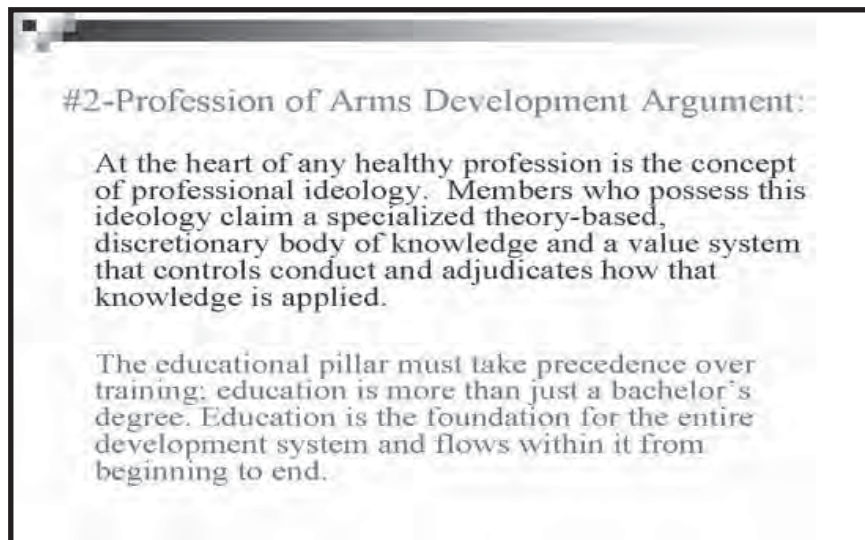


Figure 11

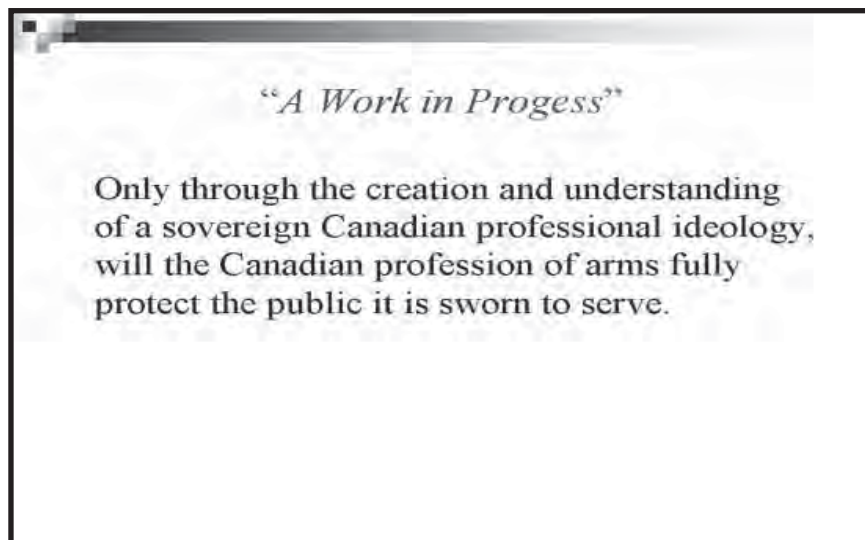
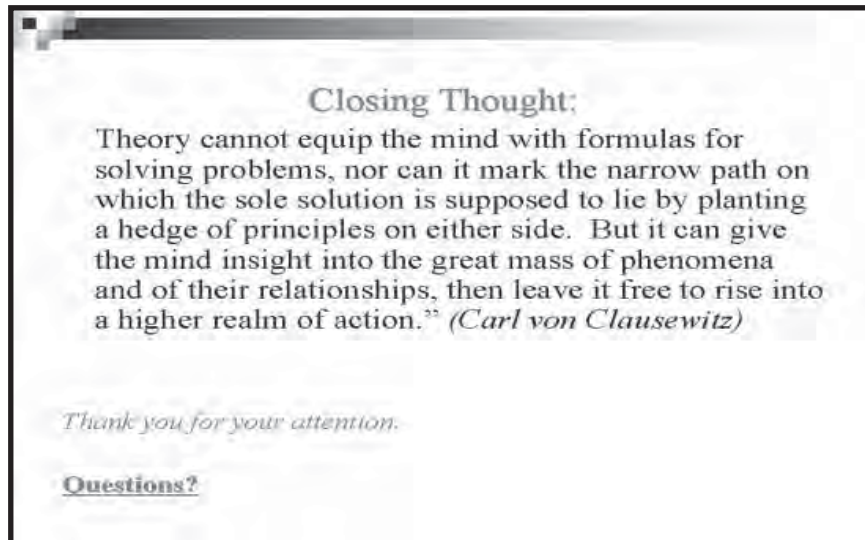


Figure 12



Closing Thought:

Theory cannot equip the mind with formulas for solving problems, nor can it mark the narrow path on which the sole solution is supposed to lie by planting a hedge of principles on either side. But it can give the mind insight into the great mass of phenomena and of their relationships, then leave it free to rise into a higher realm of action." *(Carl von Clausewitz)*

Thank you for your attention.

Questions?

Figure 13

Day 2, Session 4 Question and Answers

Moderated by
James Gebhardt - Combat Studies Institute (MPRI)

Mr. Gebhardt

With regard to the education and training issue, historically, there was no secular university in the Western world before the 18th century, and of course, military education had already been established at that time, and so the idea of military education didn't coalesce with that of university education for a long time. To the best of my knowledge, the first commissioning programs that offered bachelor degrees were the US Military and Naval Academy in the mid '30s, even though it had long been recognized that, for instance, West Point and Annapolis offered educations that were quite equivalent to undergraduate education.

I don't know the current status, but I know, for instance, that in Germany, until quite recently, very few officers had degrees from universities; they mostly had gone through the German military education program, including the Kriepps Academy, which didn't offer degrees. So I guess I'm sort of a little bit confused about whether you're talking about people should have bachelor's degrees, or that you should have a different kind of military education, since I don't really know that much about the content of Canadian military education.

Ms. Stewart

For myself, if Canadians consider that a highly respected profession like law and medicine, engineering, nursing, is based on at least a bachelor's degree, and that those people are people that should be respected, that make decisions, that actually have an impact on the health of community and society, then by implication, military officers should have that same qualification. I agree that a bachelor's degree, like you know, it could be a bachelor's degree in some—basket weaving, for lack of a better word right now—which may not have any impact at all, but over average, like overall, a bachelor's degree as a foundation, it's kind of like, it's evidence that you can think beyond just the training level, that you can take an entire body of knowledge or take a bunch of knowledge from different fields, and make an argument, and use it for some sort of purpose. I know that the stock college courses from the past—actually, prior to 1998—the only way that I've been able to gain access to those courses or the course papers is through the Access to Information, and if you look at the way they were written, the majority of them don't have footnotes; a large part of what I've seen, they didn't have bibliographies. Then you hit 1998, you go to 1999, 2000, by 2001, you're going from 30 pages to 80 pages; you're getting like graduate-level professional papers. So it's the only way for myself to gauge what was done before to what is being

taught now. But again, I didn't go through the system. I was a junior Naval officer—trying to get colonels and generals to talk about how they were educated during the '80s and '90s is very difficult because of the Somalia inquiry and the stigmatism that it's put on the Canadian Forces command. Thank you.

Mr. Gebhardt

General Brown?

Audience Member

I was interested in trying to cross-walk from several presentations, in that the argument's been made that the Canadian senior leaders or officers have not positioned themselves to be respected by the society they serve. The argument's also been made that the Canadian public is hostile to the notion of participating in what's fairly sophisticated in the technical subject of missile defense. And it was seen that the people who could best explain the virtues of participating in missile defense to the Canadian public would be the officers who would be most familiar with it. But are they stymied because they're not respected by the public that they would be trying to convince? Then, just to make sure we get the third leg in, was it different in World War II? Have Canadian officers been more respected in the past, or is this a long-term malaise? Any one of you can start. [Laughter]

Ms. Stewart

I would say that the primary problem is that the government has shut down the ability of the military to speak on its behalf, beyond doing anything but justifying the government's policy. An example of that would be one general, who is no longer in the forces, but I still won't use his name, who was told that if he wasn't quiet about missile defense, he would lose his job. That was it. You were not to be telling the Canadian public even the reasons for participation or against anything neutral.

Numerous times when I've done interviews, I've been told that if I bring up the term missile defense, the interview will be over. So there's not even a possibility for the military, in many cases, to come forward and say the things that you do hear military officers saying in the United States. Obviously, you're limited as a military officer in what you can say—you can't take a political position. But the discussions actually shut down in Canada. Our major foreign policy engagement right now is Afghanistan—there's not been a single hearing on that in the Parliament. Defense policy is simply not discussed, and the reason for that is that the government believes Canadians are highly hostile. Now, they are hostile to some elements of it, but they're also, in general, very supportive of Canadian forces themselves, you know, of the "support our troops" stuff. But after the

Somalia inquiry, I actually conducted a study with some colleagues at UNC that looked at the media reports and how incredibly negative they were, in terms of the language that was being used and that sort of thing, and it really scared the government into believing that the best thing to do was to take money away from the military at that time, put it into other programs, because the military was completely unpopular. While we're seeing a resurgence—probably the highest levels of support since World War II for the Canadian military in the population right now, we're not seeing the government respond to that other than they were promised a significant budget increase in the most recent budget, which the US would still spend in about a week. [Laughter] But it's back-loaded—most of it is five years away from now before that funding will even kick in. So I think a lot of it is more government standing in the way, rather than citizens who don't support the military itself.

MAJ Boire

Let me put this in American terms if I can, and if I screw up the analogies, excuse me; it's not a lack of respect, it's just that it's cold where I live. [Laughter] All right. Can you imagine the Chairman of the Joints Chiefs of Staff, who, during his tenure, never met the President? Not once. Not once. Can you imagine that? Never met him. Was not called to his office; didn't receive a phone call. Can you imagine the Chief of Army Staff, Air Force Staff, Navy Staff, Coast Guard, Marines, who never, never met another Cabinet Minister? Can you imagine a general office class where its members cannot stand up and defend a point of view in front of crowds of hostile defense bureaucrats? I mean, this is where we are. This is why the young ladies on the left made the comments they did—that you do have, in fact, a senior officer cadre completely—completely—cut off from the mainstream of defense decisions, not decisions across the government. So there you are; there are a couple of analogies.

Can you imagine a group of senior military officers not knowing the presidents of Canada's or of your country's largest defense producers? Can you imagine the United States Air Force not knowing where Boeing was? Can you imagine the United States Army not knowing where Chrysler is? Can you imagine the United States Navy not knowing where Litton Industries is? That's where we are.

You also have, in our country, a certain analogy that—I don't know if this is true here—but you have senior officers who hold and carry—unofficially, all right?—political ties. Are there Democratic generals in the organization? Are there Republican generals? There aren't liberal generals, nor is there storied generals in our organization, and it's that kind of political stamping that makes them increasingly unable or unwilling to express themselves.

We have now begun performing like proper auxiliaries—the great Roman legions—and we send our senior officers off to the United States Army for training. We should have done it a long time ago, but we didn't, because we are proper auxiliaries and we know our place. [Laughter] I'm being facetious, but that's the way it's being seen back home. We bring back—you know, we receive back from Fort Carlisle, from Fort Hood, from Fort Leavenworth, we receive officers who have in fact been exposed to other kinds of military regimes, examples, cultures. They come back and they're better communicators, they're certainly more worldly, and they become more popular. In fact, dare I say, some of them are even becoming inspiring. [Laughter]

So, that's where we are. But at least we are—my facetiousness aside—at least we are going out and trying to get better exemplars. In terms of officer education, remember, the Canadian officer education recruiting system is built on indentured service—the same service we people in the North America continent left two centuries ago. All right? If we want an officer, well, we bribe him. All right? “You're coming out of high school, kid. We're going to give you four years of education, you're going to be an officer for five years. There it is. You want that? Let's make a deal.” That's where you are.

Consequently, the remarks made about developing some kind of officer profession which has at least a self-image, if not, the system of education, is very, very difficult, because you have, in fact, this exchange of goods. Sure, there are several members of the Armed Forces officer cadre that are highly respected and highly motivated and highly this and highly that. But it's awfully hard to do that in a society where the profession itself isn't widely admired. I'll give you one last example. As I said in my comments, I had the honor of serving three American senior officers, and as I served them, I had a lot of friends in this organization, and I was amazed that, as these officers left the United States Army and went on to get civilian jobs, that shift in their lives, that transition was not considered to be particularly traumatic. Here, they had no problems with the idea that they had to go off and get a job someplace because they knew they could sell themselves. A question of confidence, a question of background, and I suggest to you a question of the place of the officer cadre within American society.

In our organization to leave the Armed Forces, even as a middle officer, is an extremely difficult decision because you don't know what kind of job you're going to get because your experience of life, your experience of management, your experience of leadership is automatically in many cases discounted. Consequently, you have a senior officer class that is exceedingly loathe to say “that's wrong, I'm leaving”. They stay because they don't know whether they're going or not. So that's what I have to say about officer development,

but again you're dealing with an organization that operates in an exceedingly cranky society. An exceedingly cranky society that fears the outside. The anti-Americanism is real in Canada. It has historical basis like all other mythologies it has a historical basis. It's not rational, but there it is. And a lot of the anti-militarism is associated with that anti-Americanism. You see, in Canada, we have this piece of software called "The milita myth." Unfortunately our historical experience, because of our size, tends to hammer the myth into reality. That mythology is "don't worry about war; when it comes there will be lots of time to build an Army, Navy, and Air Force. We'll always be in a grand alliance with either our American cousins, or our British cousins—ex-masters—so don't worry about it, there'll be time". So consequently when you have that kind of militia mythology mindset, when your principle operating system says "don't worry about it, you don't need this armed organization in time of peace, in time of war we'll have one we'll build one and be successful". In light of that kind of mythology, you're not going to build very much in time of peace. Unfortunately, because of our middle-rank position, history confirms the mythology, which is what Italy's all about. [Laughter]

Mr. Gebhardt

Let's have one more question, please. In the back.

Audience Member

Perhaps, I guess the question would be directed to all of you. Perhaps it would be the cold climate or the bad case of Affluenza, or the mixture of French blood, but I wonder, this seems to be clearly a social problem in Canada that you had what seems to me a clear lack of respect. In fact, PBS in the United States has had recent documentaries on how bad the Canadian military—particularly the Air Force—how bad off they are, and that they don't actually have planes to train in. So I wonder, can you actually do anything about the problem that you have? Is there any way to change Canadian society? I don't know enough about it to know whether it can move to the left or the right or up or down or if this is possible to build this kind of Colin Powell-esque respect for military leaders.

Ms. Stewart

I'll just briefly answer. For myself, being not a liberal, fairly conservative in my political views, but understanding reality in Canada, for me, the Canadian Forces, if they are able to build an ethical profession of arms that a Canadian society can understand, based on Canadian values and beliefs, then the respect will naturally come at that point. It's a way for the Canadian Forces to take responsibility, to take a handle, because the Canadian Force is not going to be able to change the government or the policy way. I personally think that we have about a decade,

like—God forbid—15 years of minority governments in our country. Trying to get anything going for the Canadian Defence is going to be extremely difficult. I think the Canada Forces, the senior leadership, just needs to sort of separate itself on a professional, ethical level. That's the only answer I can give. Thanks.

MAJ Boire

If I may, since 1938, we have empirical data on just how Canadian public opinion works, like in this country. We have polls, from '38 onwards. We know how Canadians react, we know how Canadians think about political issues. There are grand moments in military history where this collective bloodlust—which we forgot back when we beat the Iroquois—resurfaces. [Laughter] It happens in the spring of 1915, and it happens again in September and October of 1941, where the country decides that there's a war to be fought. All right? Until those two moments in those two great conflicts, the only people who were in fact advertising for armed forces and for participation in war were the gentlemen and ladies—a few of them—of the Canadian Manufacturing Association, who saw these wars as business opportunities. At those points in time, there were radical overnight changes in public opinion—not associated with a particular black moment, like a 9/11, but just a very, very sudden realization that the country was at war, and that it had to carry on, and win the war. This shift in 1915 gives us the big army of 1916, and the shift in 1941 gives us Dieppe and Hong Kong, and other grand Canadian victories of '41 and '42. But nevertheless, it happens. So the point of this comment is that if you in fact have these moments where public opinion shifts, then you'll have the attention that the organization deserves, I would argue. Certainly, the American-trained senior Canadian officers who are in positions of authority now are trying to make that happen through their public pronouncements, and are doing, if I may say, a wonderful job of being exemplar leaders. Wonderful job, and let's hope there's more of them in the pipeline.

Ms. Stephenson

Just to wrap it up, the company I work for actually works with the problem of how Canadians perceive the military and affairs, and that's why we work in television; that's why we're a documentary firm. It's not that we started as one; it's that we realize the average Canadian doesn't read public policy reports, they don't go to conferences. Many of them don't even read the morning newspaper—in my apartment building, I think I'm the only person on my floor who gets it. But everyone watches TV and everyone has a television. And in terms of schools, there's not an education in universities or particularly undergraduate and high school programs for these students that Canada even has a military history. It kind of starts in peacekeeping; there might be a day on World War I and World War II combined. So there's not really any kind of information being transferred

to these students, and we're designing courses in strategic culture. We actually have one now at Queens University, which is right next to the Royal Military College, teaching students about what it is to have a strategic culture, even. Do we have one? Is it unmilitaristic? Is it underdeveloped? Is it just lacking? What is the problem? But it's essentially a cultural issue and it's a cultural understanding, in a country where people are willing to allow their armed forces to get to the state that ours got to, because ultimately, who's responsible? The Canadian people are. We didn't stop it; we kept electing the governments that did this. I would suggest that it's because there's a natural cultural problem with the understanding of the rule of the forces in the military. It's probably not something that's going to be solved in one or two years; it's something that's going to be generational. It's going to be, if you can educate this next generation of young people coming up and growing up, who we show the videos to of what Canadians do in war zones, why we do it, and the response, inevitably, from these first and second-year students is, "Well, how come no one ever told me this? I didn't know." Complete blanks. I think that's a significant problem; it's simply not in our education system in the way that it is in the American education system, and American students are very aware of the military—what it does, and its history.

Mr. Gebhardt

A few more brief comments.

Ms. Stewart

I'll just make a brief comment with respect to Major Boire, Colonel Bentley, the commanding officer of the Canadian Defence Academy—these individuals are all extremely professional and expert intellectuals. What I was saying earlier was not perhaps fact; it's just an overall Canadian public perception of the profession of arms in Canada. Thanks.

Mr. Gebhardt

Thank you very much for a very stimulating presentation about the situation of the Canadian Armed Forces. I learned something and I hope you did as well. I welcome you back tomorrow. The folks from the Foreign Military Studies Office are going to talk to us about the war in Chechnya tomorrow morning, and please be there. [Applause] Thank you all very much.

Urban Operations, 1994-2005; Information Operations: Capturing the Media

Timothy Thomas - US Army Foreign Military Studies Office

What I've decided to do with my time is to show you some of the lessons learned, as I saw it from the Battle of Grozny, since urban warfare is playing a very important role right now in Iraq. For those of you who've seen the book out there, Block by Block, there is an entire chapter in there on the first battle for Grozny, and it goes into as much detail as I know about lessons learned—from the Chechen side, and from the Russian side. So I'm not really going to focus on anything I said in there. I want you to see some of the other lessons learned that have come out of this urban warfare that some of you may not have considered, because some of the lessons are unique—they're unique to your access, they're unique to your interpretation, and they're unique to what you're looking for.

Now, the first one, you might think, well, that's pretty obvious —personal interviews with combatants. The interesting thing here is that we had access—we've been very fortunate in our office—we had access to leaders on both sides at the highest levels. We had access to General Anatoly Kulikov, who was the commander of all Russian forces in Chechnya for two years. Through Glen Howard, we had access to Ilyas Akhmadov, who was one of Shamil Basayev's strongest supporters way back in the early fighting; he also became the foreign minister of Chechnya a few years later.

Through interviews with these people, we learned a lot about this type of situation, where we learned how they divided the city up—they did it by dividing it up into four sectors, using the railroad and the river. We learned a lot about the peculiarities of the fighting—the fog of war part—when they went into the battle, what worked and what didn't work, and why they had problems.

Initially, they went into this train station, that you see here in the bottom of the diagram, and when they went in, they actually got on the phone and started calling back home, saying, you know, all we've got to do is order some tickets; there's no resistance here—we can just hop on a train and we'll be home in a week. The Chechens, meanwhile, were ambushing another regiment of Russians up in the North; after they did that, they ran down to the South. These ambushes were being done on the spot, on the move, just with pickup trucks and whatever else they could cobble together. The Russians just sat there, thinking nothing was going to happen, and General Kulikov said he counted 26 RPG hits in one of their tanks down there, so that should give you some idea of the ferocity of the attack that the Chechens laid on them.

The second thing, of course, is journals, radio, and TV. What do you find in these journals? Believe me, the lessons that we've learned from looking at these journals are unique—they're things that we don't think about as Americans; we have our own templates that we use, and the Russians are using something different.

For example, if somebody asked you, how would you take the city of Grozny—we don't really do a great job in this country of teaching operational art to brigade and division commanders; we're really good at doing the tactical side for company commanders, battalion commanders. When we looked at some of the Russian publications, we found out how they went back in time and looked at the structure of street layouts (radial, radial ring, rectangular, etc). The radial might be Warsaw years ago, where the old city started in the very heart of the center, and then gradually expanded out. Today, we've got more of a rectangular check-board idea.

When the Russians went in the second time, into Grozny, in January of 2000, they really used the radial ring; they called it the "spider web"—and what they would do is they would try to find an insurgent group in one of those little areas of the web, and then they would try to close off all areas of that web with their own force.

Of course, there were other things they did—they sent in sniper teams, they sent in recon teams—they did a much better job the second time around because they learned a lot of lessons too.

Photographs—As you go back in time and you look at some of the photographs, you'll see some indication that the Tor-1, which the Russians refer to as a flamethrower; it's a heck of a flamethrower—it shoots thermobaric rounds that take out about a 200 by 400-square meter area. There were some shots on ABC that had some weapons that looked like the Tor-1 being shot. We also found some SS-21s that didn't explode that were lying in the streets of Grozny. So there are some indicators there that some fairly powerful SRBMs were used against the Chechens as well.

This is the one that people ignore, to their own peril, and that is: What's coming out of the military industrial complex? Lessons learned are there. All you have to do is see what comes out a year or two later. These are some of them. Pocket artillery, they need a new small arms, more linguists, faster acting recon, this thing called a tank support combat vehicle, and I'll show you some of the IEDs that they used as well.

The Schmel is a shoulder-fired thermobaric weapon—they seem to really, really like the thermobaric. What they've done is taken the thermobaric not only in the

Tor-1 that you saw that takes out the 200 by 400, or the shoulder-fired Schmel which now there's a lot of investigation in Russia that these Schmels were used by special forces in Beslan against the terrorists when they took over the school there, but also they have thermobaric grenades. One of the lessons learned was that when someone was hiding in a building, or they were hiding behind a barrier, a regular stun grenade (the fragments) would not get through the barrier—thermobaric does; it sucks all the oxygen out of the area. So they've been putting together a lot of grenade launchers that have the thermobaric round.

They found out when they got into rooms that the weapons they were carrying were too big, and they needed to go snub nose. So everything they developed went down—you know, they cut the barrel length down. They also found out that once they got in a room and they fired rounds, they were ricocheting all over the place and they were hitting their own guys, so they developed some new ammunition that when it hit the wall, it would just drop.

So this military industrial complex is really, I think, a key to understanding a lot of lessons learned, and a lot of people don't look here, but I think it's really a valuable place to take a peek.

The other thing, then, that we saw—and this covers the second half—was the information battle. The first time the Russians went in, in '94, they would not allow any press coverage—they would not allow reporters to talk to their own soldiers. The Chechens, on the other hand, talked to every reporter they could. As a result, the evening news in Russia was filled with Chechen points of view, and the Russians really understood about a month into the conflict that they had absolutely, positively lost the information war, the public opinion war—public opinion was seriously against them.

The Chechens were so adept at this that they were having reporters fly into Dagestan, the neighboring republic, and then they would pay for their taxicab rides into Chechnya just so they could report on events there. So they really knew how to use the media.

The other thing they did is they went to websites, and they began to show examples of ambushes. By doing that, they really caused the Russian press to become impotent. It was really an interesting moment, because the so-called powerful propaganda and agitation apparatus of the Soviet Union was really nullified, simply because if the Russians said “no, this ambush never took place; the Chechens are just feeding you a line to make you think they're gaining the upper hand”—the Chechens would then put the ambush on the website, and it was not possible to refute that then. So they really changed this whole battle around with this information war.

The second time around, the Russians learned a lot of lessons, and they improved on their own ability to use the press. In fact, they don't let the press go in unless they escort them now. So they don't want the Chechens to talk to the press at all. That's why there was such an uproar—in addition to the fact that we made an uproar about bin Laden on TV—there was such a big uproar about Shamil Basayev on TV.

The other thing we found out is that the Chechens found other ways to use the Internet. If you want to help Chechnya, you can just send money to them to a bank account number posted on a website. The reach is everywhere—it's America, it's Germany, it's England—it's everywhere that they can establish a bank account, somebody can contribute money to the cause.

So insurgents have learned: "We can use the Internet for manipulation, for recruiting, for financing, for obtaining data, misleading law enforcement officials." The Internet is really a place that they've focused. For those of you who have been following what's going on in Iraq [laughter], al Qaeda has several websites now. They hosted one at the University of Michigan, and one at the University of Texas—on their ISPs. They did it for obvious reasons. At the University of Texas, they have a Middle East study group, so they know that a lot of people who have an interest in Arab affairs might be looking there. And the same at the University of Michigan, because Michigan has such a heavy Arab population.

The psychological climate was intense. It's just as intense in Iraq right now—in intimidation, provocation, leaflets, the Internet, terrorist actions—it's all there.

Regional and Global Impact of Chechen War: GWOT Theater or Russian Imperial Maintenance; Chechenization and the Balance Sheet

Glen Howard—Jamestown Foundation, Washington, DC

Thank you, everyone, for having me here today. Being a former KU grad, it's always great to come back to Kansas. I've lived in Washington for a number of years, but it's often hard for me to believe that I was once working a night shift in Lenexa, working at UPS, and now I'm given the opportunity to just come back and speak to audiences like you, and hear people here in Kansas, and see my old familiar surroundings. Being in Washington, it's always a great opportunity to kind of get away from Washington and get a breath of fresh air in Kansas.

I think first of all, I'll tell you a little bit about myself, other than being a KU grad. I had the unique opportunity—several years back, I got a master's degree in Soviet studies from the University of Kansas, right at the ending of the Cold War, and I'd worked in Moscow one time in the US Embassy as a translator. I traveled a lot around the country. I went to work at SAIC and became a beltway-bandit for a number of years, and I had a great opportunity in 1999—I was presented with the opportunity to go to Chechnya.

I spent a week there; I went with a religious leader—a Sufi Shaykh—so I was kind of the only non-Muslim in the whole group that went down to Chechnya. I spent a week there and spent a lot of time interviewing, talking to people, and especially President Maskhadov, the former president of Chechnya, that was killed earlier this year.

From that, I kind of began kind of an odyssey of becoming involved in Chechnya, and I now head a committee with Dr. Zbigniew Brzezinski and General Alexander Haig called the American Committee for Peace in Chechnya that's been having an uphill struggle of trying to bring peace to Chechnya. Which is not a foregone conclusion—Chechnya is very much a vibrant issue; it's alive in Russia. There's numerous peace plans trying to end the war. We are on the web at www.peaceinchechnya.org—you can find everything you want about Chechnya, on our website.

I also carry the hat of being the president of the Jamestown Foundation, which is the major information provider on conflict and instability in Eurasia. We have a daily Eurasia Report—I've brought several copies of that with me that I'll distribute in the foyer afterwards. I also brought copies of a book that we've developed on the War on Terror that has a significant section in that book on Chech-

nya, where you've had a lot of leading experts write about Chechnya, reports that we've commissioned about Chechen fighters, Arabs in Chechnya—everything you want to know about Chechnya by what we consider many of the world's leading experts have written on this issue.

Now, before I begin my talk, as Tim has noted and others have noted, the theme today at the Combat Studies Institute is the theme of transformation. So we're all sitting here in the room and many of us heard about Chechnya, and I'd like to say, you're probably scratching your head, saying, "Well, why is Chechnya important in the issue of transformation?"

Well, I think Chechnya is a very important issue from another perspective that we're in many insurgencies throughout the world, and especially in the Middle East now, but also in the Greater Middle East, where Chechnya falls. That's what we call now a theme of regeneration. The theme of regeneration is that you're now seeing in Chechnya a second, third generation of fighters grow up insurgency commanders that have known nothing but what they call the culture of the Kalashnikov. You're also seeing a society where many of the former commanders in Chechnya—Maskhadov was one of them—that were Soviet-educated; they're all graduates of Arshile Military Academy; many of them have served in military units throughout the Soviet Union. The former president of Chechnya—Dudayev—was a Soviet Air Force general.

So what you're seeing now is a new culture, a new breed of fighters emerge that don't have that education, they don't have the Soviet military background. But what they do have is a very strong culture of growing up in an insurgency, that they know their local surroundings, they have a keen instinct for survival.

Now, I'm going to divide my presentation into two parts. I carry a slide with me that I give a presentation for in my work with activities for the American Committee for Peace in Chechnya, and I've been given the opportunity to speak for 20 minutes. So what I'm going to do is divide this time into two sections, and I'm going to present this section as the last part for ten minutes on my slides, try to give you kind of an overview of things. The other part I'll talk about is the regional impact of Chechnya and the global impact on the War on Terror.

When I begin with that, I'd like to note that Chechnya has had a very key importance to the United States. Pre-9/11, Chechnya was basically a war that was going on in the north Caucasus. The United States was upset about it—there were 400,000 refugees; they had over 100,000 Russian troops in Chechnya. It had spilled over from the conflict on the south Caucasus.

Well, the problem is that Chechnya sits astride some very important, what we call lines of communication. You have the very important Caspian Sea, and you have the Transportation Energy projects that are going through the Caspian.

Now, Chechnya, of course, is on the borderline of that, and it's a major fault line in the north Caucasus. Chechnya is separated by a mountainous barrier that goes from the Caspian to the Black Sea. So the north Caucasus is this mountain barrier that separates the south. Well, the problem is, that increasingly, the conflict is spilled over into the south, and going through Georgia and Azerbaijan. Azerbaijan has the Baku-Jihan Pipeline, which is going to bring the United States and its Western Allies about a million barrels of oil a day—the pipeline begins operation in September; a non-OPEC source of oil.

So anything that kind of carries over, or spills over into this conflict, does have an impact on American Allies in Georgia, Azerbaijan, as well as in Armenia, which is also very much strongly aligned with the United States, and actually has troops in Iraq. But this is very important in how we look at the region.

The second thing is that the spillover from the war began with the deployment of Chechnya fighters in Georgia. These fighters were seeking sanctuary, doing R&R during the winter months, and these fighters became a problem because there were Arab fighters that were mixed in with him. So what happened in the year 2002 was the Pankisi Valley became the major kind of hot spot between the United States and Russia, with the Russians threatening to go in. So what happened is we deployed American troops as advisors to Georgia, helped trained the Georgian Army; then we sent the Green Berets in to the Pankisi Valley and helped the Georgians clean up the area. Now the area is very much free of any type of instability or problems, and I know that firsthand because I was flying in an American Huey helicopter with Georgian pilots this summer—about a month ago—into the Pankisi Valley, and had a firsthand look at the area, and it's very much cleared up.

The second thing that I'd like to talk about is that there is a Chechen Diaspora that's caused by the conflict and this Chechen Diaspora is dispersed throughout the Middle East. Many of these people—I'm sure you've seen the famous film, *Lawrence of Arabia*, and the scenes from the film where they're trying to blow up the Hejaz Railway. Well, many of you will find it very interesting to note that during the Turkish Empire the people that they sent to protect the railway were Chechens, and Chechens were used in many parts of that railway to protect it, and that's how they ended up in places like Jordan, of all places.

So they do have a small Diaspora in this region. After the 19th century wars, many of the Chechens went to Turkey—a very large number are there. You may be surprised to know that the former chief of the general staff of the Turkey Army, Armed Forces is a Chechen. They have a very strong martial culture in history, and with any society that they kind of integrate into, they have this martial tradition where they do fit into regional militaries, and they do it quite well.

The other aspect that I'd like to go to—now, this also plays on the War on Terror, because of the aspects of the financing. But as you can see, by the map there's no ATM machines in Chechnya, and there's no frequent flyer flights between Grozny and Riyadh. Chechnya has very much been cut off from the outside world since 1999.

When I mentioned it earlier, I talked about the issue of regeneration—why is it important? In the case of Chechens, if we've been following them since 1999, I've basically pioneered many important uses of communication, means of communication, how they carry material things in and out, and how they keep the resistance alive is very, very much—it's kind of a fascinating glimpse of things. I'd like to ask everyone in the audience this question: “Has anybody in this audience ever sent a voice recording by the Internet? Have you ever sent a tape to a loved one, friend, relative, by the Internet? Just tell them, hi, how I'm doing?” I saw this a couple years ago.

Chechens were sending back and forth on the Internet voice recordings, and actually, there's a Chechen radio service for Radio Free Europe based in Prague, and the Czech Republic, and they were receiving voice recordings from the president of Chechen by the Internet and doing these types of things. They have been able to do, I think, key means of communication. They often use videotapes of commanders giving orders, in order to verify that the order is actually coming from that commander by videotape. They do this by a very unique system that's not high tech; it's basically what we call a courier system, where they send people by foot, and deliver tapes, they deliver certain messages, they also deliver money. They operate from areas like Azerbaijan, Georgia, even Moscow—they go back and forth. So this is how they kind of keep their struggle alive.

Now, the United States has had a concern about Chechnya because of the level of the Arab influence inside of Chechnya, and I have to talk about that briefly, because, beginning with the first war in Chechnya, they did recruit some of the Arab fighters into the region. With the beginning of the Second War in 1999, a lot of the fighters fled the region. They left a handful of key fighters—one of them was by the name of Khattab. Khattab was important because he was from the

very famous al-Ghamdi in Saudi Arabia. That may not mean anything to you, but several of the 9/11 hijackers were members of the al-Ghamdi tribe—that's important, and there is some significant relevance to what's going on in Chechnya in terms of 9/11, al-Qaeda, and the War on Terror.

But overall, there's only a handful of Arabs left in Chechnya. A recent interview by the field commander—the top Chechen military commander, a man by the name of Dokku Umarov basically said that there's not enough Arabs in Chechnya to form military units; they have to disperse the Arabs into other military units because their number is not very large.

But what these Arabs do do is they do have a source of funding and access that they can get key important equipment that they need, communications stuff, also funding and financing from the region. But a lot of the funding and financing from the Middle East that was prevalent before, beginning with the war in 1999 to 2000, has pretty much dried up—even the Russians will admit that.

Now there's several important instant things that are very important about the Chechens in terms of regeneration, and it's very important in understanding them. As I mentioned earlier, I used to be with SAIC, and right after I came back from Chechnya in 1999, I had a very interesting request came through, and that is from Quantico. A group of Marines down there were saying, "Well, gee, you know, we interviewed all these Afghan commanders who fought in Afghanistan with the Soviets, so why don't we interview some of the Chechens and learn about their urban warfare and their combat strategy during the First War?"

So we had someone approach SAIC, and then we put them in contact with a consultant in Europe, and that person went into Chechnya and did an extensive interview project, interviewing Chechen field commanders prior to the Second War. So they had an extensive process of tapes, interviews, that were all prepared for the Marine Corps, and I've often seen friends from Quantico in the past couple years, and asked them, "Well, what's the status of those tapes?" and no one knows where they are now. But they have this whole transcript of very unique, very forward thinking, talking to the Chechen field commanders about how they fought.

Why are the Chechens so successful in what they do? In August 1996, they surrounded 15,000 Russian troops in Grozny, cut them off; it led to the 1996 Khasavyurt—a lightning attack by the Chechens. The Chechens have a very strong martial tradition that grows out and they have historical experience. That experience has been going on for 400 years—it dates back to the 18th cen-

ture—but even before that, Imam Shamil led a group of what they call the North Caucasus Mountaineers against Czarist rule.

As I go on here—this key figure is very important. This is the person by the name of Imam Shamil, who fought the Russians for over 40 years. What the Chechens have, and the North Caucasus have in particular, are very strong historical experience. I'll tell you this because this historical experience has made them very adaptive to survival. You may not know that Stalin deported the entire nation overnight; in 1944, 600,000 people were put into boxcars and sent to places like Siberia and Kazakhstan. Well, growing up in a very harsh environment like that will make you very, very tough, and in that type of environment that they grew up in, up until the 1950s and 1960s, they had something of which was an oral tradition, of where their grandfathers would teach them about where every relative of their family ever fought the Russians. So they knew each valley, each little ravine; they pass on an oral tradition of historical legacy to their children. I've had the former foreign minister of Chechnya tell me the story about how when he grew up his grandfather, even growing up in Kazakhstan, would teach him about this experience of what they had.

Now what this leads to is something that we're very familiar with in the US military, is what we call "tight unit cohesion." So this leads to the Chechens because of this historical experience that they have—they know how to fight in small, very mobile groups, and this type of experience that they had in growing up in the camps, and also in Chechnya now makes them have a unique kind of tight cohesion. They also have a very egalitarian nature, to where they elect their commanders. Now Chechnya is a clan society, but it's a society that's very egalitarian. So a lot of the smaller units, when they call these units mobile units, which consist of seven men, when they're fighting in the urban environment, these guys will elect their commanders, based upon their respect for them.

Chechnya has now kind of evolved to a position where the United States, because of its position as Russia's ally in the War on Terror, has basically kind of taken a hands-off approach to Chechnya. Now, there were no Chechens found in Guantanamo, but there were rumors and reports of Chechens being in Afghanistan, but they didn't find any. But this has kind of led to this close relationship with Russia; there's been intelligence sharing with the Russians. I saw a declassified report on some of the information received from Russia, and what I learned in that report—as someone who has followed the region for years—is that we were being plugged with a lot of disinformation by the Russians. Basically, as the Russians have a certain position to advocate—making the Chechens out as a part of the al-Qaeda in the War on Terror—but we do have problems with that.

Often, a lot of our intelligence analysts don't have the historical depth, or experience, in dealing with the area to kind of separate this stuff. But, as someone who has followed this for the past six years, I can see many errors in the analysis and things that were given to us by the Russians.

Now, why I say that is that it also began—like now, you may be surprised to know that there's now, within the NSA, and in Monterey, there's now a Chechen there in Monterey, teaching Americans the Chechen language. There's been a lot of interest in the United States in the Chechens as a result of 9/11. But basically, the United States has kept its hands off the conflict, even though they advocate and promote a peaceful end to the war.

So, as this conflict has kind of drawn on, the United States has kind of separated itself from it. But it's been increasingly spilling over into other parts of the North Caucasus. It has no meaning for any of you in this room, but it does have an impact with the stability of Russia, and the stability of Russia is very important to the United States. So, if this area starts to filter away at the fringes of a decaying empire, than it does have impact on us, because, as we know, energy supplies are very important to us, and the Baku-Jihan Pipeline is going to be a very important supply of a non-OPEC source of oil to the United States.

In terms of the Global War on Terror, Chechnya has a basic military strategy by the Separatist Movement that was directed by Aslan Maskhadov, I call him the Chechen version of General Giap—very, very well educated; you know, he's an artillery officer, graduate of Arshile. He was someone that constantly advocated a guerilla war strategy against the Russians.

There was a second person by the name of Basayev within the Separatist Movement, but basically, Maskhadov designed a whole interior supply system for the resistance Separatist Movement that kept the fighters supplied. He kept them training—they had bases set up in the mountains—and what happened in the first couple years of the war, the Chechens were busy creating military bases, secret military camps where they could train and disperse people to fight.

Of course, Maskhadov was killed; he was also the only democratically elected president of Chechnya in the elections in 1997 that were deemed by the West to be free and fair. Why is Chechnya important? The Russian military casualties in Chechnya have been greater than Afghanistan. As the comments below, more than 25,000 Russian military men have been killed in Chechnya in action or died of wounds since 1999.

So is this conflict lethal? Yes, it is. Is it a bleeding wound on Russia? Yes, it is, this conflict is very much a bleeding wound on Russia.

It's also had a very large humanitarian tragedy—10,000 or 9,000 displaced. Why is this important from a military security perspective? Well, when you have people who are displaced by conflict, they go to other republics. Well, when you have refugees serving in areas, those refugees can also serve as a base of support—fund-raising, also R&R areas for people, and it's also a recruitment ground for other fighters.

So what the Russians have encountered in North Caucasus is that with all these refugees who have been dispersed by the war in Chechnya, they've gone to other parts of the North Caucasus. That's why we're seeing a spillover of the war in other parts of North Caucasus, because there's a Diaspora; this movement is everywhere.

But there's also the issue of 80 percent unemployment in Chechnya. In neighboring Ingushetia, you have 90 percent unemployment. So if there's nowhere else to go, and there's nowhere else to work, it's not a surprise why people are picking up arms to fight back. They also had a problem with many of the mosques in Chechnya have been destroyed by the conflict—300 to 350 mosques in Chechnya have been destroyed or heavily damaged.

There's still efforts now to end the war in Chechnya. The Levada poll in June 2005, 23 percent of Russians believe that peaceful lives are being restored in Chechnya, while 68 percent believe that Russia is still at war with Chechnya. Three-quarters of those polled in Russia are inclined to agree with the separation of Chechnya from the Russian Federation, so it's probably just an element of time before Russia just gives up on Chechnya because it's become such a bleeding wound, and not only that, but the conflict has spread to so many other areas.

General Aushev, the former president of Ingushetia was one of the most highly decorated Soviet veterans of the war in Afghanistan. He's an ethnic Ingush, and he's been an outspoken opponent of the war in Chechnya, and many people believe that he is the best hope for future peace in Chechnya; that unfortunately President Putin is not inclined to negotiate with the Chechens or the Separatists, but there's people like General Aushev, who managed to get out 25 children last fall, last September, from Beslan—a key figure in this movement.

Key people to watch in the post-Maskhadov resistance. Abdul-Khalim Sadulaev became the successor to President Maskhadov. You had the veteran Chechen

commander, Shamil Basayev—he's been the mastermind of suicide attacks, but he's also a mastermind of Chechen urban warfare. Shamil Basayev was the garrison commander of Grozny, when the Russians relentlessly went in and tried to attack the capital and where they took all those heavy losses. So he's not only a master of suicide attacks and terrorism, but he's also a master in urban warfare as well, so just a very key figure in the movement.

The next guy is Dokku Umarov—he's now the vice president of Chechnya, a key field commander. Why is he important? Well, June 2004, the Chechens—you probably didn't hear this; it wasn't really covered, it was maybe for one day in the news—but they seized control of the capital of the neighboring Republic of Nazran, and I still think that that attack and what they did in that one day of taking over a capital of the neighboring republic was quite significant. Why? Because they held the capital for 24 hours. The first places they went in and attacked were the communications—FSB security services, their command and control network—cut them off from having satellite contact with Moscow. Chechens and Ingush were wearing Russian military uniforms, Russian military officers coming into work were pulled off to the side of the road and they were shot and executed on the spot. Then they would take the car and move it off the side of the road—you know, just like out of one of these films, they keep coming in, they shoot them, and they take them off. So they did this for 24 hours and partially because they didn't have any communications and the Russians didn't know what was going on. They seized several warehouses of weapons; they sent the weapons back to Chechnya. They came, they went, and they did what they wanted. Why am I telling you this now? It's important because perhaps this is a dress rehearsal for something larger. If I was to guess on where we might be sitting in a month or two months, and you may be reminiscing about a my presentation on Chechnya, I think you may be seeing something in the news where the Chechens have seized another capital of another neighboring republic and I think Dagestan, Makhachkala is going to be the target. Why is all this important? The Chechens, lead by Basaev, still believes that the knockout punch is what is going to take the Russians out of the war. Whether this is an ill-fated concept is not clear, but he (Basaev) believes that he can take out two airliners going down—simultaneously being hijacked, a thousand children taken hostage last fall in September in Beslan, they had a Moscow suicide attack in a metro. All of these coincided within a several days. The first thing handed outside the door by the hostage takers in Beslan was political conditions for withdrawal of Russian troops from Chechnya. The political motive behind the conflict is still very much there. Basaev believes, and he may have changed his view somewhat, but he believes that the knockout blow is what's going to do Putin in. So you have Chechens against the Russians, head-to-head and this thing is basically a meat grinder.

Why is history important? Because the Chechens new separatist leader, Abdul-Kalim Sadulaev, models himself after Sheikh Mansur who fought the Russians, and who was another predecessor to Shamil. History is very important in this conflict. They keep modeling after their forefathers, and their grandfathers, and their resistance against the Russians.

Well, thank you very much. I very much appreciated getting a chance to talk to you, and hopefully, you're a little bit more interested in Chechnya. Thank you.

The Evolving Nature of the Chechen Resistance: Descent into Terrorism

Ray Finch

This paper will briefly touch upon the evolving nature of the Chechen resistance (though devolution may be the more accurate term). For a number of reasons, the Chechen resistance has transformed from a traditional guerilla force into one that increasingly relies upon terrorist acts against civilian targets. However, as in any symbiotic relationship, the primary cause of this change has been the equally downward evolution of Russian military strategy/tactics in Chechnya.

Background

Russia has been, on and off, at war in Chechnya for the past 250 years over the question of Chechen independence. The latest conflict stems from 1994, when Russian forces attacked Chechnya to crush an armed insurrection. Russian forces pulled out in 1996 when a ceasefire was signed and then re-entered Chechnya in the fall of 1999, when Chechen fighters made armed incursions into the neighboring republic of Dagestan and were claimed to be responsible for a series of explosions in Russian cities, including Moscow. Initially, Russian forces were merely going to restore order in Dagestan, but then the Kremlin leadership decided to move into Chechnya and crush the resistance once and for all.

Evolution of Chechen Tactics

1. Force on force. While the latest conflict could never be characterized as force on force, during the 94-96 period of hostilities there were a number of battles where a significant number of Chechen fighters engaged Russian forces in a force on force type battle. The Russians enjoyed tremendous advantages in mobility and firepower, but these were offset by poor training and leadership. Russian tactics might best be described as indiscriminate, where suspected targets were struck with massive firepower with little concern for collateral damage. The Chechens took advantage of their knowledge of the terrain (especially in urban areas) and general support among the local population.

2. Insurgency on force. This has been the traditional Chechen method of engaging Russian forces. Taking advantage of their home turf, Chechen fighters find vulnerabilities and attack Russian fortified positions and convoy operations. However, as the number of insurgents has decreased and as Russian forces have further fortified positions, the Chechens have had to engage other targets, including civilian locations.

There has been a similar widening of combat-type operations on the Russian side. If at first, Russian forces would target those who appeared to be insurgents, they soon began to harass, imprison or attack any who remotely resembled the insurgent profile. This indiscriminate Russian retaliatory violence has been aggravated by endemic corruption within and the lack of effective legal oversight of the Russian security forces. An overwhelming majority of the Chechens polled in the capital Grozny, earlier this year said that they had a “strongly negative view” toward Russian security forces.

In the past couple of years, the Russians have been able to exploit the rifts between the traditional Chechen clans. While the Chechen insurgency has probably never been unified under a single command, during the 1994-96 stage of the conflict, driving Russian forces out of Chechnya unified nearly all the insurgent groups. This is no longer the case. Chechen forces are now splintered in a number of groups with different loyalties and objectives, and Moscow has taken advantage of this to weaken the insurgency.

3. Insurgency on civilians. As the Russians have begun the process of Chechenization (turning over security operations to Chechen forces who have expressed loyalty to the Kremlin), Chechen insurgents have increasingly targeted civilian locations, both inside and outside the borders of Chechnya. Something similar is observed in Russian tactics, where villages and towns are subject to indiscriminate sweep operations, where any likely insurgents are arrested and sent to filtering camps, often never to be seen again.

Tactics of terrorism

The Chechen insurgency attacks on civilian targets have taken one of three forms:

- a. Conventional insurgent attacks against civilians/security personnel.
- b. Suicide bombing.
- c. Hostage-taking.

a. Paradoxically, as the overall size of the Chechen resistance has decreased (especially since 1999), the likelihood of more devastating attacks against civilian targets has become greater. Hardly a week goes by without a report of an insurgent attack against both military and civilian targets in Chechnya.

b. While somewhat difficult to categorize, during the 1994-96 Chechen war, there were only a couple of recorded incidents of suicide attacks against Russian military and civilian targets. In the past five years, however, there have been

a number of such attacks. For instance, just prior to the mass hostage-taking incident in Beslan, two Russian airliners were brought down using female suicide bombers. Most analysts believe that this increase has less to do with radical fundamentalist teachings than with the sense of utter despair and hopelessness among the Chechen population.

c. The hostage taking of the hospital in the town of Budennovsk (Stavropol) in June 1995 may have established a dangerous precedent for the Chechen insurgents. In this incident, the Russian authorities were willing to negotiate with the Chechen hostage-takers to free the lives of more than 1,000 hostages. As part of the agreement, the Russian authorities purportedly agreed to begin a peace negotiation with the Chechens, pull out Russian forces and also give safe passage back to Chechnya for the hostage-takers. From the Chechen perspective, this hostage operation was considered a success. A similar attempt was made in January, 1996, but with fewer Russian concessions and bloodier results. Some claim that these mass hostage-taking incidents were a last-gasp attempt by the Chechens to force the Russian side into some sort of political negotiation with the Chechen separatists. Again, though, from the Chechen perspective they appeared to help bring about the desired effect.

When hostilities resumed in the Fall of 1999, then Prime Minister Putin promised to isolate the conflict and eliminate the Chechen terrorist threat. While the Kremlin has been more effective in restricting media access in and about Chechnya (especially since 9-11 and convincing the west that the conflict in Chechnya is part of the GWOT), they have been less successful in keeping the conflict contained.

In 2002, another hostage raid was carried out, this time in the Russian capital. Some 50 Chechens infiltrated, surrounded and took hostage a theater with nearly 1,000 hostages in downtown Moscow. By striking at the very heart of Russia, they revealed the weakness and corruption of the Putin government, which had earlier staked its claim on eliminating the Chechen threat. However, the Chechens may have overplayed their hand. As opposed to 1995, when the Russian media was still relatively free and could objectively report on the conflict, by 2002 the Kremlin had re-established control over the major air-waves. Moreover, President Putin has learned the opposite lesson from the Budennovsk hospital raid, and understood that giving in to the terrorists' demands would only encourage further acts of violence. The hostage-takers were never able to publicly set forth their demands, and the theater-hostage attack was labeled by the Kremlin as sheer terrorism for the sake of terror. Though the results of this incident were tragic, they could have been much worse (some 150 civilian and all the hostage-

takers dead), and the Putin government was able to claim victory. More importantly, the policy of non-negotiation with terrorists appeared to be vindicated.

In September 2004, 30-40 mostly Chechen insurgents/terrorists took a grade school hostage in the town of Beslan in North Ossetia. Again, from the Chechens' perspective, seizing innocent children would have to be the ultimate trump card to force the Kremlin leadership into some form of peace negotiations. This proved to be a miscalculation. While President Putin publicly stated that everything must be done to save the hostages, he refused to allow any high-level official enter into negotiation with the hostage-takers—until it was too late.

Conclusions

Though the means were criminal, as the Chechen insurgents have been unable to force the Kremlin to enter into some form of negotiations by seizing hostages, they will likely resort to direct (and possibly, catastrophic) attacks against key Russian targets. Chechen insurgents might also conclude that since their attacks against Russian targets have provided little leverage, they may decide to conduct an operation outside of Russia.

From the Kremlin's point of view, the Chechen conflict has transmogrified from an attempt to crush an armed rebellion to a larger battle against global terrorism. It might be argued that this transformation is a direct result of Kremlin policies. As the situation within Chechnya has become ever more desperate, the fundamentalist and radical teachings of some Islamic clerics become more attractive. In exchange for their devotion, some of these groups have provided significant material support to the Chechen fighters.

It is important to emphasize that the US analyst not apply common western paradigms when referring to the Russian military. Simply put, Russian forces fighting in Chechnya have been plagued with corruption and lack of effective leadership. These same problems have infected the Russian plan to "Chechenize" the conflict. While the Chechen proxies may be loyal to the Kremlin (and this is far from certain), they are riddled with the same corruption and poor leadership. Instead of localizing the conflict, this policy has had the opposite effect. As Chechen insurgents seek refuge in neighboring republics, they (and anyone who might offer the Chechens assistance) are pursued with indiscriminate force, exacerbating the tension in the region. This vicious circle of violence continues to widen in the North Caucasus, and possibly, far beyond.

Sustaining the Struggle: Interplay of Ethno-Nationalism and Religion

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My title is “Sustaining the Struggle: Interplay of Ethno-Nationalism and Religious Nationalism.” I would like to express this idea that I came from a mixed background—my background is Armenian; I was borne and raised Armenian—and I’m mixed with lots of different cultures, languages, ethnic groups, and so forth and so on.

Well, I can tell you something about the Caucasus—the Caucasus is a very dangerous place, everywhere is a landmine; I mean not a real landmine, but ethnic conflicts, religious conflicts, and many different things happen up there. Then, nationalism never dies in Caucasus—it stays up there for centuries. The other thing is that besides nationalism, I can tell you that they hate their enemies very passionately, but at the same time, if you are their friends, they love you very much; I mean, they will die for you. So that’s the situation.

Now, I can tell you this, that religious fundamentalism has increased in Caucasus, partly in reaction to Russia’s refusal to allow northern Caucasus people to separate from the Russian Federation—especially in the northern Caucasus; we have different small nations up there. For example, English, Chechens, North Ossetians, and the other small republics.

Except North Ossetia, the rest of the other republics are Muslims, and the North Ossetians are Christians. So in that area, since 1991, there are some Dhabi’s—Sunni Arabian elements—up there, but at the same time, Sufi and Shi’a and Sunni groups are up there and have been for a long, long time.

So the result there, besides deep hatred toward Russia, is religious nationalism plays a role in order to fight against Russian troops since 1991. However, the influx of offsite money, especially from the Gulf countries and Saudi Arabia, makes matters worse, because the money that came from Saudi Arabia and the Gulf States helped the insurgents to go forever—I mean, for a long time. Then this flow of money is at work up there since 1991, and the Russians were not able to stop that.

It is important to remember that strife often causes secular people to become more religious. I mean, before 1991, most of the northern Caucasus and Trans-Caucasus nations were very secular, and they didn’t really have very big religious

feelings. But because of the problems that they had after 1991, they become much more nationalistic, and at the same time, religious—turning from the secular nationalism, or ethnic nationalism, to religious nationalism; it means, they put forward their religion more than anything else.

In addition is the social changes that religion can bring. Religions also influence the community's opinion about regional, national, and international players. When they put religion in front, as an ideology, that means that they create kind of a sense of brotherhood with other same religious countries. For example, in the northern Caucasus—let's say Chechen right now—has very good relations with Saudi Arabia or Gulf States or other Muslim states, rather than having good relations with other non-Muslim countries. So that becomes part of the problem—they divide themselves by religious lines.

A good example of religious nationalism replacing secular nationalism is seen in the Arab world, where the ideologies of current Arabism, nationalism and Baathism have failed to fulfill the demand of the Arab masses for social problems. That's exactly the same thing happening now in Caucasus, like what's happening in Arab countries—secular nationalism is replaced with religious nationalism—exactly the same process happened right now in Caucasus, especially in the northern Caucasus.

Then after Caucasus, one sees that something similar happened when the Soviet Empire collapsed and left no acceptable ideology in Caucasus for the large Muslim population. It means that after 1991, there were no valid ideologies for the northern Caucasus population, after the fall of the Soviet Union and after the collapse of the communism. So they do not have any other choice to find something else to redefine themselves. Then Islam becomes part of that redefinition of their ideas and beliefs and then where they want to go with.

The Caucasus' Chechen people suffered a brutal history of Russian occupation in the 19th and 20th century—to date, Chechnya is one of the major conflict zones in the Caucasus. Again, when we go to Chechnya, we see that the problem with Chechen-Russian relations is going back during the 19th and 20th century. So this makes Caucasus more—kind of unstable, in many different ways.

A number of factors continue to be a source of strife and unrest in Chechnya that really makes it difficult to see any real solution for Chechnya: unemployment; massive illiteracy among young Chechens who have not attended schools over the past 10 or 12 years; and criminal elements in Chechen society that exploit people for their own economic benefit.

Here, I would like to highlight illiteracy among young Chechens. After 1991, after the war, they were not able to go back to school and they became a very good target for the Chechen insurgency. The insurgency took them under their wing, and they become a new guerilla to fight against the Russian Army.

Today, we have the same problem in Eyak. We see, all those elements that I've mentioned in Chechen, in Eyak, you can see the same elements. You can add in Baath Party members and the security people that they are making Eyak insurgents much more dangerous.

In conclusion, it is important to remember that any conflict in the Caucasus have the potential to create further religious extremism, and draw Caucasus Christians and Muslims into more warfare that could have a regional and global impact. It means that the Caucasus is divided by Christians and Muslims. Muslim occupation in the northern Caucasus, except Northern Ossetia, on one side; and then on the other side is Georgia, Armenia, and Southern Ossetia. So there is a possibility of turning those ethnic nationalism into a religious nationalism, and then becoming a religious war in the Caucasus.

Further, we need to think more about how do these extremists find their way into international relations and influence national and religious players. This is the thing I would like you to think about—how in the late 20th century and the beginning of the 21st century that religious nationalism becomes more important than anything else, how they were able to enter into the international relations and regional politics.

The Impact of a Decade of War on the Russian Military: A Legacy of Broken Trust

Major Matt Dimmick—Eurasian Foreign Area Officer

“Society is afraid of our Army”

— Russian Defense Minister Sergei Ivanov, April 2005

Introduction

The impact on the Russian Army from a decade of war is resoundingly negative. Continual campaigning is responsible for significant loss of life, expenditure of scarce resources, and the postponement of long-overdue military reforms. However, the most far-reaching and corrosive impact of the fighting is the broken trust between the Russian people and their army. While the Chechen conflict may not have been the sole instigator of this fractured trust, it certainly magnified preexisting problems and accelerated a precipitous plunge in confidence. The purpose of this paper is to explore the state of the poor relationship between the military and society in an attempt to demonstrate how it is crippling the Russian Army’s transformation.

Eroding Public Confidence

Sergei Ivanov was absolutely correct in his pronouncement on how Russian society currently sees their military. Within the past ten years, the military has scared away public support because of its rampant unprofessionalism, corruption, lack of discipline, and crime within the ranks. Before the first Chechen War, the Russian people possessed an almost complete level of respect and confidence in their military, a holdover from their perceived Cold War prowess. However, opinion turned immediately as the Russian public witnessed their Army’s ineffectiveness firsthand. It failed to secure modest objectives in 1994 at a cost of thousands of poorly trained and led conscripts. Persistent casualties, deadly catastrophes, and few positive results further eroded the public’s confidence over the ensuing ten years.

Unsurprisingly, public opinion of the Russian military plunged. A study by Theodore Gerber and Sarah Mendelson reveals a significant drop in approval from 1993 to 2003.¹ They identify that the Russian Army used to enjoy a place as one of the most trusted organizations in society. Today that approval rating rests at a point where barely half the Russians surveyed have complete or even partial confidence in the military.

Recruiting Woes

Recruitment for the Army is another telling indicator of Chechnya's impact on the Russian armed forces. Most draft-aged men avoid military service at any cost and the public wholeheartedly supports them in their efforts. As a result, the Russian conscription system is nothing short of a disaster.² A raft of loopholes allows the smarter and better connected members of society to avoid service through any number of legal deferments. Others can easily purchase their way out of service by bribing draft officials, lining the pockets of university acceptance boards, or paying doctors for medical exemptions. The structure of such a system ensures that almost anyone, with even a modest effort, can easily slip through the grip of compulsory military service.

The bi-annual harvest of bribes and deferments results in only nine percent of the men eligible for the draft actually getting called up for duty.³ This pool of recruits represents those with the fewest employment prospects, characterized by large numbers of men who are physically or mentally inadequate for the task of military service. In 2002, only eleven percent of the men in this smaller pool of conscripts were even suitable for military service.⁴ This situation forces draft boards to send forward recruits who are well below the minimum standard for soldiering, filling the ranks with large numbers of men with criminal records, histories of drug abuse, and a lack of secondary education.⁵

Poor Quality of Life, Hazing, Crime, and Corruption

One only has to look at the quality of life for recruits to find reasons for massive draft dodging. Aside from the very real danger of service in the Caucasus, conditions for servicemen are generally miserable throughout the entire Army. Pay and benefits are pitifully low. Company grade officers are exiting the service in large numbers, leaving the military with a shortage of quality junior officers. Without a professional non-commissioned officer corps and fewer officers to supervise the barracks, the practice of *dedovschina* (the brutal practice of hazing between second-year and first year recruits) became widespread, inflicting untold damage to morale.⁶ At present, this ill-disciplined and irresponsible collection of troops not only cripples the Army's image, it also acts as a breeding ground for crime and violence. In fact, morale and discipline is so poor that some estimate as many as 2,000 troops a year die from murder, brutal hazing, and suicide.⁷

To improve the quality of its troops, the Army is experimenting with an all-contract force in Chechnya, composed of second-term soldiers and volunteers from a pool of reserves. Cash bonuses attract these men into service, but even a five-fold increase in base pay succeeds in luring only the most desperate members of society into service. Consequently, the results so far are mixed.⁸ The

quality of contracted recruits remains poor, while the amount of violence in the barracks and lack of discipline are equivalent to non-contract units.

Fighting in Chechnya also exposed widespread corruption within the military, widening another fissure between the Army and society. There are multiple instances of pay stolen from troops, rampant bribery, drug dealing, and weapons sold directly to the enemy.⁹ Crime is so widespread that in the first half of 2004 alone, the military prosecutor convicted 7,300 servicemen, including 800 officers.¹⁰ Disturbingly, most of the convicted officers were colonels and generals.

Conclusion

Taken as a whole, the relationship between the Russian Army and society is at a critically low level that makes effective transformation impossible. Transforming from a heavy conventional force to one capable of fighting low-intensity conflicts demands professional leaders and highly trained soldiers. Due in part to the ongoing war in Chechnya and the breakdown in public trust, the Army is not capable of building such a force. Only a concerted effort to fix the multiple failings of the Russian military will attract the right quality of people into the Army's ranks to fuel their transformation.

Unfortunately, the Russian Army is making little headway toward improving their image. Pay and benefits are wholly inadequate to the demands of a professional force. Quality of life for soldiers is dangerously low, and no concerted effort is underway to protect recruits from hazing and violence within the barracks. Throw in rampant corruption along with a disregard for human life, and the result is an unreformed Army serving a society that is unwilling to give up anyone other than their most ill-suited sons to serve in its ranks. Until Russia can reestablish the trust between the Army and society, broken by its involvement in Chechnya, it will continue to reap the tragic consequences.

Notes

- 1 Theodore P. Gerber and Sarah E. Mendelson, "Strong Public Support for Military Reform in Russia", *PONARS Policy Memo #288*, May 2003.
- 2 Roger N. McDermott, "Russian Military Manning System Reveals Flawed Reforms", *CDI Russia Weekly*, 18 June 2004, <http://www.cdi.org/russia/311-13.cfm>.
- 3 "How the Mighty Have Fallen", *Economist*, 5 June 2005.
- 4 "Just 11 Percent of Draftees Fit for Service", *RFE/RL Daily Report*, July 11, 2002.
- 5 Mark McDonald, "Russian Draft Collects 'Bums, Real Scum' as Most Defer Dangerous Military Posts", *Knight Ridder Newspapers*, 30 March 2005, <http://www.realcities.com/mld/kriwashington/11269302.htm>.

6 For an excellent report on the practice of *dedovschina* in the Russian Army, see “The Wrongs of Passage” published by *Human Rights Watch*, <http://hrw.org/reports/2004/russia1004/>.

7 The Russian Defense Ministry reported that 1,100 people died in the Army in 2004 due to all causes. However, Russian activist groups, including the Russian Mothers organization, complain that this number is severely underreported.

8 Roger McDermott, “Russia’s Use of Contract Soldiers Shows Mixed Results in Chechnya”, *Eurasia Daily Monitor*, Volume 1, Issue 26, June 8, 2004.

9 Pavel Felgenhauer, “The Russian Army in Chechnya”, 18 April 2003, <http://www.crimesofwar.org/chechnya-mag/chech-felgenhauer.html>.

10 Oksana Yablokova, “Crime Invades Military Ranks”, *Moscow Times*, 28 July 2004, <http://www.themoscowtimes.com/stories/2004/07/28/001.html>.

Day 3, Session 1 Question and Answers

Moderated by
Timothy L. Thomas—Foreign Military Studies Office

Mr. Thomas

I let Glen go on like he did because, first of all, he came from D.C., but I think you all see what type of background and how involved he's been in the area over the past few years. But it doesn't end there. Like I've mentioned earlier, if you go to the Jamestown website, you'll find an awful lot on China, and there's an awful lot on the insurgency in Iraq there as well—a lot of translations of key documents about how the insurgents are using IO and other items. So I would really encourage you to go to Glen's website, if you get a chance.

I would like to finish with this. We were supposed to kind of wrap up here, but I don't want to wrap up. You know, we've got five minutes left, so let's just go straight to questions, if people have them. Yes, sir?

Audience Member

This is for anyone who can address this: What's the status of the Chechen population in Russia in general and in Moscow in particular?

Mr. Howard

400,000 Chechens live in Russia—not just in Chechnya, but Moscow, parts of Siberia—overall, there's about 400,000 maybe 500,000.

Audience Member

And has it changed since about 2000? Has that been going up and down?

Mr. Howard

Well, that's 400,000. Then you have 400,000 people displaced by the war that are spread out all over the North Caucasus. Even in Europe, the highest number of asylum seekers in Europe now are Chechens; 26,000 Chechens have fled to Europe—the majority of them are women. But in Russia, they're still very much integrated into Russian society, because there's a pro-Moscow group of Chechens.

Audience Member

Yes, did the Russians make any attempt to kind of hack into the Chechen websites—specifically those collecting money?

Mr. Thomas

Yeah, they've done a lot of that. First of all, they put a website that was very close to the Kafkas website—dot-org, dot-com—so that people would go to the

wrong websites, and they've been hacking into the financial side for quite a while now.

Audience Member

How many Chechens are in the United States?

Mr. Howard

Maybe 100. A hundred at the most, and I'd say 85-90 percent of them are all women. No men are hardly allowed in.

Audience Member

The unemployment [inaudible]. What kind of economic opportunities are available [inaudible] any resources [inaudible]?

Mr. Howard

The second largest oil refinery in the Middle East is in Grozny. Abadan is number one; the second largest is Grozny—a million barrels per day. Is it operational? No. Is it partially operational? Yeah, up to 80 percent. Grozny sits on a sea of oil—there's a lot of oil in there. People refine it—you know, it's like out of the Clampetts; they shoot a shotgun in the ground and oil starts coming up. They can refine the oil—they have these really cheap refineries—and everyone engages in this oil trade. Chechnya is kind of like a transportation hub for the North Caucasus. There's no major oil refinery other than what's in Grozny, so a lot of the oil that's sold in Chechnya goes to other parts of the North Caucasus, so it's a very important kind of a transportation hub.

Mr. Thomas

Really, it's right at 9:30, and I promised I'd stop us. But these folks will be around, so please, on the break, come up and ask them your questions. What I'd like to do, though, real quick is thank Njdeh for his insights on religion in the area and what type of developing hole was dug early on and continues to be dug; Glen then talked about this regeneration of this group of Kalashnikov kids; Matt for his insights on what clearly is a big problem for the Russian Army, and because of those problems, I think you see some of it spill over into the way the Russians act against the Chechens; Ray for his insights on, really, what the biggest problem might be—do they have weapons of mass destruction, and clearly, with their connections in countries around the world, no one ever throws that thought out, I know, and hostage taking really has been their way to get the effect on the international scene; and then finally, of course, Glen for his insights. I mean, once you get to that area like he has been, the whole world opens up to you, and you can feel his enthusiasm when he talks. So please, a big round of applause for all of them. [Applause]

“The Organizational Evolution of Cadet Command, 1990-2003”

Dr. Arthur T. Coumbe

Introduction

For the Reserve Officer Training Corps (ROTC), the origins of the post-Cold War drawdown can be traced back to a series of briefings held at the Pentagon in November 1989, which considered, among other things, the officer accessions needs of the US Army in the new, less threatening international environment. At these briefings, Major General Robert E. Wagner, the Cadet Command Commander, and members of his staff learned of an initiative in progress, Operation Quicksilver, that was designed to slash the Army’s end strength by 23 percent—from approximately 750,000 to 580,000. The Quicksilver plan projected a 36 percent cut in the overall ROTC production mission in the upcoming fiscal year and a 33 percent cut in ROTC active duty accessions over the next two fiscal years. Wagner believed such drastic reductions portended disaster for Cadet Command because of the disruptive effects they would have on the officer accessions process and because of the morale problems they would create among cadets.¹

Operation Horizon

Cadet Command’s chief sought to pre-empt Quicksilver by putting forward a downsizing scheme of his own. Operation Horizon was the result. The Horizon plan reflected Wagner’s determination to effect a more gradual reduction in ROTC’s annual officer output than envisaged by the authors of the Quicksilver plan and, at the same time, to hold on to as much of the existing ROTC institutional structure as possible under the circumstances. Wagner and his staff did not believe that Cadet Command’s institutional base could sustain a cut commensurate with the reductions projected by Operation Quicksilver without endangering the program’s officer production capability or eliminating some of the functions that ROTC traditionally had been expected to perform.²

From March to August 1990, Cadet Command Headquarters, working with the TRADOC, Army, and Defense Department staffs, refined the Horizon Plan. In its August 1990 form, Horizon called for the inactivation of 62 Senior ROTC units, including both host units and extension centers, the closure of two brigade (intermediate) headquarters, and the selective drawdown of cadre at certain schools. With this plan, the command’s strength was to shrink from 4,499 to 3,761 and its officer production capability from 7,800 to 6,200. All this was to be accomplished by October 1991.³

In addition to effecting a rapid institutional drawdown of the ROTC, Horizon had other objectives. One of these was to preserve an institutional “infrastructure” large enough to maintain “the Army’s presence on America’s campuses.” The post-Cold War drawdown, many feared, would result in an increasing isolation of the Army from the rest of society. The ROTC was one of the relatively few programs through which the Army could get its views known and its message across to the American people. It was important, therefore, that the Army retain this avenue of public outreach at a strength robust enough to make its presence felt in the academic community. There was an obvious tension between Horizon’s primary goal of closing inefficient units and the objective of “Preserving the Army’s presence on America’s campuses,” which entailed the retention of a larger institutional base than dictated by officer requirements.⁴

Cadet Command met the Horizon deadline. By October 1991, Cadet Command had closed two brigade headquarters and 62 Senior ROTC units, which represented about 15 percent of extant programs. Major General Wallace C. Arnold, the Cadet Command Commander who superintended the execution of Horizon, regarded it as a huge success. He attributed this success to superb coordination by his headquarters staff. Besides keeping TRADOC headquarters, the Department of the Army, and the Defense Department involved in the planning process, his staff worked closely with congressmen, general officers, senior National Guard officials, distinguished alumni from affected institutions, and other interested parties to assuage their fears, answer their questions, and convince them of the necessity for the in-activations. The end result was that no closure decisions had to be reversed—a noteworthy achievement given the number of schools involved and the intense emotions that unit disestablishments often incite.⁵

In the past, school closures had been very difficult to execute. In fact, since the advent of the all-volunteer force in 1973, the vast majority of institutions that vigorously resisted the planned closure of their ROTC unit had been successful. The need for closures had to be compelling and obvious before disestablishments on the scale of Horizon could be carried out.

The General Accounting Office (GAO) was less enthusiastic than Cadet Command about Horizon’s results. In a report published in May 1991, that agency charged that the Horizon in-activations were “insufficient to match the Army’s lower accession needs” and that far too many “consistently unproductive units” still remained in operation. The GAO conceded that long production lead times coupled with budgetary and end strength uncertainties greatly complicated the task of managing institutional retrenchment. It insisted, however, that such dif-

facilities did not excuse the failure of the Army to develop a long-range plan to guide the downsizing process.⁶

The GAO report was highly critical of DOD Directive 1215.8, the document that governed the operation of the ROTC program. That directive, it asserted, neither defined “adequate production” nor provided sufficiently precise criteria to be of any real value in making closure determinations. The Defense Department directed that the services consider the cost of unit maintenance and the number, quality, and kinds of officers produced but it did not tell the services how to measure these factors. The report also maintained that the Defense Department’s system for monitoring closure decisions was inadequate. In fact, the department had no mechanism for ensuring that the services were complying with congressional intent, its own directive, or service regulations. This lack of oversight combined with the ambiguity of the closure criteria permitted the services to give widely varying interpretations to the specific provisions of the department’s directive—interpretations, the GAO noted, that were not always in accord with the expressed desires of Congress. The GAO singled out extension centers for special criticism. Neither the Congress nor the Defense Department, it was asserted, had sanctioned these units. They were allegedly created for the purpose of protecting inefficient units from inactivation; they epitomized the kind of uneconomical measures that the services were prone to take to protect their turf.⁷

The Defense Department and the Army responded to the GAO report by pointing out that closing uneconomical units was a very difficult and complex task. Many closures were resisted by powerful external forces—often by members of Congress. In fact, the Army was frequently forced to keep units that it neither wanted nor needed. The Army also defended its extension centers. While these units usually did not meet the criterion of 17 contracted MS III cadets, the Army maintained, their staffing levels and costs were significantly below those of host units and their cost per commission was much lower. Moreover, the expectation that the ROTC would promote the elusive quality “representativeness” in the officer corps limited Cadet Command’s ability to eliminate unproductive units. To achieve geographic balance in the officer corps, Congress required the Army to maintain at least one ROTC unit in every state, regardless of how inefficient a producer of officers that unit might be. Concerns about an appropriate mix of academic disciplines among officer aspirants, ethnic and racial diversity, and the quality of institution (large vs. small, prestigious vs. non-prestigious, state vs. private, etc.) in the ROTC institutional base further constrained the Army’s freedom of action.⁸

Phoenix/Alternative Strategies

In the winter of 1990-1991, Cadet Command assembled the “Phoenix” work group to plan the next round of unit inactivations. From Cadet Command’s perspective, these unit inactivations were necessary to bring the ROTC’s institutional strength on line with the personnel and resource realities of the post-Cold War world. The problem facing Cadet Command was that it had lost personnel at a greater rate than it had shed units and management structure. Pentagon planners had made cuts in personnel to satisfy the demands of the post-Cold War demobilization, usually without considering the effects that they would have on the ROTC program. A cadre shortage at many units was the result.

By June 1991, the Phoenix work group had identified 23 institutional candidates for elimination. Cadet Command presented this list to officials at the Department of the Army in July 1991. Army officials, however, flatly rejected the closure recommendations, citing political sensitivity as the reason. Following up Horizon with more cuts in the near term simply would not be palatable to certain members of Congress and segments of the academic community.⁹

In the spring of 1992, Cadet Command, facing more mission reductions and resource decrements, once again came forward with a plan to eliminate inefficient units. This time the effort was part of an operation labeled Alternative Strategies. In a memorandum dated April 30, 1992, Major General Arnold recommended that 56 units be eliminated over a two year period—25 in FY 1993 and 31 in FY 1994. Originally, Alternative Strategies had targeted 94 schools for closure, but the Commanding General, fearful of the political fallout that such a huge and sudden reduction would occasion, cut the number to 56.¹⁰

The TRADOC Commander, General Frederick M. Franks, Jr., and the Secretary of the Army, Mr. Michael Stone, accepted Major General Arnold’s closure plan. Notification letters were drawn up and officers detailed to deliver them to the affected college presidents. On July 1, 1992, with officers standing by to deliver the notices, the Secretary of Defense, Mr. Richard Cheney, ordered an indefinite hold on the closure actions. He gave no explanation but the fact that the proposed in-activations would be unpopular in an election year escaped the attention of few.¹¹

The Army’s inability to eliminate inefficient units combined with declining propensity for military service among college-age youth to produce scores of what some observers regarded as inordinately small ROTC detachments. In fact, it was in the early nineties that the average size of Army ROTC battalions sank below 100 for the first time in the program’s history. Not only did the existence of scores of small units represent an inefficient use of personnel and resources, some Cadet Command leaders believed, it degraded pre-commissioning train-

ing and leader development. Many units simply did not have enough people to provide meaningful leadership experienced to cadets.¹²

After the election of 1992, yet another attempt was made to trim ROTC's institutional base. Again, it was personnel cuts that inspired the attempt. In FY 1992 alone, Cadet Command lost 25 percent of its assigned officer strength (346 out of 1348). In January 1993, Major General Arnold targeted another 15 extension centers for elimination. The compelling fiscal need for the inactivations and a lack of determined institutional resistance allowed Cadet Command to proceed with its plans and effect the closures. This brought the number of unit disestablishments executed between 1990 and 1994 to 77, which represented about 18 percent of the ROTC pre-1989 institutional base.¹³

Region Closure

Congressional pressure to reduce headquarters staff and thereby realize the "peace dividend" that the end of the Cold War seemed to promise, led to the streamlining of Cadet Command's intermediate management layers. Section 906 of the FY 1991 National Defense Authorization Act (Public Law 101-510) required the defense department to trim the number of civilian and military personnel employed in management headquarters and headquarters support activities. Faced with this congressional mandate, the Army decided that it could do without an ROTC region headquarters. Accordingly, on June 12, 1992, the Department of the Army announced that the Third Region Headquarters, located at Fort Riley, Kansas, was to close and its assets and subordinate units were to be distributed among the remaining three regions. The official inactivation was to occur on December 31, 1992.¹⁴

Cadet Command opposed this action. It argued that it needed four regions to facilitate administration and exercise effective command and control. Under a three-region structure, the region span of control would be too wide. But Army authorities remained unconvinced. They had to execute the reductions in management headquarters that Congress had ordered in the FY 1991 National Defense Authorization Act and were working under a short timeline. In 1991, the Deputy Chief of Staff for Personnel (DCSPER) sent a clear message to Cadet Command when it replaced the departing region commander, Brigadier General Floyd J. Walters, Jr., with a colonel, J.C. Parrish, and indicated that henceforth the Third Region would not get a general officer as a commander. Major General Arnold had no choice but to go along.¹⁵

To determine which region headquarters to eliminate, a study was conducted to assess the ability of the existing region headquarters to support summer training. The number of active Army battalions stationed on the installation and the

overall capacity to host an Advanced Camp (taking into consideration such factors as acreage, ranges available, etc.) were the selection criteria. Forts Bragg and Lewis were found to be more suitable than Riley for the Advanced Camp mission. Hence, the ROTC region headquarters at Fort Riley was eliminated.¹⁶

Reduction of AGR Force

As the post-Cold War demobilization proceeded, the ROTC's cadre strength increasingly came under attack. One of the most damaging of these attacks occurred in 1991, when an attempt was made to remove all full-time reservists from Cadet Command. The assignment of Active Guard/Reserve (AGR) officers to ROTC units began in 1981. In that year, 101 AGR officers (captains and majors) reported to ROTC instructor groups at selected host institutions across the country. By the end of fiscal year 1986, there were about 640 AGR officers assigned to ROTC battalions—two (one National Guard and one Army Reserve) at each host campus. Throughout the eighties, the AGR officer strength remained in the 600+ range.¹⁷

In fiscal year 1991, two events occurred that drastically cut AGR officer strength. One was the inactivation of the 62 units as part of Operation Horizon. These inactivations brought AGR strength down to approximately 550. The second and more far-reaching event occurred as a result of the FY 1991 National Defense Authorization Act. This act prohibited the assignment of full-time reservists to the ROTC program after September 30, 1991. Section 687 was added to Chapter 39, Title 10, US Code; it read:

A member of the reserve component serving on active duty or full-time National Guard duty for the purpose of administering, recruiting, instructing, or training the reserve components may not be assigned to duty with a unit of the Reserve Officers' Training Corps Program.¹⁸

The passage of the act stunned Cadet Command. It was known that AGR strength was to be reduced by 30 percent over the next six years in consonance with the institutional drawdown projected by Operation Horizon. But no one in the ROTC community expected that such a radical initiative was being considered. It was apparent that since AGR officers constituted a third of ROTC cadre strength nationwide, their withdrawal from campuses by the September 30 deadline would have disastrous results.¹⁹

Concerns about economy, reserve readiness and functional efficiency motivated congressional proponents of the AGR ban. A report of the Senate Armed Services Committee (SASC) noted that although the Army's ROTC program was a direct source of officers for reserve units, the duties of an ROTC instructor

could be performed by active component soldiers and did not specifically require reserve expertise. Many members of Congress believed that the AGR officers could better be employed elsewhere. An ROTC assignment, they felt, contributed little to reserve readiness and therefore represented a waste of time and money. Some legislators even saw the use of AGR officers in ROTC as an attempt by the Army to circumvent its congressionally mandated end strength. Some senior Guard and Reserve leaders agreed with the SASC report. They, too, wanted to employ their full-time personnel in other ways—to bolster the support given to troop program units (TPU), for example. Like some legislators, they saw the reserve ROTC instructor program as detracting from the primary mission of the reserve components.²⁰

Appeals were made to Congress to soften the impact of the legislation. Fortunately for Cadet Command, many members of the House and Senate recognized the impracticability of such a precipitous move and approved a measure, incorporated into the FY 1992 National Defense Authorization Act, which allowed a phased reduction of AGR personnel by normal attrition. Congressional approval of a phased elimination of AGR instructors gave the command some breathing room but did not solve its fundamental problem. Cadet Command began a campaign to garner congressional support for an AGR restoration. Letters were sent to congressmen explaining the importance of the AGR contribution to the ROTC and highlighting the adverse effects that would inevitably follow an AGR pull-out.²¹

Cadet Command stressed five principal reasons for continued AGR involvement in the ROTC. First, the Army was the only service that commissioned officers directly into the reserve components through its ROTC. Hence, the RC presence on campus was necessary to “sell” reserve duty as a service option. Second, AGR officers were necessary to manage those programs designed exclusively for the RC. These programs included the Guaranteed Reserve Forces Duty scholarship program and the Simultaneous Membership Program. Third, AGR instructors could establish close working relationships with local reserve units, permitting host battalions to take advantage of training resources and equipment not otherwise available. Fourth, AGR officers were uniquely qualified to advise cadets on RC issues and concerns such as annual training, drill periods, and mobilization planning. Active component cadre often did not have this knowledge. Finally, the AGR ban would entail a manpower loss that, together with the scheduled drawdown of active duty cadre, would necessitate the closure of an estimated 100 additional units.²²

The arguments advanced by Cadet Command led to a partial restoration of full-time reserve cadre. The FY 1993 National Defense Authorization Act re-

pealed the AGR ban and acknowledged the importance of these officers to the ROTC program. Major General Arnold had requested a total AGR authorization of 275, which equated to one reservist for each host college or university. The Congress gave Arnold 200 of the 275 AGR officers he requested.²³

Over the course of the next year, Cadet Command pressed to get the additional 75 AGR officers it felt in needed. Again, the Congress acceded to Cadet Command's request. The FY 1994 Nation Defense Authorization Act raised the AGR authorization level to 275. But Cadet Command soon learned that victory in Congress did not necessarily mean victory in the field. The National Guard and Army Reserve, who were also feeling the effects of demobilization, told Cadet Command that they did not have the 75 AGR officers authorized by Congress. The command would have to make do with the 200 AGRs it then had. AGR strength in the ROTC has remained at or slightly above this level to the present day.²⁴

Cadre Shortages and Turbulence

The instructor shortages and cadre turbulence that accompanied the drawdown of the early nineties placed severe strains on the ROTC program. With the AGR cutback, the average unit saw its instructional staff reduced by one officer. In some units, this amounted to 25 percent of the instructor force. And the AGR losses, it is important to remember, came in the midst of a sizeable cut in active component instructor strength. Under these conditions, training and recruiting inevitably suffered. Personnel turbulence also extracted a toll on recruiting and training. As a result of Selective Early Retirement Boards (SERB), involuntary reductions-in-force (RIF), voluntary outs, and a number of other personnel policies designed to pare down the size of the officer corps to appropriate levels, ROTC battalions experienced a rapid turnover of cadre. Some ROTC battalions had four professors of military science over a five year period. Assignment "underlap" was another byproduct of personnel turbulence. It sometimes took months for a replacement to arrive on station after his or her predecessor's unanticipated and, in some cases, sudden departure.²⁵

The anomalous personnel situation elicited sharp criticism from university officials, especially those whose ROTC units were being closed or threatened with closure. Hazo W. Carter, Jr., President of West Virginia State College, voiced displeasure with the support given the ROTC battalion at his institution by the Army. In a letter to Major General James M. Lyle, who took over as Cadet Command Commander in July 1993, he wrote,

"It baffles me to know that the Army can provide inadequate support and then threaten the college with the possibility of closure."²⁶

Curtis J. Thompkins, president of Michigan Tech University, sounded a similar note:

Adequate staffing with quality cadre and continuity....are critical elements which will have an immediate impact on the success of Michigan Tech's Army ROTC program. Despite manpower reductions in both services, the Air Force has been able to maintain a full staffed ROTC cadre. Unfortunately, the Army has not done so.²⁷

The president of Columbus College, Frank D. Brown, accused the Army of a breach of faith:

I do not believe there is any way to achieve the assigned mission in our ROTC activity until we have the number of officers we are authorized...I feel strongly that we have not been supported in a good faith fashion but we are moving forward with a genuine team spirit at Columbus College.²⁸

The Chancellor of Vanderbilt University, Joe B. Wyatt, complained of turbulence among the cadre and blamed the poor performance of Vanderbilt cadets at advanced camp on the Army:

[our] students...were not well served by the Army. They had three Army ROTC directors in three years....the Army did not do as good job as it might in providing stable leadership....given serious lack of continuity by Army personnel, I am not surprised by your assessment that our students do not perform well at advanced camp.²⁹

The Five Year Plan

By the summer of 1993, it had become obvious that more had to be done in terms of aligning ROTC's institutional structure with a steadily declining defense budget and a shrinking military establishment. Accordingly, between July 1993 and February 1994, the Cadet Command staff put together a plan designed to slash ROTC's institutional base by between 23 and 34 percent over the next five years. The plan was dubbed, for obvious reasons, the five year plan. In its final form, it provided for the "time-phased" elimination of between 60 and 100 units, including both host battalions and extension centers, and outlined the manpower and monetary savings that would be realized in each phase.³⁰

Ensuring program stability was a principal concern of the staff officers who drafted the plan. It was to guarantee short-term stability that the plan provided for the incremental reduction of institutional and cadre strength at a rate of approximately 20 units per year (**Figure 1**).

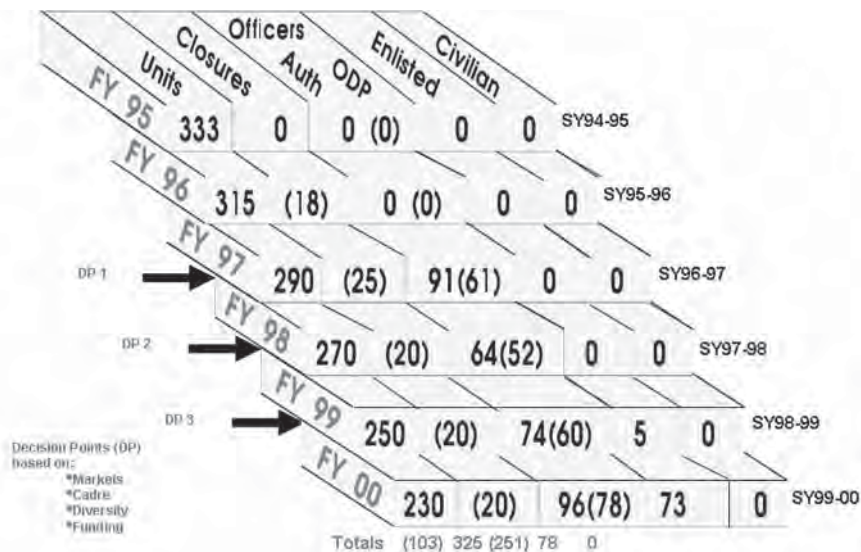


Figure 1.³¹ Decision Points for the Five Year Plan

The “time-phased” feature of the plan was intended to forestall the practice of cutting instructors before cutting units—a practice that resource managers had often resorted to in the past.

The five-year plan was also drafted with an eye toward providing for the program’s long-term stability. Previous downsizing initiatives (Horizon, Alternative Strategies, etc.) aimed at bringing ROTC’s production base on line with near-term officer requirements (i.e., requirements projected one to five years into the future). The problem with this, some noted, was that ROTC production objectives frequently changed; indeed, they had been in a state of almost constant flux since 1988.

By setting ROTC’s institutional end state at between 230 and 270, the authors of the five-year plan attempted to cushion the program from such oscillations. In the future, production was to be regulated not by opening or closing schools but by manipulating scholarships and other financial incentives. If officer requirements exceeded ROTC’s production capability, then the OCS program would take up the slack.³²

In September 1995, TRADOC Headquarters informed Cadet Command that it (Cadet Command) was about to lose an additional 100 officer instructors. Once again, people were taken away before structure was reduced. To compensate for these personnel decrements, Cadet Command considered the option of accelerating the pace of disestablishments. Political reality intruded, however, and Cadet

Command was unable to speed the in-activations along. Thus, in FY 1995 and FY 1996, Cadet Command disestablished 18 and 15 schools respectively, ten short of its two year goal of 43 (as outlined in the five-year plan).³³

Cadet Command encountered stubborn obstacles in its drive to slash unit strength. Some universities, through their ties with influential legislators, were able to bring effective pressure to bear in the US Congress. For example, Washington University in Saint Louis, Missouri, blocked a Cadet Command attempt to shut down its ROTC unit by enlisting the assistance of Senator Danforth of Missouri. Senator Danforth, whose brother was Washington University's president, secured passage of a measure that effectively prevented the command from executing its plan. While the command made significant progress in trimming its institutional base, shutting down an ROTC unit against the will of the affected school remained an extremely problematic proposition.³⁴

Attempt to Close Second Region

Unit closures, declining officer requirements, and continuing congressional pressure to reduce headquarters "overhead" prompted yet another attempt to cut ROTC's management infrastructure. The ROTC production mission had dropped from 8,200 in 1989 to 4,500 in 1995. The Army's deputy chief of staff for personnel projected a decline to 3,800 by 1998. ROTC funding levels and personnel strengths likewise continued to fall. In addition, the Bottom Up Review and the National Performance Review, the latter conducted under the auspices of the White House, called for the chiefs of federal departments to "achieve leaner organizations through staff reductions and process engineering." Accordingly, proposals calling for the elimination of another region headquarters, several brigade headquarters, and a summer training site were drawn up. It was hoped that personnel savings achieved through these reductions could be redistributed within the command to shore up and restore undermanned battalions and extension centers.³⁵

Cadet Command representatives presented these proposals to the Army Chief of Staff in November 1994. The Chief of Staff of the Army (CSA) approved them in concept. Because of the small numbers of people involved, the brigade closures were allowed to proceed as planned.³⁶ To eliminate a region headquarters—and hence a summer training site—a preliminary study had to be conducted. The study was supposed to assess the cost-effectiveness of the proposed closure and investigate, among other things, the effects of the closure on the civilian job force in the area and on the local environment. Based on such considerations as the amount of training space and the number of FORSCOM troop units available, billeting potential, and the suitability of available ranges, Cadet Command Headquarters decided to retain region headquarters at Forts Bragg and

Lewis and eliminate the Second Region Headquarters at Fort Knox, Kentucky. It proposed that the Second Region's command, control and administrative functions along with its Basic Camp responsibilities be split between the remaining two regions.³⁷

Cadet Command leaders believed that the availability of FORSCOM troop units was particularly important in the selection of summer training sites. The exposure to the atmosphere and ethos of a tactical unit was, they believed, a vital part of the cadet's socialization process. The elimination of either Lewis or Bragg would thus deprive officer aspirants of a key component of their pre-commissioning preparation.³⁸

The plan to close Second Region met resistance from a number of quarters. At the Pentagon, the Judge Advocate General expressed concern about the format of the plan while engineers questioned the adequacy of billeting at Fort Bragg. At the same time, Senator Wendell H. Ford and Representative Ron Lewis from Kentucky put up a determined fight against the closure. They, along with many of their constituents, were worried that the closure of Second Region Headquarters would destroy the viability of Fort Knox as an Army post. Lewis and Ford amended the FY 1995 National Defense Authorization Act in both the House and Senate to include language that prohibited the movement or closure of ROTC region headquarters or camps. Section 8074 of the Senate version (July 10, 1995) specifically forbade the elimination of Second Region Headquarters and the removal of First Region Headquarters from Fort Bragg until the Comptroller General had reviewed the data and findings of the Army's closure investigation.³⁹

In the end, the arguments of the two Kentucky legislators prevailed and the region headquarters remained at Knox. The Cadet Command staff believed that its failure to close the Second Region Headquarters was due to political pressure exerted by Ford and Lewis. The GAO, on the other hand, attributed the Cadet Command's failure to faulty analysis. Cadet Command's closure study, it charged, focused on short-term rather than long-term solutions to its restructuring needs. It did not, according to the GAO, fully address the impact on FORSCOM installations or the issue of cadet housing and costs. The GAO called for broader based study to examine how best to accommodate the long-term needs of ROTC within the context of the Army's total base structure. These matters stood in relation to Cadet Command's Command and Control architecture until 2003.⁴⁰

USAREC/Cadet Command Merger

Before 1996, Cadet Command leaders had generally resisted pressures by senior defense officials and army leaders to effect a substantial restructuring of the ROTC program. Major General Wagner, Cadet Command's first commander

and architect of its pre-commissioning paradigm, remained in the Fort Monroe area after his retirement in 1990 and continued to exert an influence on the Cadet Command staff and on decision makers in the Pentagon. That influence was used to prevent any substantial alteration in Cadet Command's operating methods. His next two successors—Major Generals Wallace C. Arnold and James M. Lyle—shared Wagner's general philosophy of pre-commissioning training, however much they might diverge from him in details. Both of these men fought to preserve that paradigm intact.

Lyle, in particular, acquired the reputation for being a defender of the existing pre-commissioning model. Over the course of his three-year stay at Fort Monroe, his stock at the Department of the Army gradually fell. Many felt that this was due to his stormy relationship with Ms. Sarah Lister, the Assistant Secretary of the Army for Manpower and Reserve Affairs until March 1998. The two did not get along.⁴¹

Yet Lyle's troubles extended beyond his problems with Lister. It was undoubtedly his determination to retain the basic model of pre-commissioning training that had evolved since 1986 that hastened his exit from the scene. That model included a robust command and control apparatus, a predominantly active component cadre, a manpower-intensive system of cadet evaluation and an equally manpower-intensive system of summer training. It was a model that many senior army leaders believed that the army could no longer afford—and other senior leaders believed the army could not afford to be without.

By mid-decade, a consensus had emerged among senior army leaders that the army's training base had to be reduced. Budgets were getting tight, the Army's end strength was falling, line units were beginning to suffer from manpower shortages, and readiness was beginning to decline. Congressmen and other critics complained of the Army's "tooth-to-tail" ratio. The ROTC program was a part of the tail and was, therefore, considered an appropriate candidate for downsizing. Even one former Cadet Command Chief of Staff characterized the ROTC as "by definition, the most rear echelon organization in the army."⁴²

To make what they considered to be the requisite changes in the ROTC program, senior army leaders—most notably General Griffith, the Vice Chief of Staff of the Army, General William Hartzog, the TRADOC Commander, and Ms. Lister—appointed Major General Stewart Wallace as the Cadet Command Commander in the late summer of 1996. Whereas Lyle, who was an associate of Wagner, brought a lot of ideas about ROTC with him to Fort Monroe, Wallace did not. His last intimate contact with the program had been in 1969 when he was a cadet at the University of Iowa. His lack of preconceived notions about and attachment to the program was undoubtedly one of the reasons he was selected to

be the ROTC chief. To carry out the type of restructuring they were contemplating, senior leaders needed a Cadet Command commander who did not have an attachment to the status quo.

Wallace's intention to make major changes to the program became evident soon after he arrived at Fort Monroe. He announced that he was there to serve the best interests of the Army, not the best interests of Cadet Command. Aware that within Cadet Command headquarters there were many who opposed a major restructuring of the ROTC, Wallace declared that anyone who had been in Cadet Command for more than two or three years was part of the "problem." In this awareness, he exhibited a great deal of insight. As we shall see, several of his organizational initiatives were shipwrecked, in part, through the efforts of recalcitrant elements within the headquarters and in the command.⁴³

The agenda for changing Cadet Command had been crafted by Lister, Griffith and Hartzog, but it was Hartzog who apparently provided the most detailed and formal plan for Wallace to follow. One of the most controversial parts of the plan called for the merger of Cadet Command with the US Army Recruiting Command (USAREC). The idea of such a merger was by no means new. It had been pushed forward repeatedly over the previous three decades—most notably, perhaps, in 1970, 1976, 1984-85 and 1991-92. If implemented, it would have been in accord with the general organizational trend in the army since 1987 of headquarters consolidation and organizational flattening. The merger proposal entailed the elimination of ROTC region headquarters, since the ROTC region level of management had no counterpart in the USAREC structure.

The army hoped to attain several goals by the merger. The principal one was to cut personnel strength and apply the savings thus achieved to the field army. A study conducted by the Federal Systems Integration Management Center at the behest of TRADOC, found that the army could save a total of between 120 and 248 positions with such a merger and suggested that the actual savings could in fact be much greater, since the study did not address potential savings at the battalion level, where the bulk of the ROTC cadre strength was concentrated. "Economies" and "efficiencies," it concluded, could be realized in the areas of analysis and evaluation, marketing and advertising. Organizational redundancy would also be reduced. The number of organizations responsible for an aspect of army recruiting would be trimmed from six to five. Since both Cadet Command and USAREC were responsible for bringing new soldiers (including officers) into the army, it only seemed logical to combine the two headquarters and command structures. In addition to saving manpower, it would result in a more efficient, effective and capable recruiting effort. It would do this through "recruiting synergy" and the "streamlining of command, control and support structures."⁴⁴

In the end, this attempt at a merger, like previous ones, failed (although it was not completely dropped). Concerns about combining two commands that had such different cultures and different operating methods prevailed over the push for consolidation. Cadet Command's focus was long-term (up to four years) and included both training and recruiting. USAREC's focus was short-term and lacked training and leader development aspects. Cadet Command targeted the college market. USAREC targeted the college and general market.

Wagner played a role in defeating the merger attempt. In January 1997, he wrote a letter to Sara Lister outlining the reasons why the proposal to combine the two commands would not, in his opinion, serve the army well. He told Lister

The missions of these two organizations are almost completely disparate. Cadet Command is engaged in the entire complex commissioning process from university recruiting through leader development and training to eventual selection and commissioning. Recruiting command, on the other hand, is a high school recruiting operation targeted at mostly non-college bound youngsters. Both commands do recruit, but mostly in different markets. Recruiting command is not involved in the training and leader development functions that are the life's blood of Cadet Command. Cadet Command not only recruits an Army cadet but trains and motivates him or her through a four year accession system to commissioning....It is difficult to conceive how the missions and functions of these disparate commands could combine into a single headquarters. Granted some jointness could be achieved in marketing and resource management, but in the training/leader development areas it would be impossible. There is a serious danger here that doctrine such as the Leadership Assessment Program (LAP) and even the basic execution and supervision of advanced camp would suffer, with the possibility of degrading the leader development of our cadets.⁴⁵

Wagner also warned of the adverse effects that a merger would have on the Junior ROTC program:

JROTC under a Recruiting Command Headquarters would immediately become unpopular in parts of the nation. Much of the secondary school community is very guarded about having a recruiting presence on campus. Cadet Command has always stated that citizenship—not soldier recruiting—is our objective. This approach has worked so far. If the important citizenship enhancing presence of JROTC is removed from the inner city secondary schools an important value added feature to our society will be destroyed.⁴⁶

Alternative Staffing

The opponents of change were not successful, however, in blocking the introduction of contract instructors into the ROTC. In the latter half of the nineties, an increased optempo combined with recruiting difficulties to pressure the Army to withdraw active-duty soldiers from the training base and headquarters organizations and assign them to line units. To find ways to return officers and non-commissioned officers to line units, the Army tested a number of “staffing alternatives.” It conducted these tests under the auspices of “Umbrella Issue 41,” which was part of the Army’s Institutional/TDA Redesign Study intended to bolster the personnel readiness of the operational Army. They were approved by Vice Chief of Staff of the Army (VCSA) and Ms. Lister on February 23, 1996. One of these alternatives called for the use of contract ROTC instructors. MPRI, a professional services firm headquartered in Arlington, Virginia, was awarded the contract for providing these individuals. Originally, about one-third of them were retirees; the rest were reservists. A test of this option began in School Year 1997-1998 at 16 institutions involving contract personnel. Nine more schools were added to the list of participants the following academic year, bringing the total number of contract cadre up to 75.⁴⁷

Some expressed reservations about the contract instructors. Retired four-star generals, senior officers from other services, and the Cadet Command Commander (MG James M. Lyle) were among those who protested. The heart of the ROTC experience, they argued, was the person-to-person interaction between cadet and officer. The retirees and reservists who worked for MPRI might be fine instructors but they would not be appropriate role models for cadets. They would be too old, too out of shape, or too out of touch with the contemporary Army to be of much value in this regard.

To prevent these fears from materializing, the command built into its contract with MPRI some restrictive clauses relative to the use and quality of the contractors. These clauses included requirements to meet Army height and weight standards and pass the Army Physical Fitness Test (APFT). They also stipulated that officer applicants had to have served at least eight years and enlisted applicants at least 15 years to be eligible for employment. Experience as a company commander (officers) or as a platoon sergeant (non-commissioned officers) was listed as a highly desirable characteristic. In addition, the contract specified that no one who had been retired for more than two years could be hired and no one could serve for more than five years.⁴⁸

After one year, the RAND Corporation provided an initial evaluation of the test. It reported that units participating in the experiment were performing as well as other units. Some discounted the RAND findings because, they argued, one

year was far too short a period for a valid assessment of the long-term impact of the contractor alternative. Some ROTC cadre and senior officers in the chain-of-command, however, also gave the contract instructors passing marks. The question that remained in their minds was “When the contract instructor force is expanded, can instructor quality be maintained?”⁴⁹

Another impetus for an increased use of contracted cadre came in November, 1999, when the Army’s Chief of Staff, General Eric Shenseki, made a decision to fully man the Army’s 10 divisions and two armored cavalry regiments by October 1, 2000. Largely as a result of this decision, the contractor force in ROTC grew from 75 in September 1998 to 363 in September, 2000. The latter figure represented about 30 percent of the ROTC instructor force. A proposal to expand the use of contractors beyond the 363 level was entertained but quickly shelved. Senior Army leaders apparently felt that the contracted officers should be more thoroughly assimilated into the program before more were hired.⁵⁰

Major General Stewart Wallace saw the contractor option was a viable long-term solution to ROTC’s persistent staffing problems. He saw two distinct advantages in it. First, it insulated the ROTC program from the roller coaster effect of cyclical personnel resourcing decisions by removing a substantial portion of the instructor force from under the control of the Army’s personnel management community. Second, it gave the program a mature and stable complement of instructors who acted as a counterbalance to the active component cadre. Continuity was a quality that the ROTC had often lacked in the past. Colonel Kerry Parker, Chief of Staff of the First Region from 1999-2003, believed that the ability of MPRI and, after February 2002 Com Tek, to rapidly fill vacancies was another advantage. It sometimes took months for the Pentagon to identify and dispatch a suitable candidate to the ROTC. A contractor fill could be done in weeks, or even days.⁵¹

Cadet Command’s deputy commanding general during this period, Brigadier General William Heilman, was not as enthusiastic about the contractor option as his boss. He stated that in the matter of contract cadre, Cadet Command was given a Hobson’s choice, that is, take the contractors or go without cadre. It was clear that Heilmann did not believe that contract instructors were the optimal solution to the command’s personnel dilemma. There were many officers in the command who agreed with Heilmann.⁵²

An even more controversial staffing alternative tested during this period involved the use of reservists assigned to Army Reserve Troop Program Units (TPU) as ROTC instructors. A “proof of principle” (POP) test of this alternative began in School Year 1997-98 at three universities—the University of South Carolina, Georgia Institute of Technology, and the University of Central Florida.

The goal of this initial test was to assess the feasibility of replacing both an active component (AC) assistant professor of military science (APMS) and an AC training NCO with groups of eight reservists. Only at the University of South Carolina, however, were both the APMS and training NCO replaced. At Georgia Tech and Central Florida, only the APMS was replaced. The results of that experiment were mixed. It worked better in some places than others. The distribution of reserve units, the local environment, the skills, qualifications and availability of reservists and the resourcefulness and attitude of ROTC cadre affected the outcome.⁵³

Despite the mixed results, Cadet Command and the US Army Reserve Command (USARC) decided to proceed with the full-fledged test at 10 institutions. But Cadet Command did so in a tentative manner. Major General Wallace believed that the original blueprint for the TPU test was “faulty.” That blueprint, developed by the RAND Corporation for the purpose of returning officers and NCOs to line units, called for eight TPU reservists to “replace” one full-time cadre member. In the opinion of Wallace and many ROTC cadre members, such a staffing arrangement would degrade leader development, which required frequent and regular face-to-face interaction between cadet and instructor. An individual who worked at a unit only part-time (four or five hours per week) could not provide such interaction. Moreover, finding TPU reservists who were available during normal weekday hours posed a problem in some areas. Many civilian jobs did not permit prolonged absences during the day. Personnel turnover was a major concern of the professor of military science (PMS) at Georgia Tech. Reservists joined and left the unit at a rapid pace, reducing the value of their collective contribution.⁵⁴

His reservations about the replacement model led Wallace to propose that a second test be conducted—one in which TPU soldiers would not replace but “augment” or reinforce active component cadre. In this new scheme, groups of “up to eight” reservists would be assigned to host programs with the specific goal of boosting production at “partnership” schools (formerly designated as cross-enrolled schools). It was a scheme that had worked well at the University of Central Florida and the Cadet Command Commander believed that it might work in other places as well. Cadet Command and the US Army Reserve Command (USARC) agreed to conduct a second test, designated Proof of Principle Test 2 (POP2), at eight schools beginning in school year 1998-1999.⁵⁵

Like their active component counterparts, senior reserve leaders entertained reservations about the TPU staffing alternative. Officer production shortfalls created some of these reservations. In 1999, the Cadet Command officer production mission stood at 3800, about 700 of which were supposed to be commissioned in

the Army Reserve or Army National Guard. The ROTC did not make its mission, however, falling approximately 600 short of requirements in Fiscal Year 1999. Due to the Army's policy of giving priority of fill to the active component officer requirements, it was the reserve components that suffered from production shortfalls. In FY 2000, for example, the Army Reserve received fewer than 80 of the 300 lieutenants that Cadet Command was tasked to produce for it. The production shortfall was vexing to reserve leaders in view of the \$11 million in direct support that the Army Reserve provided to Cadet Command each year.

Certain organizational anomalies also gave reserve leaders cause for concern. The Army Reserve had participated in both "replacement" and "augmentation" tests with "provisional" TDAs. People for these provisional units were borrowed from "legitimate" units on a temporary basis. This resulted in personnel turnover, recruiting and retention problems, and fewer opportunities for promotion in provisional units. Non-commissioned officers were particularly hard hit by the lack of promotion opportunities. Such an irregular arrangement, if adopted as a permanent solution, would leave the units and the training divisions susceptible to future cuts. The Army Reserve pressed to have the provisional organizations it created "legitimized," that is to say, given an approved structure so that these units would be regarded as relevant to the Army and shielded to a certain extent from future cutbacks. This was achieved by the beginning of school year 2000-2001, thus eliminating at least some of the concerns of reserve component leaders about the initiative.⁵⁶

To resolve the remaining issues, Major General Wallace and Major General Thomas J. Plewes, commander of the US Army Reserve Command, met on June 14, 2000. The stated goal of this meeting was to develop a program that would boost overall lieutenant production and reserve lieutenant production, facilitate the integration of the active and reserve components, and improve the efficiency and effectiveness of Cadet Command. The plan crafted to achieve this goal applied what the two leaders considered to be the best of both the replacement and augmentation staffing models. The new plan called for the Army Reserve to continue to provide a total of 256 spaces, which represented the sum of reserve personnel authorizations in both the replacement and augmentation tests, but to redistribute these spaces among the various universities involved.

Under the provisions of the new plan, the Army Reserve was to replace one active component position at eight universities—Northeastern, Hofstra, Widener, Hampton, South Carolina, Central Florida, Marquette, and Georgia Tech. A total of 64 reserve soldiers were devoted to this effort—eight reservists at each of the eight universities involved. The tentative TDA design called for six TPU officers and two TPU non-commissioned officers to be assigned to each replacement

team. Each team was to include one lieutenant colonel, two majors, three captains, one master sergeant and one sergeant first class.⁵⁷

The Army Reserve provided augmentation teams to a much wider range of universities. The three-person augmentation teams provided for in the new plan were designed to equip the PMS with the capability of conducting basic course programs on partnership campuses. The number of teams assigned to each university depended on the size of the targeted partnership school. The goal was to increase annual production for the Army Reserve by at least two lieutenants per augmentation team. In designing the new augmentation model, Cadet Command leaders assumed that the production potential of host institutions had been exhausted by the existing on-campus cadre. Partnership schools, on the other hand, represented a largely untapped, or at least unexplored, market. Although the focus of the new model was clearly on partnership schools, the local PMS was not prohibited from using augmentation teams at host campuses if circumstances required it.⁵⁸

The tentative TDA structure for the augmentation team included one major, one captain and one sergeant first class. As a tool to assist their recruiting efforts, each augmentation team was “linked” with one Army Reserve two-year scholarship. In addition, Guaranteed Reserve Forces Duty (GRFD) control numbers were linked to each team in an effort to create an adequate base for recruiting the desired number of MS IIIs.

Originally, 64 USAR augmentation teams were distributed among 50 ROTC units. A number of factors determined the location of these 64 teams. Among the most important criteria were: (1) the student population at the partnership school; (2) the history of previous production; (3) the assessment of the local PMS; (4) the desire of active component cadre to implement such a program; (5) the availability of reservists; and (6) the equity of dispersion among the seven USAR institutional training divisions administering the test. Augmentation teams were in place by the spring semester of School Year 2000-2001. After 2001, the program expanded. By the summer of 2004, Cadet Command was supported by 87 augmentation teams, which covered 95 schools. There were a total of 226 TPU officers and 106 TPU NCOs manning the 87 teams. The so-called “replacement” scheme, on the other hand, proved ineffective due to the reasons previously elaborated. Replacement teams were gradually converted into augmentation teams. Today, there are no replacement teams remaining the program.⁵⁹

Organizational Streamlining

The most momentous change in the program’s headquarters structure in the post Cold War era began in 1997. In that year, Major General Wallace announced

the decision to cut the size of region headquarters in half and transfer a portion of the savings achieved to the national and brigade headquarters. Over the next four years, Cadet Command headquarters and the brigade headquarters grew substantially at the expense of the region headquarters. The command as a whole realized a net savings of 121 authorizations (**Table 1**).

Table 1.⁶⁰ Total Cadet Command Authorizations FY 1996 to FY 2001

Unit	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01
CC HQ	123	142	152	184	217	216
1st Region						
HQ	138	128	105	81	48	47
BDE	53	62	62	65	65	65
BN	1066	1061	926	921	909	891
2nd Region						
HQ	98	107	93	71	59	57
BDE	47	49	50	58	50	50
BN	807	849	730	720	728	734
4th Region						
HQ	110	101	86	74	61	60
BDE	45	49	53	53	53	53
BN	736	696	602	603	597	609
TOTAL	3223	3244	2859	2830	2787	2782

More significant than the number of spaces saved was the functional realignment that took place. As a result of the realignment, the regions lost many of their administrative and logistical functions and became essentially command and control (C2) headquarters. Along with their logistical and administrative responsibilities, the regions also forfeited some of the power and autonomy they had enjoyed since their creation in 1973. Some officers, in anticipation of further manpower decrements, urged that region headquarters be abolished entirely. The Cadet Command Commander, however, rejected this idea, believing that it would complicate summer camp operations and create span of control problems. Brigades, on the other hand, became more robust entities and took on more oversight responsibilities. In its enlarged form, Cadet Command Headquarters began to assume a more customer service orientation and exercise a more centralized control over administration and logistics.⁶¹

There were also changes in unit designation during this period. On October 6, 1999, Cadet Command requested that all 15 remaining ROTC “extension centers” be converted into “host units.” The request was quickly approved. The Army had introduced the extension center at the beginning of school year

1975-76 for the purpose of rapidly expanding officer production. Originally, the extension center had differed from the host unit in several important ways. First, it could be established and closed by the Commanding General, US Army Cadet Command whereas a decision about the establishment or closing of a host unit had to be elevated to the Secretary of the Army. Second, host units were provided with administrative and logistical support personnel while extension centers were not. The latter had to rely on host units for such support.

Over the years, the distinction between hosts and extension centers blurred. Professors of Military Science for both types of unit were chosen by the same centralized selection board. Extension centers were treated as independent entities in the allocation of scholarships and the setting of production objectives. Moreover, all extension centers eventually had either organic administrative or logistical assets assigned to them. In six out of the 15 schools in question, the centers had both types of support. Cadet Command leaders believed that the upgrade of these extension centers to host status would strengthen the Army's relationship with the schools concerned without requiring additional expenditures. All 15 were redesignated as host units by September 30, 2000.⁶²

Realignment

The US Army Cadet Command underwent another major organizational realignment in 2003. During that year, the command went from a three-region structure with 13 brigades to a two-region structure with 14 brigades, at least with regard to the Senior ROTC. The region and brigade boundaries under the old three-region structure (as of October 2002) are depicted in **Figure 2**.



Figure 2. US Army Cadet Command Region and Brigade Boundaries October 2002

Cadet Command effected the realignment by disestablishing the First ROTC Region, whose headquarters had since its inception in July 1973 been located at Fort Bragg, North Carolina⁶³.

The organizational realignment took effect on 1 June 2003. After the realignment, Cadet Command was left with an Eastern (the former Second Region Headquarters) and a Western Region (former Fourth Region Headquarters). The new regional and brigade boundaries after the realignment are depicted in **Figure 3**.

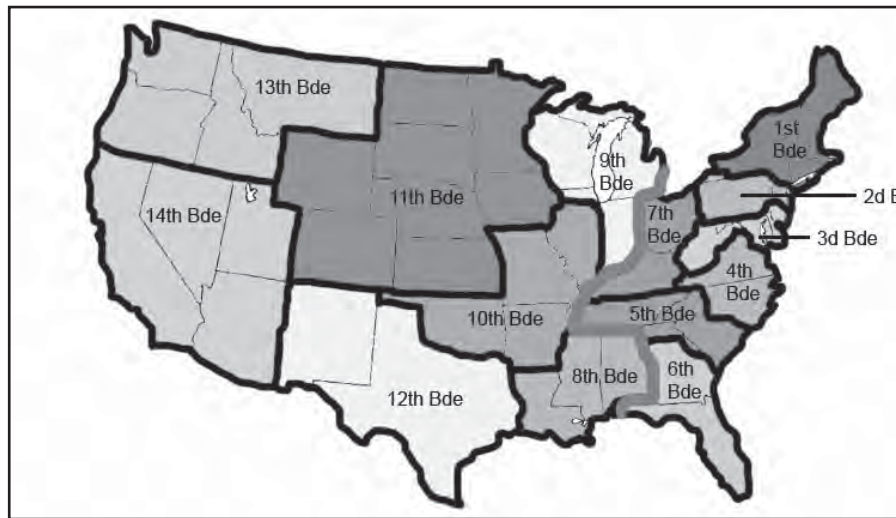


Figure 3. US Army Cadet Command

This reorganization occurred principally because of pressures to “save” manpower spaces. The spaces thus “saved” were to be either returned to a sorely pressed active army that was intent on reducing the army’s overhead and bolstering line units. These spaces were also necessary to offset new demands for personnel created by the creation of the US Army Accessions Command (USAAC), a command established to oversee accessions and initial entry training for the US Army. The US Army Cadet Command (USACC), the US Army Recruiting Command (USAREC), and the Initial Entry Training Center at Fort Jackson, South Carolina were placed under the new command, which was officially established on 15 February 2003.

The driving force behind the realignment was the army’s desire to reduce “overhead” and return soldiers to the operational army, which was then engaged in the Global War on Terrorism (GWOT). The personnel “savings” achieved through the closure of First Region were to be returned to line units, assigned to one of the two remaining region headquarters, or used to staff the newly created

US Army Accessions Command (USAAC), the organization that since its establishment on February 15, 2002 was responsible for enlisted and officer accessions and initial entry training. (The subordinate units of the new USAAC were, in addition to Cadet Command, the US Army Recruiting Command (USAREC), and the US Army Training Center (USATC) at Fort Jackson, South Carolina). In all, the realignment saved 11 personnel authorizations for the Army.⁶⁴

The transition from a three-region to a two-region structure was not smooth. Changes were introduced at the eleventh hour that threw the process into confusion. The Chief of Staff of First Region at the time, Colonel Kerry Parker, described it as “a last minute zoo.” The final brigade boundaries in what was to become the Eastern Region were, due to last minute alterations in the restructuring plan, drawn up in a few hours.⁶⁵

The disruption stemmed from the last minute scuttling of the “Elite Brigade,” dubbed the “snooty” brigade by some of its critics. This Elite Brigade was the creation of Major General John T.D. “Rusty” Casey, the Cadet Command Commander from the summer of 2000 through the summer of 2003. The brigade included prestigious schools such as Princeton, MIT, Cornell, Duke and Johns Hopkins.

Casey initially wanted to organize the ROTC along functional rather than geographic lines. He assumed that the units in this proposed brigade would have essentially the same demographics, confront many of the same problems, share a common culture, operate on similar assumptions, and respond to incentives and other policies essentially in the same way. A brigade commander and staff could manage more efficiently a brigade with such a homogeneous institutional base. As it was, a brigade commander had a great range of schools within his area of responsibility, schools with disparate needs and characteristics that differed greatly in terms of cost, competitiveness, and societal standing. Casey wanted to extend his functional organization scheme beyond the so-called elite brigade. He also considered organizing a brigade for senior military colleges (i.e., VMI, the Citadel, Texas A&M, North Georgia College, Norwich University) and for Historically Black Colleges and Universities (HBCU).⁶⁶

Just as the Elite Brigade was about to be implemented, however, a retired general officer who was a member of the ROCKS, an organization devoted to the mentoring of African American junior officers, learned of Casey’s plans and reportedly intervened with the TRADOC commander to block its formation. The general feared that the creation of this unit would greatly weaken the position of Historically Black Colleges and Universities (HBCU) within the ROTC structure by siphoning off scholarship dollars to high cost, prestigious schools. His fears may have been justified because Casey was widely regarded as a great proponent

of bolstering ROTC's presence in the nation's elite universities and of lowering the program's presence in less competitive schools.⁶⁷

Many observers contended that, as a result of the 2003 realignment, Cadet Command's span of control had become too wide. Each region now had to control, on average, seven brigade headquarters, 136 senior units, and over 700 Junior ROTC units. One brigade commander called the post-realignment span of control "ridiculous in its scope." Cadet Command deputy commander, Brigadier General Gratton N. Sealock, gave a more restrained but similar assessment. In his estimation, the realignment "flattened the organization too much" and made the control of subordinated units by the brigade commander "almost impossible."⁶⁸

The realignment also left the intermediate levels of command (i.e., region and brigade) inadequately staffed. The substantial increase in workload that the realignment had occasioned in the region headquarters was not accompanied by a commensurate increase in personnel authorizations. Cadet Command hired contractors to offset the personnel shortages, but this did not completely make up for the losses. The effects of barebones staffing was particularly noticeable in the Junior ROTC program. Mid-level personnel (GS-11s and GS-12s) found themselves doing clerical work instead of functioning as program managers. Supervision inevitably suffered.⁶⁹

In fact, the realignment resulted in the region headquarters being excluded from any active role in the supervision of many functions. This was because the two remaining region headquarters were, with their diminutive staffs, so focused on summer training—the Western Region on the Leader Development Advanced Course (LDAC) and the Eastern Region on the Leader's Training Course (LTC)—that they did not always have time for or enough staff to handle many routine administrative matters. Increasingly, actions went straight from the brigades, and in some cases battalions, to Cadet Command headquarters.⁷⁰

Staffing shortfalls plagued the brigade headquarters also. Brigade headquarters had been bolstered to accommodate the increased workload, but the plus-up had been insufficient to handle the increased demands. Lack of personnel induced many brigade commanders to use personnel designated for the Junior ROTC to perform duties and functions related to the Senior ROTC. This was done in part out of necessity (there was not enough people to perform all of the functions) and in part as a result of command policy. Major General Casey had instructed his brigade commanders to keep their "hands off" Junior ROTC and concentrate on producing commissioned officers through the Senior ROTC. The upshot was that the Junior ROTC suffered from a sort of "benign neglect."⁷¹

Junior ROTC

The downsizing of the JROTC management apparatus began in the mid-nineties. As was the case with the senior program, the steady pressure exerted by Congress to reduce the headquarters support structure was a driving force behind this downsizing. One study of the Junior ROTC program conducted at the time found that approximately 30 percent of the junior program's manpower was being consumed by program administration. This was far too much, in the opinion of some defense officials. Ms. Lister directed that an assessment be made of JROTC staffing and organization for the purpose of reducing costs and saving manpower. The resultant study, conducted by the US Army Force Integration Support Agency (USAFISA) in the spring of 1995, recommended that these savings be achieved by centralizing some functions at the national headquarters, drastically cutting the JROTC staffs at the three region headquarters, and moderately bolstering the staffs at brigade headquarters to accommodate some of the additional responsibilities that would devolve upon them. After some haggling between representatives of the ROTC and USAFISA, it was agreed that the Junior ROTC staff would be reduced by about 15 percent (95 vs. 81 authorizations) and the management staffs configured along the general lines proposed by the USAFISA.⁷²

The Junior ROTC management structure, however, came under increasing strain after the beginning of the new century. The strain was a result of the JROTC expansion (the third such expansion in the post-Vietnam era) that began in the autumn of 2000. The original expansion plan, announced by the Secretary of the Army Louis Caldera in July, 1999, called for the creation of 50 units in school year 2000-2001 and of 45 more units each year thereafter until the legislative limit of 1645 was reached in fiscal year 2006. This would give the army about half—or 47 percent—of the congressionally established defense department ceiling of 3500 units, reflecting the unit distribution scheme among the services prescribed by Section 2103, Title 10 of the US Code (**Table 2**).⁷³

Because of a higher than expected unit attrition rate, however, the army found it necessary to add more units on an annual basis than it had originally projected. School budget shortfalls and, possibly, the demands on school systems made by the No Child Left Behind Act (NCLBA) of 2001, resulted in an unusually large number of schools dropping the program over the last several years. To reach the 1645 mark, Cadet Command had to add 83 units, instead of the 45 it had originally projected, during school year 2004-2005.⁷⁵

Table 2.⁷⁴ Army JROTC Expansion School Year 1997-1998 through School Year 2004-2005

School Year	Number of Units	Enrollment
1997-98	1368	228,163
1998-99	1370	231,060
1999-00	1370	234,471
2000-01	1420	243,103
2001-02	1465	250,008
2002-03	1510	272,746
2003-04	1530	267,343
2004-05	1563	274,176
2005-06	1645	

The Junior ROTC Expansion

Various factors came together to propel the expansion forward at the end of the century. A continuing need for public outreach played a part. Throughout the mid and late nineties, various observers perceived that the military was becoming increasingly isolated from society. Junior ROTC was one medium through which this connection between the civilian and military communities could be maintained. Indeed, among many segments of the public, ROTC is Junior ROTC. It has, according to studies conducted for Cadet Command, much more public visibility than the senior ROTC.⁷⁶

This is easily comprehended by viewing enrollment trends over the past three decades. During that time frame, the junior and senior programs have moved in opposite directions. In school year 1968-1969, the senior program boasted an enrollment of almost 151,000, while the junior program had only 102,000 participants, and was rapidly losing students. Twenty six years later, the senior ROTC numbered slightly more than 25,000 cadets while enrollment in the junior program reached an all-time high of almost 275,000 cadets. Clearly, the junior program has displaced the senior program as a vehicle of public outreach for the army.⁷⁷

The Junior ROTC was also seen as a way for the Defense Department to contribute to national educational goals. These goals encompassed not only academic skills but various habits, attitudes and orientations that allowed students to become obedient and tractable citizens and “good workers.” Respect for “constituted authority,” the ability to work as a member of a team, punctuality, neatness, “etiquette,” loyalty, and trustworthiness were purportedly as important to employers in the twenty first century as they had been in the nineteenth century.⁷⁸

Popular demand, as it had been in the past, was another factor that propelled the expansion forward. Throughout the latter half of the nineties, Congressmen bombarded Cadet Command headquarters with letters, asking for more units. Major General Stewart Wallace, the ROTC Commander, told the Secretary of the Army that he received such requests from congressmen asking for a new JROTC unit “virtually every week.” As of June 9, 1998, there were 204 high schools on the waiting list. Wallace told the Secretary that the army could expect that list to grow “by several times” if there were a reasonable hope of new starts.⁷⁹

The Junior ROTC also remained an important source of employment for military retirees. On the eve of the expansion, the army’s JROTC had over 2700 retired officers and NCOs in its instructor force. By the beginning of school year 2004-2005, that total had grown to over 3300. The Army Retiree Council recognized the importance of the JROTC as a source of jobs for its membership. It described the program as a cost effective, highly structured, successful program involving a significant segment of the military retiree community.⁸⁰

Accessions shortfalls were probably the most powerful force behind the expansion, however. The army had to face a very difficult recruiting environment in the late 1990s. A booming economy, which held an abundance of entry-level jobs, coupled with an increasing propensity on the part of high school students to attend college, cut deeply into the army’s traditional recruiting market of non-college bound high school graduates. In this environment, the program once again began to be looked upon as a fertile ground for new accessions. One often-adduced study claimed that JROTC cadets were five times more likely than their contemporaries to join the military. It was data such as this, perhaps, that prompted former Secretary of Defense William S. Cohen to describe the program as “one of the best recruiting devices that we could have.” The demands placed on the Army by the Global War on Terrorism (GWOT) has, of course, made the expansion even more compelling and may lead to further program growth in the future.⁸¹

Since the fall of the Berlin Wall, the JROTC management chain has become increasingly tenuous. After 1990, intermediate (i.e., region and brigade) headquarters had been reduced or eliminated based on the lowered lieutenant requirements of the army. At the same time, ROTC’s institutional base in the senior program shrank from 420 units to 270. It would take less “overhead” and smaller headquarters, it was assumed, to manage a smaller program (**Table 3**). In this restructuring process, however, the management needs of the Junior ROTC program were ignored. No organizational moves were made for managing the hundreds of units that have been added since 1990.

Table 3. ROTC Management Structure 1989-2005 (Selected Years)

Year	No. of Regions	No. of Brigades	No. of Senior ROTC Units	No. of Junior ROTC Units
1989	4	16	420	865
1991	4	16	410	853
1993	3	15	311	1028
1995	3	14	287	1240
1997	3	13	270	1370
1999	3	13	270	1380
2001	3	13	270	1432
2003	2	13	272	1500
2005	2	13	272	1645

Thus, in 1990, the average brigade controlled 54 high schools; by 2005, that average stood at 127. Over the same period, the region span of control increased, on average, from 216 to 781 units. But simple averages obscure the true scope of the problem. Because Junior ROTC units are heavily concentrated in the southeastern portion of the nation, some brigades must control over 200 units while others control fewer than 50. The Sixth Brigade, which encompasses Florida and portions of Georgia, controls 240 units while the Third Brigade, which encompasses Delaware, Maryland, West Virginia and portions of Virginia, controls 49.

The Junior ROTC Directorate at Fort Monroe became convinced that management changes were necessary to reassert a degree of control over the program—changes that would ensure that Junior ROTC staff members at the brigade headquarters were used for their designated purpose and that units would be visited on a regular basis. Accordingly, in December 2003, it began a test, called the Area Coordinator (AC) test. In certain areas on the east coast, the JROTC staffs were taken out of brigade headquarters and consolidated in one management cell. These AC cells were to report directly to Cadet Command headquarters, bypassing both the brigade and region management level. The cell, which had no ties with the senior program, was to be devoted exclusively to the administration of the junior program. The staff at the national headquarters believed that it provided an acceptable, if not ideal, solution to the Junior ROTC's management problems. While the staff-to-unit ratio was very high under the AC test, at least all elements allocated to the program were used for their intended purpose.

There was intense resistance to the idea in the field, however. Brigade commanders chafed at losing people from their diminutive staffs. Some argued that, in their brigade, the Junior ROTC was not being neglected and asked why should these assets be taken away from them. Others objected to the idea of decoupling

the junior from the senior program. This decoupling would presumably destroy the cooperation and synergistic relationship that some brigades had developed between junior and senior units and restrict the flow of junior cadets into the senior program. Moreover, a few argued, having one headquarters, assisted by only five relatively small AC cells, control 1645 units ran contrary to army management theory and practice. The span of control would be unconscionably broad. And finally, there was a fear that separating the junior from the senior ROTC would make it easier for the Army and the Defense Department to divest themselves of the JROTC program altogether. By separating the two, the first step would already have been taken.

In the end, the arguments of the brigade commander won out. The AC experiment was shelved. For the present at least, Junior ROTC units will remain under the control of the brigade headquarters. However, the AC concept has not been totally abandoned. The current director of the JROTC Directorate within Cadet Command headquarters is a supporter of the scheme and is presently trying to resurrect it as an alternative to the present organizational arrangement. How successful he will be is unclear.

Conclusion

The Global War on Terror has presented more challenges to an organization that even before September 2001 was feeling the effects of the personnel and resource decrements of the preceding decade. The ROTC's contract instructor force, 75 percent of which is comprised of reservists, has been particularly hard hit. In May 2005, about one-fourth of all ROTC contract instructors were deployed. Some were replaced by temporary hires, who, according to several brigade commanders, have to devote some time during their relatively short stay in an ROTC battalion to searching for their next job. Deployments have also affected the reserve augmentation teams. In certain areas, these teams are no longer available to support the ROTC. In others, they have been greatly depleted.

Moreover, the ComTek instructor has aged over the past several years. Due to the difficulties encountered in filling instructor positions, the average age of contract cadre has reputedly increased by 12 years since the beginning of the century. At the Leadership Development and Assessment Course (LDAC)—formerly known as Advanced Camp—instructors over 60 years of age have recently served as platoon tactical officers.

Pressure to cut headquarters management and support activities has not abated over the last several years. Neither has the push to take officers and non-commissioned officers out of the training base and assign them to operational units. Cadet Command is currently studying realignment alternatives for the purpose of

streamlining its organization and of saving personnel authorizations. Given the tenuous state of the ROTC command and control apparatus, it seems unlikely that the Army can execute these realignments and save manpower without making fundamental organizational changes—changes that would lead to the abandonment of the organizational model that the Army has used to manage the ROTC since the Steadfast Reorganization of 1973.

Notes

1 US Army Cadet Command, *Annual Command History, 1 January—31 December 1990* (Fort Monroe, Va.: USACC, 1991):38-39.

2 Ibid. The procedure that the command had developed for eliminating unproductive units, the Effective Management Program (EMP), was not an appropriate instrument for the closings projected in Horizon. That procedure involved a four year inactivation timeline but Cadet Command had only one year in which to make major cuts. To effect the drawdown with the necessary rapidity, therefore, the command chose to rely on the expedient of the “contract closure.” A review of the standardized contract between the Army and institutional authorities revealed that a host institution could be closed in one academic year and an extension center in one semester if either the school or the Army terminated the contract for whatever reason.

3 Arthur T. Coumbe and Lee S. Harford, *US Army Cadet Command: The Ten Year History* (Fort Monroe, Va.: GPO, 1996):234.

4 Information Paper, DAPE-MPO, LTC Kitchen, 2 June 1991, subject: AUSA Draft Resolution #1.

5 Author interview with MG Wallace C. Arnold, January 15, 1993. Fifty of these unit closures were part of the original plan. The other 12 were Effective Management Program closures, which involved ROTC units that had been identified for elimination before the Horizon plan had been developed. However, all 62 actions are commonly lumped together under the Horizon label because they were worked concurrently.

6 US General Accounting Office, *Reserve Officers' Training Corps: Less Need for Officers Provides Opportunities for Significant Savings*, B-242016.2 (May 6, 1991): 14.

7 Ibid.: 24,27, 46 and 48.

8 Coumbe and Harford:237.

9 Ibid.: 238.

10 US Army Cadet Command, *Annual Command History, 1 January—31 December 1991* (Fort Monroe, Va.: USACC, 1992):35. Author interview with LTC Mike Hodson, May 31, 1995.

11 Fact Sheet, ATCC-MO, LTC James Janele, 25 June 1992, subject: Alternative Strategies; Author interview with LTC James Janele, March 1, 1992.

12 Coumbe and Harford: 240.

13 Author interview with LTC James Janele, May 26, 1995; US Army Cadet Command, *Annual Command History, 1 January—31 December 1993* (Fort Monroe, Va.: USACC, 1994):42.

14 Memorandum, Christopher Jehn, ASD (MF&P), For Secretaries of the Military Departments, May 3, 1991, subject: FY 1991 Management Headquarters Reduction; Memorandum, Christopher Jehn, ASD (MF&P), For Secretaries of the Military Departments, June 28, 1991, subject: FY 1991 Management Headquarters Reduction. (2) US Army Third ROTC Region, Annual Historical Summary, 1 January—15 November 1992 (Fort Riley, KS: 22 December 1992); Memorandum of Instruction (MOI) for Third Region Closure and Inactivation, ATOC-CG, COL Robert B. Suave, Chief of Staff, Third ROTC Region, n.d.

15 After Action Report (AAR), Third ROTC Region, Tab G, 22 December 1992; FY 1991 National Defense Authorization Act, Public Law 101-510, 102nd Congress, 2nd Session, October 5, 1990.

16 Author interview with LTC James Janele, May 26, 1995.

17 Impact Paper, n.d., subject: Congressional Action Eliminating the Assignment of Full-Time Army National Guardsmen and Army Reservists to ROTC units; Memorandum for Record, ATCC-ZR, COL W. Ellis, Reserve Forces Advisor, 31 October 1991, subject: Removal of AGR Support from ROTC.

18 Chapter 39, Title 10, US Code.

19 Information Paper, ATOB-RC, LTC Crowson, ARNG Adviser, 2 October 1992, subject: AGR APMS Placement Project.

20 Impact Paper, n.d., subject: Congressional Action Eliminating the Assignment of Full-Time Army National Guardsmen and Army Reservists to ROTC units.

21 Memorandum, ATCC-ZR, COL William Napper, Jr., to CAR, 23 December 1992, subject: Active Guard Reserve (AGR) Allocation; FY 1992 Defense Authorization Act, Public Law 103-313, 102nd Congress, 1st Session, October 5, 1992.

22 Memorandum, ATCC-PC, MG Arnold for DCSPER, 12 February 1993, subject: Request for Legislative Action (AGR).

23 FY 1993 National Defense Authorization Act, Public 102-337, 102nd Congress, October 5, 1992.

24 Author interview with LTC Victor R. Coffenberry II, 12 December 1995; Author interview with COL Douglas S. Becker, 12 December 1995; FY 1993 National Defense Authorization Act, Public Law 102-357, 103 Congress, 1st Session, October 5, 1992.

25 Author interview with COL J. G. Cretella, March 16, 1993.

26 Letter, Hazo W. Carter, Jr. to MG James M. Lyle.

27 Letter, Curtis J. Thompkins to MG James M. Lyle.

28 Letter, Frank D. Brown to MG James M. Lyle.

29 Letter, Joe B. Wyatt, to MG James M. Lyle.

30 Author interview with LTC James Janele, May 26, 1995; Briefing Slides, ATCC-MO, 23 February 1994, subject: US Army Cadet Command Update Briefing.

31 Ibid.

32 (1) Author interview with LTC James Janele, June 23, 1995. (2) Author interview with MG James M. Lyle, January 15 and February 10, 1995.

33 Author interview with LTC James Janele, June 23, 1995.

34 (1) Letter, William H. Danforth, Chancellor, Washington University, to COL Judith R. Hanes, September 30, 1994. (2) Letter, William H. Danforth, to the Honorable Sara Lister, ASA (M&RA), August 10, 1994. (3)

35 (1) PROFS message, Mr. Dave Hickman, ATCC-MO, 27 July 1994, subject: Response to GAO Issues. (2) US General Accounting Officer, *Reserve Officers' Training Corps: Questions Relating to Organizational Restructuring*, GAO/NSIAD 96-56, B-270485, (Washington, D.C.: GAO, February 6, 1996): 4. (3) Memorandum, William Perry, Deputy Secretary of Defense, For Undersecretaries of Defense, Assistant Secretaries of Defense, Comptroller, 10 December 1993, subject: Office of the Secretary of Defense (OSD) Manpower Reductions.

36 One brigade was shut down in FY 1995. Two others were closed in FY 1996. As a result of pressure exerted by Congress and the Pentagon, the ROTC unit contraction was halted at 270 units. Consequently, only three, instead of four as originally planned, brigade headquarters were closed.

37 The name "split camp option" was attached to this scheme because it entailed holding a combined Advanced/Basic Camp at both Bragg and Lewis, thus splitting Basic Camp between two posts.

38 Dr. Bert Huggins, ATCC-MO, Market Research Branch, Operations Division, 5-10 Closure of Second Region Headquarters, December 1995.

39 Ibid; Author interview with LTC James Janele, June 23, 1995.

40 GAO, *Reserve Officers' Training Corps*: 4-5.

41 Arthur T. Coumbe, "The Senior Army Reserve Officers' Training Corps (ROTC); Recent Developments and Current Prospects", Unpublished Manuscript, July 12, 2000; When Lyle asked to be extended in command for an additional year, Lister refused his request; Her critical remarks about the Marine Corps that she delivered in a public forum precipitated Lister's early departure from office.

42 Briefing Slide, ATCC-MO, "Officer Shortfall," 9 February 1999.

43 Wallace also soon embarked on what can best be described as a “de-Wagnerfication” of the headquarters building. Scores of old photographs depicting ROTC units engaged in various activities were taken down and replaced with standard army prints of civil war battles. The move was apparently made to symbolize the command’s new focus (i.e., promoting the interests of the army rather than those of the ROTC) and to announce that a new regime was in charge. The ROTC argot that Wagner had introduced to emphasize the program’s distinctiveness was another of Wallace’s targets. He changed the name of the “Gold Strike Room” to the “conference room.” Again, the change was symbolic.

44 See LTC Tim Kleppinger, *A Proposal for the Merger of the US Army Recruiting Command (USAREC) and the US Army Cadet Command: One Recruiting Organization - “More Than a Partnership”* (Carlisle, Pa.: USAWC, Strategy Research Project, February 10, 2001).

45 Letter, MG (Ret) Robert E. Wagner to Ms. Sara Lister, 10 January 1997.

46 Ibid.

47 (1) Message, HQDA TO CDR TRADOC and CDR Cadet Command, 22 July 1996, subject: Institutional Army Redesign Issue 41, Senior ROTC Staffing; (2) Author interview with Mr. Dennis Kennedy, MPRI.

48 (1) Interview with LTC C. Hardy, ATCC-O, Chief, Operations and Evaluation Directorate, 5 November 1999; (2) Briefing Slide, ATCC-O, “Alternative Staffing Test,” 9 February 1999; (3) Charles A. Goldman, Bruce R. Orvis, Michael G. Mattock, and Dorothy A. Smith, *Staffing Army ROTC at Colleges and Universities: Alternatives for Reducing the Use of Active-Duty Soldiers* (Santa Monica, Ca.: RAND, 1999), pp.16-17; (4) Interview with MAJ C. Neely, ATCC-MO, ORSA, Operations and Evaluation Directorate, 16 November 1999; (5) Interview with Mr. Dennis Kennedy, MPRI, 22 May 2000; (6) Memorandum, ATCC-RR, MG James M. Lyle, Cdr, USACC, For CDR, TRADOC, 18 January 1996, subject: Alternative Staffing—SROTC units; (7) Memorandum For Record, DAEC-CA, LTC Fletcher, 24 January 1997, subject: RAND—Staffing Alternatives for SROTC Battalions.

49 Interview with Mr. Dennis Kennedy, MPRI, 3 November 1999.

50 Author interview with LTC Fred Barrell, III, ATCC-PM, Chief, Personnel Management Division, Personnel and Administration Directorate; Sydney F. Freedberg, Jr., “The New-Model Army,” *National Journal*, June 3, 2000, p.1750.

51 Author interview with Colonel Kerry Parker, 10 August 2003.

52 Author interview with BG William Heilmann, Deputy Commanding General, US Army Cadet Command.

53 Memorandum of Understanding Between MG Thomas J. Plewes, Chief, Army Reserve and MG Stewart W. Wallace, CG, USACC, subject: Senior Reserve Officer [sic] Training Corps (SROTC), Alternative Staffing Demonstration; Memorandum For Record, ATCC-AR, COL Robert P. Morrow, ACS-USAR, 15 May 2000, subject: USAR Participation in SROTC Alternate Staffing.

54 The original plan called for the test to be conducted at 18 schools using the “two-replacement” scenario. But, due to various reasons, only nine additional institutions were added to the list of participants. Because the ROTC battalions at Georgia Tech and the University of Central Florida had used reservists to replace only one position, RAND declared their participation to be invalid for official evaluation. Consequently, the official replacement test included only 10 schools—the University of South Carolina and the nine newly-designated institutions. The test was scheduled to run from September 1998 through March 2001. Cadet Command suggested that the test be extended through school year 2001-2002 since only 10 schools participated in it.

55 The Army Reserve’s seven institutional training divisions, it was agreed, would administer and manage the test, which eventually expanded to encompass 10 schools. This test was to run concurrently with the “replacement” test and was to be evaluated internally, that is, by Cadet Command and the Reserve Command.

56 Memorandum of Understanding Between MG Thomas J. Plewes, Chief, Army Reserve and MG Stewart W. Wallace, CG, USACC, subject: Senior Reserve Officer [sic] Training Corps (SROTC), Alternative Staffing Demonstration; Memorandum For Record, ATCC-AR, COL Robert P. Morrow, ACS-USAR, 15 May 2000, subject: USAR Participation in SROTC Alternate Staffing.

57 Ibid.

58 Ibid.

59 Author interview with COL Martha Oliver, Assistant Chief of Staff—USAR, USACC, July 21, 2005.

60 Fact Sheet, ATCC-RM, Ms. Francis Holloway, 12 August 1999, subject: Total Cadet Command Authorizations.

61 Interview with Ms. Jo Gay, ATCC-RM, 11 August 1999.

62 Memorandum, MG Stewart W. Wallace, Cdr, USACC, for ASA (M&RA), 12 January 1998, subject: SROTC Extension Center; Memorandum, COL John W. Corbett, COS, USACC, 3 March 2000, subject: Memorandum for Instruction (MOI) for Conversion of Extension Centers to Hosts.

63 US Army Cadet Command, *Annual Command History, 1 January—31 December 2003* (Fort Monroe, Va.: USACC, 2004):1-3.

64 Ibid.

65 Author interview with Colonel Kerry Parker, Chief of Staff, First ROTC Region, 10 August 2003.

66 Author interview with Colonel McGaughey, Third Brigade Commander, 10 May 2005.

67 Ibid.

68 Author interview with Brigadier General Gratton Sealock, Deputy Commander, US Army Cadet Command, 4 June 2005; Author interview with Colonel Dave Ahrens,

Director, Directorate of Leader Development, 14 April 2005; Author interview with Colonel Kathy Denis, 10th Brigade Commander, Western Region, US Army Cadet Command, April 4, 2005.

69 Author interview with Colonel Dan Patterson, Chief of Staff, Western Region, USACC, May 17, 2005.

70 Author interview with Brigadier General Gratton Sealock, Deputy Commander, US Army Cadet Command, 4 June 2005.

71 Author interview with Colonel Dan Patterson, Chief of Staff, Western Region, USACC, 17 May 2005; Author interview with Colonel James House, Director, Directorate of Leader Development, USACC, March 14, 2005.

72 US Army Integration Support Agency (USAFISA), March-May 1995, subject: Junior ROTC Manpower and Organizational Study; Memorandum, MG James M. Lyle, For Assistant Secretary of the Army, Manpower and Reserve Affairs, 2 October 1995, subject: Junior ROTC Manpower and Organizational Study; The staffs at the three region headquarters were cut from an average of 17 to 6 personnel. Within this reduced number, Cadet Command allotted the region commander 3 personnel in direct support of Junior ROTC instead of the single person associated with USAFISA's operating concept. This meets the region commander's command and control concerns, permits the coordination of training and camps at a lower, more effective level and support duties that remain after other staff changes are implemented. These changes have the net effect of reducing the region staffs to the level recommended by USAFISA; Fact Sheet, ATCC-HS, LTC Glenn M. Hayes, 19 March 1996, subject: JROTC Program Update.

73 Colonel John Corbett and Colonel Arthur T. Coumbe, "JROTC: Recent Trends and Developments," *Military Review* 54 (January-February 2001): 41.

74 US Army Cadet Command, *Opening Enrollment Report, Junior ROTC*, School Year 1997-1998 through School Year 2004-2005.

75 (1) National Defense Authorization Act of 2002, Section 537, "Repeal of Limitation on Number of Junior Reserve Officers' Training Corps Units," available from <http://thomas.loc.gov/cgi-bin/query/c?c107/temp/^c107ABgG18/> accessed March 3, 2005. (2) Author interview with Ms. Carol Hetler, JROTC Directorate, USACC, July 10, 2005. (3) Anticipating expansion beyond the 3500 limit, Congress removed the legislative ceiling on Junior ROTC's institutional base with the passage of the National Defense Authorization Act (NDAA) of 2002. No funding accompanied this move, however. The expansion will stop at the 1645 mark.

76 For example, see Richard H. Kohn, "Out of Control: The Crisis in Civil-Military Relations," *The National Interest* (Spring, 1994): 3-17.

77 US Army Cadet Command, *Opening Enrollment Report, Junior ROTC*, School Year 1968-1969 and School Year 2004-2005.

78 US Army Cadet Command, *The Prospectus: A Curriculum Outline for Army JROTC/NDCC* (Fort Monroe, Va.: US Army Cadet Command, 1999), p.1; US Army Cadet

Command, *Program of Instruction* (Fort Monroe, Va.: US Army Cadet Command, 1999), p.1.

79 Fact Sheet, ATCC-HS, JROTC Directorate, US Army Cadet Command, 9 June 1998, subject: Popular Demand of Junior ROTC; Letter, MG Stewart W. Wallace to the Secretary of the Army, 27 October 1997, subject: Popular Demand for JROTC; Fact Sheet, ATCC-HS, JROTC Directorate, US Army Cadet Command, 9 June 1998, subject: Popular Demand of Junior ROTC; AUSA Institute of Land Warfare, Defense Report, "The Demand for Junior Reserve Officers' Training Corps in American High Schools," July 1998; Memorandum, ATCC-HS, MG Stewart W. Wallace, Commander, US Army Cadet Command For the Secretary of the Army, 27 October 1997; The Junior ROTC, program administrators were convinced, was one of the relatively few federal education programs that had "near universal support" at the community and neighborhood level. The enthusiastic endorsement of the program by school officials at existing host sites supposedly created a demand by their neighbors for new starts. The demand was further fueled by the normal population increase.

80 Information Paper, Subject: Army Retiree Council Issue 3-58-96, Additional Emphasis and Support for the JROTC Program.

81 Walt Barron, "Lawmakers Eye Junior ROTC as Cheap Way to Boost Recruiting," *CQ Monitor News*, February 17, 2001, p.1; *Junior Reserve Officers' Training Corps: Contributions to America's Communities*, p.4.

Transformation and the Officer Corps — The case of Japan and the United States Between the World Wars

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Professional military education (PME)² plays a part in most officer careers, but its extent and career influence vary significantly between services. What are its impacts on military effectiveness and on wartime innovation and transformation? This paper and the project on which it is based seek to answer that question for one particular historical case, that of Japan and the United States between the world wars.

This case is a good one both because the necessary data are reasonably available for both sides and because the circumstances of the early phases of the Pacific War that followed are favorable for clear comparative analysis. The great majority of higher commanders and key staff officers on both sides during the first two years of the war were graduates of PME programs. And the performance of the military forces of the two nations differed in relatively distinct ways. This permits us to draw reasonably clear connections between what officers learned and how they performed in top command and staff positions.

PME and military doctrine in Japan and America: the background

The 19th century brought the rise of education for the professions. The Prussian Army was a pioneer military example. Thus the example of the contemporary success of Prussian arms on the battlefields of Northwestern Europe gave great impetus to the spread of professional military education (PME). The US services were among the first to take up this idea. In a way this seems strange, as both the Army and Navy were all but moribund as military forces in the decades following the Civil War. The Navy began to awaken in the 1880s, but for the Army the process had to await the difficult experiences of the Spanish-American War, where the Army's inefficiency was far more costly than the feeble efforts of the Spanish foe.

Yet the Army and Navy both entered World War I with a core of mid-grade officers who had received PME of a kind that was relatively strong by the standards of the day. This owed a good deal to the perception, within the Army especially, that American military needs were unique. It might be necessary at any time, the Army believed, for it to suddenly expand from a frontier and colonial constabulary to a great and modern army. This after all was precisely what it had experienced in the Civil War and to a lesser extent in the Mexican and Spanish-American Wars. It was essential that as many as possible of its small cadre of professional officers be equipped to carry general-officer stars in their mu-

sette bags. Since there was little opportunity for them to gain experience of war through peacetime exercises, PME was the Army's chosen instrument for preparation.

The case of the US Navy (USN) was somewhat different. Once a modern naval force was in the water, as it was in the first decade of the 20th century, naval officers had an opportunity to practice their profession on a scale denied to the peacetime Army. In effect, the Navy had more "hands-on" PME. Formal PME, however, continued to occupy an important role in a naval officer's development.³

American interest in economic expansion and the 19th century view that "trade follows the flag" prompted the nation to acquire a number of Pacific island territories, culminating in the wake of the Spanish-American War with the Philippines and Guam. The ultimate goal was to secure access to what was assumed to be a huge potential Chinese market for American goods. This led directly to increased interest in and concern about Japan.

Since the early 1600s Japan's post-feudal shogunate had pursued a policy of very tightly regulated and limited contact with foreign influences. By the 19th century, strains accumulated over more than two centuries of economic and social change had undermined the political bases of the shogunate, however, and concerns about the dangers posed by European and American penetration into the region helped to trigger its overthrow at the end of the 1860s. The rise to power of the new Meiji regime brought a sharp volte-face: rather than shunning almost all foreign influences Japan would now selectively embrace them in an effort to develop its national power.⁴

Most dramatically, Japan shed its traditional military structure, a feudal relic, turning instead to European models for an entirely new army and navy.⁵ Both services quickly developed general staffs and staff colleges on an entirely up-to-date pattern. Many Europeans and Americans tended at first to smirk at the earnest efforts of the "little yellow men," but the smirks slipped when Japan decisively defeated much larger China in 1894–1895 and bested Russia in a hard-fought war a decade later.

American military thought was decisively influenced by the experience of participation in World War I, and especially so for the Army. The huge expansion between April 1917 and November 1918—from 200 thousand men to 3.6 million—found the Army short of nearly everything. So far as General John J. "Black Jack" Pershing was concerned, however, few shortages were so critical as the lack of qualified officers to fill staff positions in his American Expeditionary Force (AEF). Graduates of the General Service and Staff School at Leavenworth and Army War College (AWC) at Washington were highly valued, but there

were not nearly enough of them. Nor, in any case, were they trained in a tactical and operational doctrine that was at all adequate for the circumstances the Army found itself fighting in.

Borrowing from the British and (especially) French experiences, staff structures were re-shaped (including the establishment of the familiar G-1, G-2, etc., system) to meet the demands of combat of a scale and intensity without precedent in then-recent American experience. Instruction in staff doctrine was the focus of an intensive twelve-week course with the impressive title of General Staff College set up at Langres, France to produce staff officers. Its 537 graduates helped, but there were not enough of them soon enough to avert many costly problems. Parallel problems bedeviled the mobilization effort at home.⁶ After the war the Army's leaders freely expressed their service's great and well-justified pride in its accomplishments, but in private they reflected as well on the cost of the lessons it had learned. The Army would not find itself so ill-prepared again, they resolved, so far as it was in their power to prevent.

The Navy's lessons had not been so painful as the Army's, but the service had plenty to think about in the wake of the war. It had seen its own share of a chaotic mobilization effort and its command arrangements had proven at least as unsatisfactory as those of the Army, bringing on a bitter and public post-war row. While it had done little fighting, it had been close enough to Britain's Royal Navy to gain considerably from Allied experience. Neither Army nor Navy was prepared to acknowledge any need for integrated joint command to meet the demands of modern war, but the need for closer coordination and cooperation was recognized.

Japan's involvement in World War I was very limited. The Imperial Japanese Army (IJA)⁷ resisted sending troops to fight alongside the nation's allies, limiting itself to the dispatch of observers to Europe. Its sister service, the IJN, was more active, sending a destroyer squadron to the Mediterranean for antisubmarine duties. But in fact the IJN continued to show very little interest in antisubmarine warfare (ASW) and the officers who had been involved in ASW operations with the British exerted no particular influence. Like the USN, the IJN regarded the great battleship action between British and Germans at the Battle of Jutland (31 May–1 Jun 1916) as a prototype for the future.

For the Japanese—and especially the IJA—the point of reference for doctrine and PME was its own Russo-Japanese War of 1904–05 rather than the European conflict which had followed a decade later. In terms of the modes and intensity of tactical combat, the two conflicts were not too dissimilar. In 16 months of combat Japan lost more men killed in action than America did in any 20th century conflict outside of World War II—more than 60,000 battle deaths out of a population

of 47 million. Although dwarfed by European death rolls in World War I, this toll made a strong impression in Japan.

Doctrinal orientations: the armies

Military leaders in both countries interpreted the “lessons” of the conflicts in terms of their own views of war. The table below summarizes the lessons as seen by the two armies.⁸

	US Army	Japanese Army
Arm of Decision	<ul style="list-style-type: none"> Mass maneuver infantry backed by strong combined-arms team 	<ul style="list-style-type: none"> All-elite maneuver light infantry
Tactical Essentials	<ul style="list-style-type: none"> Rifleman marksmanship and firepower Strong artillery, plus limited organic light artillery Organic armor for assault 	<ul style="list-style-type: none"> Self-sacrificing determination and offensive spirit (<i>seishin</i>) Ultimate troop hardening Intensive tactical training for day-night offensive; emphasis on use of night and cover to negate enemy firepower Small-unit leadership initiative Close artillery support, including organic light artillery Armor support as needed
Operational Essentials	<ul style="list-style-type: none"> Clear and uniform doctrine at all levels Operational maneuver with mass forces and logistics Emphasis on principle of mass Operations overseas and in remote areas Operational intelligence, with emphasis on COMINT 	<ul style="list-style-type: none"> Clear and uniform doctrine at all levels Light, swift, decisive operations, with minimal forces and logistics Strong emphasis on convergent operations and economy of force Coordinated Army-Navy landing operations
Force Bases	<ul style="list-style-type: none"> Standing volunteer regular forces as cadre for wartime expansion by 10x or more Regular and reserve forces heavy in officers for mobilization Expansion via reserve mobilization plus wartime volunteers and/or draftees Motivation – national patriotism and duty Standardized “all-purpose” combined-arms formations Industrial mobilization to expand/sustain matériel 	<ul style="list-style-type: none"> Two-year conscript forces with regular officer and NCO core in peacetime Mobilize and fill out reserve units as necessary to meet needs Raise and train new formations when necessary Units formed on territorial basis Motivation structure combining religious national patriotism, traditional authority structures, and local ties Little TO&E standardization; force packages tailored for task
Operational Planning Concept	<ul style="list-style-type: none"> Multi-echelon planning led and coordinated by ops sections Opportunity for feedback from executing echelons Planned margins and fallbacks for uncertainties 	<ul style="list-style-type: none"> Top-echelon planning under <i>very close direction of ops section</i> Plan allows executing echelons flexibility in means, but <i>must</i> adhere to plan Strongly success oriented
Issues	<ul style="list-style-type: none"> <i>Bombardment aviation as arm of decision?</i> 	
Areas of Relative Neglect	<ul style="list-style-type: none"> <i>Control of air as crucial factor</i> <i>Tropical-region operations</i> <i>Armor tactics and operations</i> <i>Night combat</i> <i>Command relationships in joint operations</i> 	<ul style="list-style-type: none"> <i>Control of air as crucial factor</i> <i>Tropical-region operations</i> <i>Armor tactics and operations</i> <i>Logistics</i> <i>Intelligence</i>

While these principles were not all enunciated explicitly, and did not all emerge at once, they formed the main substance of PME throughout the period between the wars in the respective armies. Although both armies emphasized maneuver infantry, their approaches diverged and contrasted sharply in most respects across the board.

Naval doctrines and PME programs

For the navies it is difficult to encompass doctrinal views quite so clearly and succinctly. Like all navies since the middle of the 19th century onward they were very conscious of an important and even dominant role of technology and technological change as an influence on naval operations. In neither navy was there a uniform and unchanging consensus regarding the nature and significance of changes in technological factors. In the armies, officers who advocated divergent views generally were isolated and marginal. But some of the USN's highest-ranking and most prestigious leaders vigorously questioned prevailing views from the early 1920s onward. In the IJN the internal debate emerged somewhat later and less publicly but was still quite vigorous.

In both navies the mainstream view emphasized the battle line as the force of decision. It was universally recognized, however, that the battleship had been under threat from torpedo craft for decades. In addition to technical measures to harden battleships against torpedo damage (particularly in the USN) both navies had developed a multilayered defense concept against surface and, more recently, subsurface torpedo craft. The IJN, however, counted on overwhelming the USN's torpedo defenses in order to attrite the enemy's battle line before the climactic battleship duel. This was to be accomplished by four main means:⁹

- Large, long-range submarines would intercept the US fleet as it sortied and make repeated attacks en route to the Western Pacific, using high surfaced speed to sprint ahead after each attack.
- Long-ranged land-based torpedo bombers would attack en masse as the enemy came in range of their island bases.
- Heavy torpedo flotillas would deliver a massive attack at night prior to the main engagement, relying on very intensive training in night operations.
- As the main fleets closed, flotilla forces with long-range torpedoes would attack in concert with carrier-based torpedo bombers.

The USN had a very different view. It believed that defensive measures could restrict torpedo attacks to circumstances in which hit rates would be quite low. Night engagements, in particular, were to be avoided altogether. The Americans

joined their Japanese counterparts in emphasizing long-range daylight gunnery, but differed in placing exclusive reliance in it.¹⁰ US naval officers were unaware of the advanced technical capabilities of Japanese torpedoes, and unreceptive to intelligence suggesting it, but it is questionable whether such knowledge would have caused them to alter their doctrinal views.¹¹

Just as was the case with land forces, those naval officers who became aviators early developed enthusiasm for aviation's military potential that far outstripped the vision of their surface colleagues as well as the immediately foreseeable technical possibilities. Again like their army colleagues, however, the majority of surface naval officers quickly grasped the possibilities offered by aircraft for reconnaissance and observation. In particular it was evident that adjustment of fires on the basis of airborne spotting could increase the effectiveness of the long-range gun action favored by existing doctrine.

In the USN, a group of quite senior officers developed considerable enthusiasm for naval aviation by the late 1920s. Corresponding developments in the IJN took somewhat longer to materialize and did not spread quite so widely, but in both services officers who saw air forces as prominent among the decisive factors in naval warfare held many key positions by the outbreak of war in 1941. The aircraft carrier was the principal object of their enthusiasm, but not the only one. The IJN placed great stress on the role of long-ranged land-based antiship strike aircraft, intending to base them on Central Pacific islands as a primary element of defense against American thrusts to the westward. The USN was denied such options not only by geography but by political factors stemming from bureaucratic clashes with Army aviators.¹² Up through the later 1930s the leaders of US naval aviation saw great promise in long-ranged rigid airships for wide-area surveillance as well as flying boats for both surveillance and antiship attack. By war's outbreak, however, the consensus was that airships no longer held any material promise and that flying boats were valuable only for surveillance, a role for which the IJN also employed them – albeit on a far smaller scale.

A final and pivotal area of uncertainty lay in the specifics of weapons effectiveness. By the late 1930s, both navies had concluded that horizontal free-fall bombing was relatively unattractive for antiship attack due to low hit rates. Aviators anticipated high hit rates from both dive bombers and aerial torpedoes, with low losses to delivery aircraft. Many surface officers, however, believed that intense and accurate anti-aircraft fire would prevent effective attacks.

Both navies saw submarines as largely ancillary to fleet action. The USN believed that submarines would be quite vulnerable both to air and surface ASW forces and inculcated a cautious tactical doctrine to avoid high losses.

A Pacific clash between Japan and the United States had been widely foreseen and explicitly forecast since America's acquisition of the Philippines and Japan's victory over Imperial Russia at the beginning of the 20th century.¹³ Both navies and both armies acknowledged a Pacific war as a leading threat scenario. For the IJA, however, Japan's destiny lay on the Asian Continent; America was only a distracting nuisance. So far as it was concerned, the United States was the IJN's problem, and it relied on the IJN to take care of it (aside from the acknowledged need for army troops to conquer the Philippines in order to deny it to the US fleet). That was, after all, why the IJA put up with the Navy's expense and airs.

The US Army garrisoned the Philippines with several thousand American troops (plus several thousand more Filipinos enlisted as Philippine Scouts) both for colonial security and as a symbol of American sovereignty.¹⁴ This was a source of strategic irritation and concern inasmuch as it was apparent that the garrison was not nearly strong enough to stand for long against a determined Japanese attack. The nearest American base was in Hawaii, 4,000 miles away, and the Japanese occupied a great many Central Pacific islands between it and the Philippines. Generations of planners agonized over how the Philippines garrison might hold out until relief could be pushed through, with most coming to the conclusion that there was no real solution to the problem.¹⁵ As there was political support neither for strengthening the garrison nor withdrawing it, the Army hoped for the best and turned its attention to places other than the Pacific.

The USN, in the meantime, continued to probe for a way to get across the Pacific soon enough to relieve the garrison and ensure continued access to Philippine bases. A Pacific war was overwhelmingly the dominant focus for scenarios studied by students at the Naval War College (NWC) in Newport, Rhode Island.¹⁶ And so it was also for the scenarios studied by Japanese naval officers at the Navy Staff College. Making intensive use of war games, both came to strikingly parallel overall concepts. The USN would advance across the Central Pacific to intervene against Japan, the IJN would seek to block it, and the culmination would come in a great clash of battleships, somewhere in the Western Pacific. Conscious of their inferiority in numbers if not quality of ships, Japanese officers worried about being overwhelmed. At the same time American navy men were concerned that the toll exacted by a long transit through enemy-dominated waters would leave them at a disadvantage in the final exchange. Both spent endless hours seeking ways to gain advantage.

In short, the navies saw a prospective Pacific war as a duel, while the armies envisioned themselves as seconds.

Doctrinal orientations: the navies

We can summarize the navy views along the following lines:

	US Navy	Japanese Navy
Arm of Decision	<ul style="list-style-type: none"> The battle line, supported and screened by strong light surface forces and carrier- and sea-based air forces 	<ul style="list-style-type: none"> The battle line, supported by a multi-layered defense to exact preliminary attrition
Tactical Essentials	<ul style="list-style-type: none"> Emphasis on striking in mass, particularly in air Aggressive and comprehensive air and surface search to locate enemy forces first First strike against enemy carriers Long-range surface daylight gunnery Torpedo flotillas as a credible threat Avoidance of night action 	<ul style="list-style-type: none"> Self-sacrificing determination and offensive spirit (<i>seishin</i>) Heavy reliance on individual skill and qualitatively superior matériel First strike against enemy carriers Long-range surface daylight gunnery Torpedo flotillas as a major striking force Deliberate employment of night action
Operational Essentials	<ul style="list-style-type: none"> Clear and uniform doctrine at all levels Emphasis on concentration, principle of the objective, and mass Operational intelligence, with emphasis on COMINT 	<ul style="list-style-type: none"> Clear and uniform doctrine at all levels Strong emphasis on convergent operations and economy of force Coordinated Army-Navy landing operations
Operational Planning Concept	<ul style="list-style-type: none"> Multi-echelon planning Opportunity for feedback from executing echelons Planned margins and fallbacks for uncertainties 	<ul style="list-style-type: none"> Top-echelon planning under <i>very close direction of ops section</i> Plan allows executing echelons flexibility in means, but <i>must</i> adhere to plan Strongly success oriented
Issues	<ul style="list-style-type: none"> <i>Carrier-based aviation as arm of decision?</i> 	<ul style="list-style-type: none"> <i>Carrier-based aviation as arm of decision?</i>
Areas of Relative Neglect	<ul style="list-style-type: none"> <i>Night combat</i> <i>Command relationships in joint operations</i> <i>Submarine tactics</i> <i>Antiaircraft defense</i> <i>Shore bombardment in support of amphibious assaults</i> <i>Ship-to-shore movement in amphibious assault</i> 	<ul style="list-style-type: none"> <i>Logistics</i> <i>Submarine tactics</i> <i>Antiaircraft defense</i> <i>Intelligence</i>

Marines and air forces

Both navies had their own ground forces. The IJN had no marine corps in the American sense but did have Special Naval Landing Forces (SNLF), which were navy-manned.¹⁷ They were primarily a light infantry force almost entirely lacking in supporting arms. Their mission was to seize and defend advanced bases as well as acting as reconnaissance elements in landing operations conducted by the army. While they generally employed army weapons, equipment, and tactical doctrines, they strove for elite status and had a reputation for ferocity and tenacity in fighting. There was no separate PME program for SNLF officers.

The US Marine Corps (USMC) was not yet officially recognized as a fully separate and equal armed service but had always been separately organized and not a part of the navy. It had filled a variety of roles throughout its history, but

by the 1930s had come to see its principal mission as seizure and defense of the island bases the USN would need to prosecute a war across the Pacific. Between the world wars it devoted a great deal of attention to the specialized (and largely unprecedented) techniques of amphibious assault against fortified islands and beaches. The USMC incorporated its own supporting arms, to a limited degree, including an air force.¹⁸

The US Army Air Corps (USAAC) was at this time a somewhat distant and reluctant branch of the army. In common with military and naval aviators elsewhere, its officers had tense and sometimes conflictual relations with those who lacked their enthusiasm for the air weapon. By the 1930s the USAAC's senior leadership had strongly embraced a doctrine which identified high-altitude daylight precision bombing of the critical nodes of an enemy's industrial infrastructure network as the unique key to immediate and decisive victory by knocking out his capacity to wage industrial war. Because such strategic bombing was held to be swift and final in its effects there was little need for other branches of aviation, let alone ground or sea forces. USAAC leaders endeavored to walk a line between promotion of this bright vision of quick, certain, and relatively inexpensive victory and maintaining cooperative relations with yet-unconvinced comrades in arms.¹⁹

PME programs and institutions

Army PME

In both armies, those who completed commissioning programs generally went on to a specialized branch-oriented school within their first few years of commissioned service. The pattern of these schools varied but in the main they taught the fundamentals of branch-related tactics and administration to qualify officers for company/battery/troop-level command. In most cases there was an additional tier of branch schools at a higher level intended to qualify officers for command at the level of the battalion/squadron and regimental levels. In the US Army, officers normally completed this second-tier branch school before entering combined-arms command and staff PME schools or other PME at equivalent level. In the Japanese Army, however, those selected for staff college attendance normally did not take advanced branch courses.²⁰

The main institutions of combined-arms staff and command PME in the two armies were as follows:²¹

Service	US Army		IJA
Institution	Command & General Staff School (C&GSS)	Army War College (AWC)	Army Staff College (ASC)
Students			
Typical age	35-40	40-50	25-35
Typical grade	CPT-MAJ	LTC-COL	CPT-MAJ
Selection process	Branch chief recommended	Branch chief recommended	Command (regt. & divn.) selection + written exam + multi-part oral exams.
Selectivity	Broad – all officers thought able to master general staff duties	Intended to be quite selective, but somewhat uneven in practice.	Intense competition for slots. Avg <6% selection opportunity.
Background	Assumed collegiate level, regardless of actual degree.	C&GS grads with high class standings – but some exceptions.	All were grads of IJA Military Academy – sub-collegiate.
Other service attendance	USMC	USMC, USN	None
Career influence	Important	Important	Crucial
Course			
Duration (yrs)	Varied: 1 or 2	1	3
Main theme	Qualification as general staff officers for war.	Qualification for War Dept. General Staff, & for high command in war.	Qualification for IJA General Staff, general officer rank, & for high command in war.
Subjects of study			
<i>Main subjects</i>	Combined-arms tactics and operations; General staff functions and doctrine, all aspects.	High command general staff functions and issues.	Spiritual development, military strategy and tactics, military history, general collegiate.
<i>Secondary subjects</i>		Joint operations, national policy, mobilization planning.	
<i>Little or no coverage</i>	Technology & innovation; air operations; joint operations	Technology & innovation; air operations	Technology & innovation; logistics; air operations; joint operations

All of these institutions were rigorous, at least for those motivated to do well. In the US Army program, the C&GSS (the direct ancestor of today's C&GSC) functioned somewhat like a civilian professional school, along the lines of a law school or graduate business school. That is to say that it concentrated on inculcating a given body of knowledge and the methods of its application rather than fostering intellectual development and inquiry, in the spirit of an academic graduate school. The USAWC, attended generally by the higher-ranking C&GSS graduates, was somewhat more like an academic program. Both, of course, served to acculturate the student to the command and general staff culture of the Army, whose elements were outlined earlier in this paper. The graduates of these programs constituted an elite within the Army, but not a particularly narrow or

self-conscious one. Their promotion prospects were better and their spectrum of potential assignments were broader than those of other army officers, but there was considerable overlap in these respects between graduates and non-graduates. In the circumstances of the pre-war army, even top graduates were likely to finish their careers in field grades. To a large extent, their elite status was established and known before their assignment to the courses, particularly the AWC.

Matters were quite different in the Imperial Japanese Army, where selection for Staff College²² attendance came quite early in the officer's career and graduates constituted a very narrow and conscious elite whose career patterns and promotion prospects were sharply different from those of regimental officers.

An additional PME institution had been established by the US Army following World War I, reflecting one of the major lessons of the war. This was the Army Industrial College (AIC), located in Washington, D. C. The AIC was intended to prepare Army officers to plan and execute massive procurement programs upon mobilization for war – something which they had no more opportunity to practice in peace than they did large warlike operations. Considerable numbers of USN and USMC officers also attended the AIC.²³

The partial estrangement between the USAAC and its parent service showed in PME. Treatment of air operations at the C&GSS and AWC was very limited and incomplete. Air Corps officers at first felt distinctly out of place at these institutions and perceived little professional benefit. One reason is simply that these officers generally did not expect, or aspire, to gain command or top staff assignments with large combined-arms formations, as most other Army officers did. For many AAC officers, the service's own branch school, the Air Corps Tactical School (ACTS) at Maxwell Field, Alabama, provided a more desirable PME opportunity. Overall it appears that the senior Air Corps officers in World War II may have been somewhat less likely to have attended the senior PME institutions than their non-flying Army contemporaries.²⁴

Navy PME

In the navies, early post-commissioning PME tended to be technical in nature. Both had established courses to train officers as aviators, submariners, gunnery officers, and torpedo officers. More traditionally seamanlike skills generally were learned aboard ship. In the US Navy, after a few years of service, unrestricted line officers might go to an engineering school for graduate study of such subjects as ordnance, electrical, or aeronautical engineering, while not becoming specialists. In Japan, where candidates for line commissions did not receive undergraduate engineering education, such matters were left to specialists and

line officers generally had quite limited knowledge of the engineering principles of naval equipment.

The US Naval War College (NWC) and the Japanese Naval Staff College (NSC)²⁵ were the predominant institutions of broad military-oriented PME for their respective services. Each offered both upper and lower courses, but the lower courses at the JNSC were basic technical courses for junior officers. The following table summarizes the principal PME courses:²⁶

Service	US Navy		IJN
Institution	Naval War College (NWC)		Navy Staff College (NSC)
Course	Junior	Senior	"A" or Main
Students			
Typical age	35-40	40-50	29-35
Typical grade	LT-LCDR	CDR-RADM	LT-LCDR
Selection process	Detailed by BuNav ²⁷		Special selection board
Selectivity	Limited selectivity		Highly selective
Background	Naval academy grads		All were grads of IJA Naval Academy
Other service attendance		USMC, Army	None
Career influence	Modest	Important	Very important
Course			
Duration (yrs)	1	1	2
Main theme	Command and staff assignments in fleet; preparation for Senior Course.	Higher command and staff assignments in fleet.	Qualification for IJN General Staff, major sea command, and flag rank.
Subjects of Study			
- <i>Main subjects</i>	Naval tactical warfare doctrine.	Naval operational warfare doctrine.	Naval strategic and tactical doctrine, spiritual development.
- <i>Secondary subjects</i>		Joint operations, naval strategy, national policy, international law, afloat logistics.	Land war, Army-Navy cooperation, technology, military & naval history, international law.
- <i>Little or no coverage</i>	Logistics, innovation.	Shore support functions, innovation.	Shore support, logistics, innovation.

The US Naval War College also offered an Advanced Course for senior officers, somewhat along the lines of today's Senior Study Group. The first Advanced Course did not meet until 1934, by which time fleet expansion was putting pressure on officer assignments. Thus the total output of the course up to the beginning of World War II mobilization was small.

The NWC Junior Course was something of an oddity. The College had originally envisioned it as a stepping stone to the Senior Course, somewhat in the pattern of the C&GSS–AWC sequence, but Bureau of Navigation detailing practices never reflected this. Moreover, there was no very clear distinction between the two courses. Students of both attended many of the same lectures by outside experts and participated in the same war games.

NWC Senior Course attendance neither consistently reflected nor bestowed elite status. Some of those detailed to attend the course were in fact at the end of their careers and retired soon after completion.²⁸ Graduation opened no particular doors. In practice, however, all the men who served in senior line posts in the Navy were NWC graduates.

Selection for the Japanese NSC was more consistently rigorous than that for the USNWC and came earlier in an officer's career. However, it was neither so rigorous nor so early as selection for the Japanese Army's equivalent, and the elite of NSC graduates was not as narrow or exclusive as that of ASC graduates. It was very rare for an officer to gain assignment to the IJN General Staff, its central governing institution, without having graduated from the NSC, and unusual for non-graduates to be assigned to the Navy Ministry. Non-graduates could sometimes gain flag rank, however, and some rose to high levels.

It will be noted that each of the American war colleges had students of other services. In fact, several of the men who rose to high command in World War II attended the war college of the other service in addition to that of their own.²⁹ Such cross attendance was unknown in Japan.

Also apparent is that Marines attended all of the principal American PME institutions. In addition, the USMC had its own equivalent of branch schools, including an officer Basic Course and Field Officers Course. Finally, the service regularly sent students to the premiere French PME institution, L'Ecole Supérieure de Guerre. Marine Corps in-house PME institutions played a prominent role in developing doctrine for amphibious assault.³⁰

Cultures and effectiveness

Having now sketched all of the major PME institutions of both Japan and the United States as they existed between the world wars and the doctrinal and cultural foundations they were built upon, it is helpful here to reflect upon and summarize some major points which might be expected to affect military performance in war.

Each service on both sides had its own command and staff culture, but there were broad national differences. As has often been remarked, usually disparag-

ingly, the American services tended to have rather bureaucratized cultures. That is, while the commander held overall authority and responsibility, the work of planning, and oversight was parceled out among specialized staff sections. Moreover, lower echelons were deliberately given considerable sway over subsidiary plans and their execution. This tended to undermine the potential for commanding exercise of brilliant central vision, the coup de maître of an Alexander or Napoleon. There were a few such in World War II, but on the whole the American forte was the comprehensive plan combined with the flexibility to quickly adjust to unexpected circumstances and opportunities.

This was reflected in the structure of American command. Every echelon, right down to the battalion and equivalent level, had its own staff. A division, or force of equivalent level, generally had officers with staff PME backgrounds in one or two key slots, as well as in command. At higher echelons, staff leadership positions were increasingly filled by men with staff training and experience. These higher-echelon PME-graduate staff officers generally were experienced officers in middle age with broad backgrounds, who often were little younger than the commander they served. The more successful of them frequently went on to commands of their own, and even those who did not, generally were solid and competent performers (at least after the initial shake-out period, when the sheep were separated from the goats), who sought and exercised significant responsibility.

The American system of PME matched and upheld these cultural norms. Officers selected for their first course of command/staff PME generally had at least fifteen years of commissioned service, and scarcely any had as few as ten. The services – and particularly so the Army – endeavored to give staff PME to virtually every officer regarded as qualified, and qualification was judged on performance in service rather than relying on examinations. The result was a command/staff cadre that was mature, broadly experienced, diverse, and distinguished by performance in service rather than by abstract intellect.

The Japanese system was markedly different, reflecting a very different culture of command. Naval officers selected for Staff College attendance rarely had more than twelve years of commissioned service and most had no more than ten. For army officers the experience level was lower still—usually no more than six years of commissioned service and rarely as much as ten.³¹ Intellectual qualities, as measured by written and/or oral examinations, were prominent among the criteria for selection, particularly in the Army. Graduates became general staff officers and thereafter pursued a career track quite distinct from that of other line officers, with excellent chances of reaching high rank.³²

In the Japanese Army, almost to the end of the war, command at the division level and above was almost exclusively reserved for general staff officers.³³ So too were all important operational staff slots. No one outside this circle had any role in operational planning; they were simply to execute the plans as given—or die in the attempt. Staffs in general were small and line battalions did not even have staffs.³⁴ The circle of staff officers was not quite so tightly drawn in the Japanese Navy, but the dominance of the central plan was no less absolute.

In Japan, the profession of arms conferred high social status and places at the service academies were much sought after. Thus the man who received the badge of a general staff officer in his early 30s had joined a narrow elite within a narrow elite, having proven himself by rigorous examination and training. These “staff gods” naturally were not particularly inclined to modesty about their own abilities or accomplishments. As part of the normal pattern of Japanese social bonds, they tended to align themselves in cliques bound by loyalty to senior figures, often a man from the same region.³⁵ The cliques were rivalrous, often bitterly so. While these groups were not really bound by ideas, each generally did espouse a particular program of action.

Placing all of the powers of planning and ultimate decision in the hands of such men could have volatile and unpredictable results. If the commander were a strongly dominant and determined figure, he could impel the staff to translate his vision into decisive action. Admiral Isoroku Yamamoto is the example best known in the West, but there were others of this stripe, such as General Tomoyuki Yamashita, the “Tiger of Malaya.”

In some cases, commanders in effect delegated conception to a trusted chief of staff or other key officer, while retaining overall control of the situation. Genuinely weak characters rarely rose to the top in Japan, but as one went up the chain of command, with larger and more diverse organizations and larger and more diverse staff groups, it became progressively more challenging to impose order and unity of purpose. With a staff split into strongly-bonded vertical cliques, all competing for power, such situations could easily degenerate into paralyzing disunity.

In all the services of both nations the combat arms commanded greater interest and prestige among professional military men than did the logistical and support services.³⁶ Yet their treatment in PME differed sharply between the two nations – largely neglected in Japan, but dealt with seriously in the United States. This appears to tie into the trend to exalt the warrior spirit in Japan, both as a reaction against social modernization and as a means of motivating military personnel to extraordinary dedication and will to victory.³⁷ Embedded within the much more bureaucratized, mass culture of the United States, the American armed forces

were better able to call upon rational analysis to give importance to supporting services such as logistics and intelligence, and bureaucratic professionalism to assert their prestige. Japanese officers vehemently asserted that service as an officer was a calling and explicitly denied that it had anything to do with bureaucratic professionalism or mass-society careerism.³⁸ American officers, by contrast, increasingly embraced both the “profession” and “career” labels.

Effectiveness: measuring inputs and outputs

Japan, of course, was markedly less well endowed for industrialized warfare than the United States. In the late 1930s, the economy of Japan and its empire was no more than 15% as large as that of the United States.³⁹ However, through the late 1930s American spending for military purposes was small relative to the size of the economy, whereas Japan spent relatively heavily for military purposes. The result was that the resources devoted by the Japanese to defense in this era were not significantly inferior to those put to such purposes by the Americans. Indeed, it appears that Japanese investment in arms and equipment was significantly greater.⁴⁰ Thus on the eve of war, Japan had an arsenal of arms and equipment that was numerically roughly equivalent to that of the United States and in some respects more modern.

Nevertheless, the disparity between the two nations in economic and industrial potential clearly implied that the United States would out-produce Japan once it had mobilized. Thus in this sense Japan’s emphasis on light, skills-intensive forces made maximum use of comparative advantage. Equally sensible was its goal of swift, decisive operations and its desire to transform the terms of conflict from material vs. material, to spirit vs. spirit.

The outbreak of the European War in 1939 and the German victories of 1940, which the Japanese saw as a great opportunity, in fact worked against them in a very significant way, inasmuch as British and French orders (and advance payments) did a great deal to stimulate expansion of American industrial capacity for armaments production, while the growing perception of a Nazi German threat prompted the beginnings of America’s own rearmament.⁴¹

Nevertheless, it was not until the latter part of 1943 that significant quantities of newly-produced major systems began to be available to American forces for action in the Pacific. Up to that point, the cumulative force inputs to both sides in the Pacific War had been roughly equivalent, overall. That is, the United States had equalized its initial disparity in force inputs, but had gotten no further up to that time.

Had the general level of operational performance been equivalent, we would suppose that the losses sustained by each side also would have been approxi-

mately equivalent. In fact, however, Japanese losses had been considerably more severe. For this reason, Japanese forces were inferior to American forces in strength in some critical categories already by mid 1943, before the United States began to pull ahead in the rate at which forces were augmented and replenished.

Combat air forces and air superiority

Nothing was more critical in the Pacific War than attaining and maintaining superiority in the air. Air superiority could not guarantee victory, but loss of it would put victory out of reach.

Immediately prior to the outbreak of war, combat aircraft (including reconnaissance and patrol aircraft, as well as bombers and fighters) assigned to Japanese tactical units and pools in the Pacific numbered about 2,675, (about 1,565 IJN and 1,110 IJA).⁴² The corresponding total for the U. S. Army Air Forces (USAAF)⁴³ in the Pacific was 596.⁴⁴ For the USN and USMC the Pacific area total was 870.⁴⁵ The US aircraft totals included a large proportion of obsolescent and even outright obsolete models, and even the up-to-date models were generally inferior to their Japanese opponents except for heavy bomber types.

Many of the Japanese aircraft were initially deployed against non-American targets.⁴⁶ But this changed very quickly, and well in excess of 90% of all Japanese combat losses in the Pacific War fell to American forces.⁴⁷ As a result, the great majority of aircraft produced by Japan had to go to forces fighting the Americans.

As is well known, the US aircraft industry very early outstripped Japan's in production rate.⁴⁸ In the first two years of the war, however, a significant portion of American production went to Allies. Only a fraction of the remainder went to the Pacific. Even the USN sent only a little more than half of its share of combat aircraft production to the Pacific, with the remainder divided between training and the war against Nazi Germany and its U-boat force.⁴⁹ The rate of American deliveries to the Pacific only slightly exceeded Japan's up through the end of 1943, just about enough to close the large gap between forces in place at the beginning; a little less than 17,000 for Japan (roughly 7,000 IJA and 9,700 IJN) to a little under 18,000 for the United States (6,813 USAAF plus nearly 11,000 USN, with USMC aircraft coming from USN production).⁵⁰ Thus it was not until the end of 1943 that the cumulative American matériel inputs of combat aircraft to the Pacific caught up with those of Japan.

The initial Japanese onslaught essentially wiped out USAAF and allied air strength in the Pacific with relatively light losses to Japanese forces. USN/USMC air forces were only moderately eroded, but initially were much weaker than those of Japan in any event. The Japanese Navy lost several dozen aircraft in its

initial offensives, nearly 100 at the Battle of the Coral Sea, and more than 250 at the Battle of Midway, but that still did not equalize the air force ratio. Moreover, Japanese losses of highly-trained aircrew were fairly light up through mid 1942.⁵¹

After June 1942, however, the locus of action shifted to the South and Equatorial Pacific. For more than a year, the focus of everything was Rabaul, on the northeast end of the island of New Britain, a key strategic point seized by Japan early in the war. It is about 2,600 nautical miles (nmi) from major Japanese ports, and the route to it lay well inside Japan's established defensive perimeter. The nearest allied base was more than 400 nmi away, on the southern shore of New Guinea's east-pointing tail, but there were no very secure bases within 1,000 nmi. Moreover, the region lies 5,000 nmi from US West Coast ports, and more than 9,000 nmi from the Gulf and East Coast ports that gave access to the country's main industrial resources. In a day when few cargo ships could traverse 1,000 nmi in less than four days and long-haul cargo aircraft scarcely existed, these distances were immense.

The environmental stresses in the region were exceptionally severe. There was virtually no modern infrastructure of any kind, and most of the region's scattered population was only just removed (if at all) from a purely Neolithic style of life. The exceptionally hot, moist, sun-drenched climate is very stressful both for personnel and equipment, and neither side had the technical ability to create climate-controlled environments for health care, accommodation, maintenance, or storage. Many areas harbor tropical disease pathogens and vectors, and the slightest lapse of public health measures immediately brought devastating outbreaks of disease. Moreover, the generally rugged, geologically young terrain covered with frequently poorly-drained tropical soils and dense tropical vegetation presented great obstacles to overland movement and to construction of facilities.⁵²

High intensity air operations across the long distances of the theater imposed tremendous stresses on personnel and materiel alike. Neither side was at all prepared for these challenges. Shipping was in very short supply on both sides and severely constrained support. Many needs had to be met by local improvisation.

The Japanese focused relentlessly on offensive operations, regardless of logistical and support considerations. Even fairly simple problems got short shrift if they did not immediately effect offensive operations. While the Americans and their Australian and New Zealand allies were very concerned to keep pressure on the enemy, they pursued a more balanced operational approach. If the Japanese method may be summed up as attack, attack, attack! that of the Americans was more like attack, build, attack.

The stresses told most swiftly on the complex and delicate structure of air power. No detail of its health was beneath American attention. Many problems

could not be resolved with the resources available, but none was forgotten. The Japanese operations staffs were consumed with operations and there was no one with the ability and authority to address support problems. Jewel-like airplanes and engines decayed into corroded hulks. Dauntless, exquisitely trained and skilled men were reduced to malnourished, disease-racked husks.

Aware that the environment was in many ways the most difficult enemy and that logistical support was tenuous, the Americans made interdiction of Japanese logistics a priority only just below that of offensive counter-air attack. The Japanese made little effort to interdict American lines of communication.

Aircraft Quality and Its Influence

In evaluating loss data it is necessary to consider the impact of changes in the quality of aircraft materiel. Throughout this period the main air forces opposing the US in the Pacific were those of the IJN, whose fighters were almost all various series of the Zero.⁵³ Initially, the principal fighter models flown by the USAAF were various series of the Curtiss P-40 and Bell P-39, while the USN and USMC generally flew various series of the Grumman F4F.⁵⁴ In general, each of these early American fighters were somewhat deficient in tactical performance compared to the Zero. The deficiencies were not decisive but did put the Americans at some overall tactical disadvantage, all else equal (which it seldom was in actual combat). In addition, the Zero had a significant advantage in operating radius. The overall effect of this was to limit the American fighters largely to defensive counterair (DCA) operations, while allowing the Japanese more scope for offensive counterair (OCA).⁵⁵

In Jun 1942 USAAF forces in the Pacific began to receive small numbers of Lockheed P-38 fighters.⁵⁶ By Sep 1942 there were 105, representing ten percent of USAAF fighter forces in theater. By mid 1943 USAAF forces in the Pacific had begun to receive Republic P-47 and North American P-51 fighters as well.⁵⁷ By Jun 1943 these three more modern models accounted for twenty percent of USAAF fighters arrayed against Japan, while by Dec the proportion had risen almost to fifty percent.⁵⁸ Similarly, by the early months of 1943 Vought F4U fighters were beginning to replace Grumman F4Fs in land-based action, while the new aircraft carriers reaching the Pacific from mid 1943 onward were all equipped with Grumman F6Fs.⁵⁹

These newer fighters held margins of tactical performance over the Zero that were broadly comparable to those that the Zero held over the earlier US fighters.⁶⁰ That is to say that all else equal, the pilot in one of these aircraft would have a small margin of tactical advantage. It is easy to overstate the significance of these margins, however. For the most part the speed margins were no greater

than ten percent, for instance. Differences in tactical circumstances, and in particular in pilot skill, could easily be far more significant. Perceptions of the significance of the newer aircraft are probably considerably exaggerated by the concurrent changes in the balance of pilot skills, owing largely to the established disparities in operational as well as combat loss rates together with differences in pilot production and in the efforts made to preserve pilots.

In any event, air-to-air combat was only one source of aircraft losses, and by no means a dominant one. Allied forces claimed a total of more than 31,000 air-to-air kills against the Japanese.⁶¹ However, the most comprehensive assessment of Japanese air forces estimates that combat losses from all causes totaled only about 20,000.⁶² Inasmuch as antiaircraft gunners claimed many thousands more kills, and claims of kills on the ground by air attack by US forces alone total 8,903,⁶³ it is apparent that claims provide only a very rough guide to actual destruction. Moreover, there is reason to weight claims of aircraft destroyed on the ground especially heavily, since they were normally verified by post-strike imagery. Thus it seems that actual air-to-air kills can have numbered no more than about 10,000, less than a quarter of the 44,000 aircraft Japan is estimated to have lost from all causes other than training accidents.

Of this quarter, what proportion can be credited to improvements wrought by the introduction of the second generation of US fighters in 1943? To begin with we note that in general, about one third of US air-to-air kill claims were made by defending gunners aboard bomber aircraft, suggesting that US fighter air-to-air kills accounted for no more than one-fifth to one-sixth of total Japanese non-training losses. The USN tabulates loss exchange-ratio figures for various model aircraft for the 1944-45 period.⁶⁴ From these it would appear that the second-generation F6F and F4U enjoyed exchange ratios of 22.0:1 and 21.3:1, respectively. However, the first-generation F4F⁶⁵ was still employed from escort carriers in this period and claimed an exchange ratio of 44.9:1! If we restrict our attention to loss exchange ratios against the Zero alone in this period we find ratios of 13.3:1 for the F6F, 12.1:1 for the F4U, and 43.5:1 for the F4F. From these figures it certainly seems very difficult to make a case that the introduction of the second-generation fighters, per se, can have had a truly major influence in increasing Japanese losses. Most of what influence they did have probably was due to their greater ability to force an engagement.

Less remarked, but probably of the same order of importance as second-generation fighters, was the US superiority in air warning, which allowed both interceptors and antiaircraft artillery to be more effective in opposing Japanese air raids. This was in part due to the technological factor of superior American radar,

but the operational factors of superior communications intelligence and a better observer network also were significant.

Operational disaster

The statistics tell a story more dramatic and meaningful than most tales of combat. By the final day of 1943, 10,209 first-line American combat aircraft opposed approximately 4,050 Japanese aircraft.⁶⁶ The Americans had lost approximately 45% of the aircraft they had sent to fight against Japan, while the Japanese had lost nearly 80%. Before America won the war of aircraft production for the Pacific, Japan had already lost the war of aircraft attrition.

The difficulties of precise enumeration notwithstanding, we can say with some confidence that the major causes for this disparity had to do with operational factors. As just shown, the factor which is most usually cited as having made the great difference—that of the introduction of second-generation US fighters—can have had, at most, only limited influence. Other factors each of at least equal individual importance included US/allied superiorities in:

- Protection of aircraft maintenance and logistical structures.
- Protection of the health of aircrew and ground crew.
- Secure delivery of aircraft to the combat theater with minimal losses.
- Recovery of downed aircrew, which preserved the skills base.
- Provision of spares.
- Intelligence, which increased opportunities for destroying Japanese aircraft on the ground.
- Allocation of resources to training replacement and augmenting aircrew.

All of these areas of superiority reflected superior operational planning and execution.

The figures for aircraft sent to the Pacific and operational are summarized graphically in Figure 1 and Figure 2, at the end of this paper.

Aircraft carrier forces

The Pacific War was the first oceanic war—and may very well forever stand as the sole example. As such, naval forces played a uniquely pivotal role.

Regardless of pre-war doctrinal views, all responsible naval authorities on both sides very quickly came to see aircraft carrier forces as the key denominator of naval power in the Pacific.

The two navies had begun the war with small numbers of carriers, all built within the preceding fifteen years. There had been no prior experience to guide development and each had worked to devise appropriate doctrine, with somewhat different results.⁶⁷ Because of the differences between and among the carrier fleets, the best simple measure of potential is aggregate displacement of the carrier force, when fully loaded for war.⁶⁸

On 7 December 1941, this figure stood at 220 thousand long tons (klt) for Japan and 156 klt for the USN.⁶⁹ By early April 1942 the IJN had 234 klt of carriers in service in the Pacific versus 181 klt for the USN, or nearly a 1.3:1 Japanese advantage. By the end of October, after a series of battles, the balance stood essentially equal at 78 klt to 69 klt. This remained unchanged for nearly a year, throughout which the few surviving carriers (some of which needed extensive repairs) saw very limited action.

Overall, up until late in the summer of 1943 the Japanese had put 29% more carrier tonnage into service. But this advantage was gone after less than six months of war, having yielded Japan little in the meantime. We cannot read too much into the specifics of ship sinkings, which often depended on quite circumstantial details only loosely related to overall command decisions. Yet it is certainly clear that after the initial bold stroke of the Pearl Harbor raid the Japanese command failed to make much of its powerful carrier force.

Only twice did Japan attempt genuinely strategic thrusts with its carrier forces: in the effort to force the Australians from their last toehold on New Guinea by assaulting their base at Port Moresby in May 1942 and again a month later in the attempt on Midway. Both were parried by American forces which had superior operational intelligence (largely due to COMINT) and more reconnaissance aircraft (due to deliberate and long-established American doctrinal choice). In the Midway operation, of course, the IJN not only failed to achieve its objective but also suffered very severe losses. But the important point is that by failing to mass and concentrate its forces well it ran needless risks to its missions.

Finally, in mid August of 1943, the new carriers USS *Essex* (CV 9) and *Independence* (CVL 22) cleared Pearl Harbor bound for their maiden missions. By early October seven more carriers had been added to the US Pacific Fleet, bringing its carrier tonnage total to 282 klt, more than 3½ times that of the IJN. With that, the initiative in the oceanic war passed finally and irretrievably to the United States, marking the beginning of an entirely different phase.

These trends are traced in Figure 3, at the end of this paper.

Naval surface forces

The battleship forces to which both navies had devoted much of their attention played relatively limited roles in the first two years of the Pacific War.⁷⁰ One major reason was that in the region around Rabaul, neither opponent had the logistical capacity to supply large quantities of fuel oil until the need for surface forces had largely passed. At later stages, battleships were used primarily for shore bombardment as well as for carrier escorts.

Surface action by lighter forces, however, was important in the campaign in the Solomon Islands (a part of the Allied offensive against Japanese Rabaul-based forces) between August 1942 and early 1943. Once American forces had taken and put into service the airdrome on Guadalcanal, the Japanese relied on night thrusts by surface naval forces down the Slot (New Georgia Sound) to land and resupply troops, and to bombard American positions. When Guadalcanal had at last been secured and Allied forces advanced up the Solomons-Bismarcks chain toward Rabaul, night surface actions continued.

Overall, the numbers and qualities of the ships available to each side were fairly well matched. Tactically, the Japanese generally got the better of the engagements until well into 1943, reflecting superior doctrine, training, and weapons for night surface warfare. There can be little question that the US Navy had done a distinctly inadequate job of preparing itself for this sort of conflict.⁷¹ The result was a delay of several months, increased casualties on the ground as well as at sea, and serious levels of operational and strategic risk.

Ultimately, the USN did master night surface warfare, largely by integrating radar and other technological improvements into its tactical doctrine and training, as well as by fixing the worst of its weapons defects. In the meantime, US operational-level strengths were sufficient to limit the damage done by these tactical inadequacies to tolerable levels.

Ground forces

American ground-force experience in the Pacific is largely another story of initial tactical-level weakness compensated by operational-level strength. It is important to recognize that the compensation was not, at least initially, any particular superiority in quantity, or quality of matériel, or of force numbers.

Neither side had ever made any serious preparation for ground combat in jungles or other tropical landscapes, even though both had opportunities and reasons to do so.⁷² The Japanese in general were distinctly quicker to adapt in

a tactical sense. US Army forces in New Guinea, and earlier in the Philippines, suffered from a certain amount of “chateau generalship,” leading to insistent demands from the rear for action of a sort not well suited or even feasible for the circumstances. Japanese general officers usually paid a lot of attention to tactics and the tactical situation, which aided and speeded tactical adaptiveness. Much the same was true of the USMC.⁷³

But formidable as they were at the tactical level, Japanese forces did not often do well against the Americans. Japanese doctrine emphasized the initial attack above all, intending to overwhelm the opposition at a stroke. This rarely worked against the Americans, even early in the war—even when lacking in tactical maneuver abilities, American forces tended to be tenacious and resourceful in defense.⁷⁴

After the initial attacks, the Japanese quickly found themselves severely embarrassed by lack of logistical support. This told against them with special severity in the stressful environments of the South and Equatorial Pacific regions.

American attacks against Japanese logistics were a factor in this, but by no means the root cause. Like their air forces, Japanese ground forces never made anything like adequate provision for logistical support.⁷⁵ Japan’s well led, keenly motivated, highly disciplined, finely trained, and adequately armed and equipped troops were undermined by disease, starvation, and lack of munitions to the point where they could not withstand the American onslaught. In many cases, they simply perished of want without direct attack.

Nor was this the only deficiency in Japanese command at the operational level. While Japanese operations officers often were quite adept at deducing what the enemy might do on the basis of military logic, the Japanese in general did poorly at collecting and processing intelligence.⁷⁶

Emphasis on economy of force combined with over-optimism (fed, in part, by faulty intelligence) to prompt inadequate force commitments that were anything but economical in the end. Sometimes this led to absurd operations, as when a battalion task force was dispatched to “wipe out” the Marine division that had just landed on Guadalcanal, and was itself wiped out instead.⁷⁷ Even when not carried to such extremes, it fed a penchant for piecemeal serial attacks or inadequately coordinated attacks on multiple axes that invited defeat in detail.

The Americans were by no means immune to operational deficiencies of their own. The Guadalcanal invasion in particular entailed very high operational risks. But to a considerable extent these were calculated; the time value of seizing the island before the Japanese could establish an operational airfield was high enough to justify acceptance of a great deal of risk. Moreover, US commanders and staffs

were rarely complacent or fatalistic about operational deficiencies; once a gap had been revealed, strenuous efforts were usually mounted to close it and prevent repetition.

PME, culture, and military effectiveness

Most students of warfare have long perceived that command and staff culture—beyond the personal qualities of individual officers—has an important effect. To holders of such views it has seemed natural to expect that PME could exert a markedly beneficial effect by shaping and perfecting the command/staff culture.

This study both supports and modifies that view. In the particular case under investigation, it shows that US Army command/staff PME between the two world wars was aimed primarily at the operational level of war, while that of the Navy was divided between the operational and fleet tactical levels. Turning to the initial two years of the Pacific War—the period in which we would expect the effects of pre-war preparation to be most marked—it shows that American performance at operational levels, while very far from perfect, was generally substantially better than that exhibited in World War I. Broadly speaking, it did follow the rational-bureaucratic doctrinal model taught in American PME programs.

The Japanese PME, by contrast, was pitched principally at producing officers who were motivated to the point of fanaticism and intensely devoted to the study of tactics for swift offensive decision. Operational considerations were treated as ancillary—to be dealt with strictly to the extent necessary to achieve immediate tactical victory. The initial Japanese centrifugal offensive followed these precepts with devastatingly successful results. But when American naval successes at the Coral Sea and Midway battles permitted Allied forces (under American operational command) to go over to a limited offensive in the regions northeast of Australia the Japanese seemed unable to respond effectively at an operational level.

The result was disproportionate Japanese attrition, particularly of the air forces which were especially crucial in this conflict. This allowed the Allies to achieve substantial force superiority without having to supply significantly greater force inputs – inputs they were not yet in a position to supply in 1943. In turn, this permitted them to overcome highly capable Japanese forces without paying excessive prices for victory.

Thus it is certainly reasonable to conclude that the command/staff cultures of the Japanese and Americans had significant effects in terms of military performance, and that these cultures did accurately reflect the PME programs of the various services. At the same time, we must acknowledge that the PME programs

were decisively shaped by the command/staff cultures of their services. Moreover, we can see that there were systematic national, as opposed to purely service-specific differences in PME choices, seemingly unrelated to the differences in geostrategic or economic situation—suggesting strongly that the command/staff cultures are shaped significantly by broader forces within their societies of origin.

It is necessary to exercise some caution in drawing general lessons from a single analysis of a single case. Nevertheless, it seems reasonable to suggest that:

- Study of the structure and orientation of PME programs may give useful clues to probable performance in war.
- In structuring PME programs it is well to make serious efforts to give careful and objective consideration to assumptions that may reflect underlying cultural assumptions of the society that are at odds with rational military calculation.

This latter point raises interesting questions of how far it may be possible for a military command/staff culture to be made to diverge from the culture of its underlying society, and the implications of such divergence.

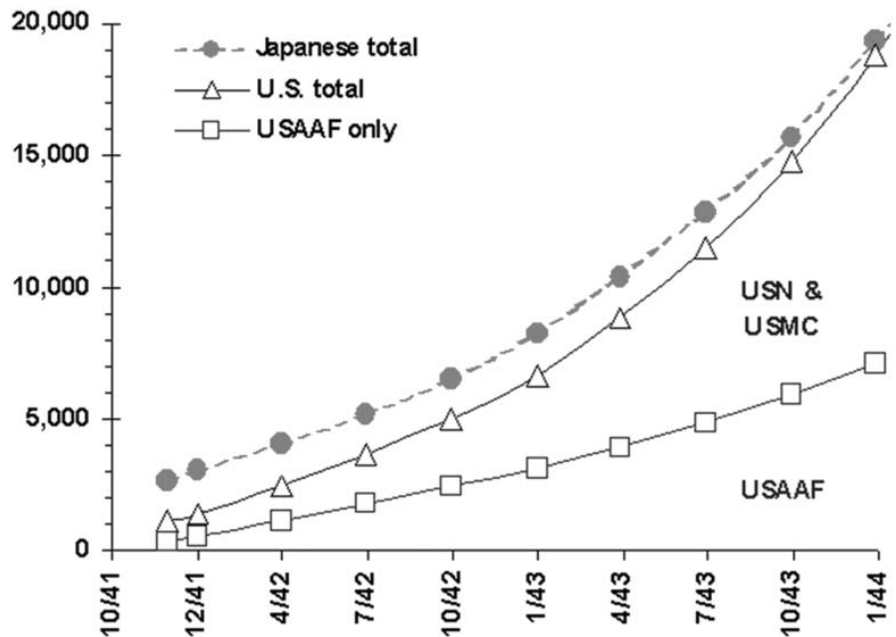


Figure 1. First-line combat aircraft present in Pacific theaters as of 1 Dec 1941 plus cumulative numbers of first-line combat aircraft dispatched to Pacific theaters through dates as shown.

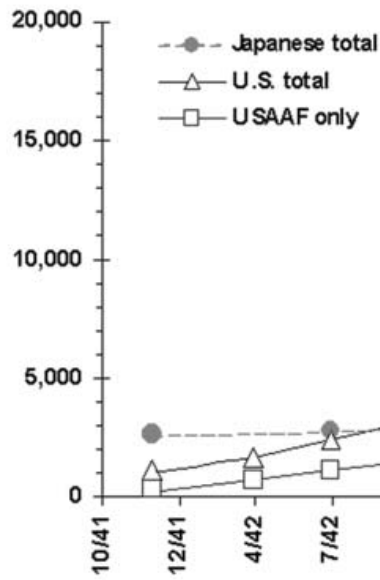


Figure 2. First-line combat aircraft actually present in Pacific theaters on dates as shown.

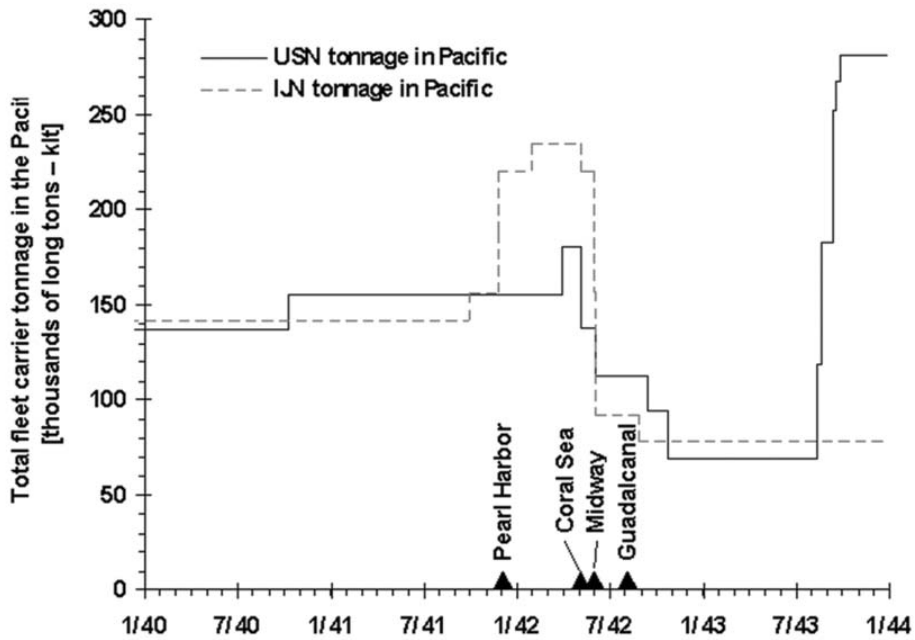


Figure 3. Fleet carrier tonnage in service in the Pacific as of dates as shown.

Abbreviations and acronyms

AAC	Army Air Corps (US)
AAF	Army Air Forces (US)
AEF	American Expeditionary Force
AIC	Army Industrial College (US)
ASC	Army Staff College (Japan)
ASW	antisubmarine warfare
AWC	Army War College (US)
C&GSS	Command and General Staff School (US)
CDR	commander (naval rank)
COMINT	communications intelligence
CPT	captain (army rank)
CV	aircraft carrier
CVL	light aircraft carrier
Divn.	division (army unit)
IJA	Imperial Japanese Army
IJN	Imperial Japanese Navy
J	Japanese (prefix)
klt	thousands of long tons
LT	lieutenant (naval rank)
MAJ	major (army rank)
NCO	noncommissioned officer
NSC	Naval Staff College (Japan)
NWC	Naval War College (US)
PME	professional military education
RADM	rear admiral
Regt.	regiment
SNLF	Special Naval Landing Force (Japan)
TO&E	table of organization and equipment
US	US (prefix)
USMC	US Marine Corps
USN	US Navy
USSBS	US Strategic Bombing Survey

Notes

1 This paper is copyright 2005 by CNA Corporation. The author may be reached by e-mail at oneilw_cna@pobox.com. The author wishes to acknowledge with gratitude the support of Mr. Andrew W. Marshall, Director of Net Assessment in the Office of the Secretary of Defense, not only for sponsoring the project on which this paper is based but for providing valuable intellectual contributions.

2 All abbreviations and acronyms used in this paper are recapitulated in a table at its end for convenience.

3 For a broad summary of Navy as well as Army PME development prior to World War I see Harry P. Ball, *Of Responsible Command: A History of the US Army War College*, Revised Edition (Carlisle Barracks, Pennsylvania: Alumni Association of the United States Army War College, 1994), 1-145.

4 These developments are well summarized in Marius B. Jansen, *The Making of Modern Japan* (Cambridge: Belknap Press of Harvard University Press, 2000).

5 For Japanese Army development see Edward J. Drea, "The Imperial Japanese Army (1868-1945): Origins, Evolution, Legacy," in *War in the Modern World*, edited by Jeremy Black (London: Routledge, 2003); Alvin D. Coox, "The Japanese Army Experience," in *New Dimensions in Military History*, edited by Russell F. Weigley (San Rafael, California: Presidio Press, 1975); and Roger F. Hackett, "The Military: A. Japan," in *Political Modernization in Japan and Turkey*, edited by Robert E. Ward and Dankwart A. Rustow (Princeton: Princeton University Press, 1964). For the Navy, see David C. Evans and Mark R. Peattie, *Kaigun: Strategy, Tactics, and Technology in the Imperial Japanese Navy, 1887-1941*, (Annapolis: Naval Institute Press, 1997).

6 H. P. Ball, *Of Responsible Command*, pages 147-50; Edward M. Coffman, "The Battle Against Red Tape: Business Methods of the War Department General Staff 1917-1918" *Military Affairs*, 26, No. 1 (Spring 1962): 1-10; James J. Cooke, *Pershing and His Generals: Command and Staff in the AEF* (Westport, Connecticut: Praeger Publishers, 1997), pp. 31-43 and *passim*; Timothy K. Nenninger, "'Unsystematic as a Mode of Command': Commanders and the Process of Command in the American Expeditionary Forces, 1917-1918" *Journal of Military History*, 64, No. 3 (Jul 2000): 739-68.

7 Although the Japanese Army did not become "Imperial" until about 1930, I will follow widespread practice and refer to it as the IJA throughout.

8 Author's interpretation based on consistent elements in actual wartime operations plus a wide variety of descriptions of doctrine and PME curricula. It has been influenced by and is largely consistent with Edward J. Drea, "US Army and Imperial Japanese Army Doctrine During World War II," in his *In the Service of the Emperor: Essays on the Imperial Japanese Army* (Lincoln: University of Nebraska Press, 1998): 60-74, and also by Eric [M] Bergerud, *Touched with Fire: The Land War in the South Pacific* (New York: Viking, 1996).

9 David C. Evans and Mark R. Peattie, *Kaigun: Strategy, Tactics, and Technology in the Imperial Japanese Navy, 1887-1941*, (Annapolis: Naval Institute Press, 1997), 238 et seq.

10 This was in part because the USN had solved certain technological problems in gun fire control which they believed (correctly, as it turned out) the Japanese and others had not. The value of these innovations was, however, overestimated.

11 Trent Hone, "The Evolution of Fleet Tactical Doctrine in the US Navy, 1922-1941," *Journal of Military History*, 67, No. 4 (Oct 2003): 1107-48.

12 Notably, of course, the divisive and inflammatory Brigadier General William "Billy" Mitchell.

13 Walter LaFeber, *The Clash: US-Japanese Relations Throughout History* (New York: W. W. Norton & Co., 1997), 65-159.

14 Brian McAlister Linn, *Guardians of Empire: The US Army and the Pacific, 1902-1940*, (Chapel Hill: University of North Carolina Press, 1997), passim.

15 George B. Eaton, "General Walter Krueger and Joint War Planning, 1922-1938," *Naval War College Review*, 48, No. 2 (Spring 1995): 91-113; Henry G. Gole, *The Road to Rainbow: Army Planning for Global War, 1934-1940*, (Annapolis: Naval Institute Press, 2003), passim; Brian McAlister Linn, *op. cit.*, pp. 165 et seq.; Ronald Schaffer, "General Stanley D. Embick: Military Dissenter," *Military Affairs*, 37, No. 3 (Oct 1973): 89-95.

16 George B. Eaton, *op. cit.*; Edward S. Miller, *War Plan Orange: The US Strategy to Defeat Japan, 1897-1945*, (Annapolis: Naval Institute Press, 1991).

17 Evans and Peattie, *op. cit.*, 443-6.

18 Kenneth J. Clifford, *Progress and Purpose: A Developmental History of the US Marine Corps, 1900-1970* (Washington: History and Museums Division, Headquarters, United States Marine Corps, 1973); Allan R. Millett, *Semper Fideles: The History of the United States Marine Corps* (New York: Macmillan Publishing Co., 1980).

19 Maurer Maurer, *Aviation in the US Army, 1919-1939* (Washington: Office of Air Force History, 1987); James P. Tate, *The Army and its Air Corps : Army Policy Toward Aviation, 1919-1941* (Maxwell Air Force Base, Alabama: Air University Press, 1998).

20 For a fine analytical overview of US Army PME between the wars see Charles E. Kirkpatrick, "Orthodox Soldiers: US Army Formal Schools and Junior Officers between the Wars," in *Forging the Sword: Selecting, Educating, and Training Cadets and Junior Officers in the Modern World*, edited by Elliott V. Converse, III (Chicago: Imprint Publications, 1998).

21 For the C&GSS see Mark C. Bender, "Watershed at Leavenworth: Dwight D. Eisenhower and the Command and General Staff School" (M.S. thesis, Fort Leavenworth, Kansas: Command and General Staff College, 1988); Philip Carlton Cockrell, "Brown Shoes and Mortar Boards: US Army Officer Professional Education at the Command and General Staff School, Fort Leavenworth, Kansas, 1919-1940" (Ph.D. diss., University

of South Carolina, 1991); Boyd L. Dastrup, *The US Army Command and General Staff College: A Centennial History* (Manhattan, Kansas: Sunflower University Press, 1982); Elvid Hunt and Walter E. Lorence, *History of Fort Leavenworth, 1827-1937*, Second Edition Reprint (Fort Leavenworth, Kansas: Fort Leavenworth Historical Society, 1981) [Command and General Staff School Press, 1937]; Timothy K. Nenninger, "Leavenworth and Its Critics: The US Army Command and General Staff School, 1920-1940" *Journal of Military History*, 58, No. 2 (Apr 1994): 199-231; Peter J[ohn] Schifferle, "Anticipating Armageddon: The Leavenworth Schools and United States Army Military Effectiveness, 1919 to 1945" (Ph.D. diss., University of Kansas Press, 2002).

For the AWC see H. P. Ball, *Of Responsible Command*.

For the IJA's ASC see Theodore Failor Cook, Jr., "The Japanese Officer Corps: The Making of a Military Elite, 1872-1945" (Ph.D. diss., Princeton, 1987); Alvin D. Coox, "Japanese Military Education and Planning Before Pearl Harbor," in *Military Planning in the Twentieth Century: Proceedings of the Eleventh Military History Symposium, 11-12 October 1984*, edited by Harry R. Borowski (Washington: Office of Air Force History, 1986); Edward J. Drea, "US Army and Imperial Japanese Army Doctrine During World War II."

22 Occasionally rendered as *War College*.

23 Francis W. A'Hearn, "The Industrial College of the Armed Forces: Contextual Analysis of an Evolving Mission, 1924 - 1994" (Ed.D. diss., Blacksburg, Virginia: Virginia Polytechnic Institute and State University, 1997); Theodore W. Bauer, *History of the Industrial College of the Armed Forces* (Washington: Alumni Association of the Industrial College of the Armed Forces, 1983).

24 No comprehensive statistics are available in either case. I make this judgment after scanning a number of the entries in Robert P. Fogerty, "Biographical Data on Air Force General Officers, 1917-1952," Two volumes, US Air Force Historical Study No. 91 (Maxwell Air Force Base, Alabama: USAF Historical Division, Air University, 1953). Many memoirs and biographies of senior air officers speak to the issue of estrangement from the rest of the Army and negative feelings about the C&GSS course. See Robert T. Finney, *History of the Air Corps Tactical School, 1920-1940* (Maxwell Air Force Base, Alabama: Research Studies Institute, USAF Historical Division, Air University, 1955) and James P. Tate, *The Army and its Air Corps*, 192.

25 Its title might better be translated as *Higher Naval College*, but Naval Staff College is more commonly seen.

26 For the NWC see Thomas B. Buell, "Edward C. Kalbfus and the Naval Planner's 'Holy Scripture': *Sound Military Decision*" *Naval War College Review*, 25, No. 5 (May-Jun 1973): 31-41; *Idem*, "Admiral Raymond A. Spruance and the Naval War College: Part I – Preparing for World War II" *Naval War College Review*, 23, No. 7 (Mar 1971): 31-51; *Idem*, "Admiral Raymond A. Spruance and the Naval War College: Part II – From Student to Warrior" *Naval War College Review*, 23, No. 8 (Apr 1971): 29-53; John B. Hattendorf, B. Mitchell Simpson, III and John R. Wadleigh, *Sailors and Scholars: The*

Centennial History of the Naval War College (Newport: Naval War College Press, 1984); Gerald John Kennedy, "United States Naval War College, 1919-1941: An Institutional Response to Naval Preparedness" (Ph.D. diss., Minneapolis: University of Minnesota, 1975); Douglas V. Smith, "Preparing for War: Naval Education Between the World Wars" *International Journal of Naval History*, 1, No. 1 (Apr 2002); Michael Vlahos, *Blue Sword: The Naval War College and the American Mission, 1919-1941* (Newport, Rhode Island: Naval War College Press, 1980).

For the NSC see Alvin D. Coox, "Japanese Military Education and Planning Before Pearl Harbor"; Peter George Cornwall, "The Meiji Navy: Training in an Age of Change" (Ph.D. diss., University of Michigan, 1970); Evans and Peattie, *Op. cit., passim*.

27 The Bureau of Navigation had the functions of a personnel bureau.

28 This is a pattern which has affected the NWC periodically since then.

29 Fleet Admiral William F. Halsey and General Walter Krueger are two prominent examples.

30 Donald F. Bittner, "Foreign Military Officer Training in Reverse: U. S. Marine Corps Officers in the French Professional Military Education System in the Interwar Years," *Journal of Military History*, 51, No. 3 (Jul 1993): 481-510.

31 I base these generalizations on examination of a number of biographical records of officers.

32 Leonard A. Humphreys, *The Way of the Heavenly Sword: The Japanese Army in the 1920s*, (Stanford: Stanford University Press, 1995), pp. 109-10; Theodore F. Cook, "The Japanese Officer Corps," 381-4.

33 Humphreys, *Ibid.*, 386-7.

34 Edward J. Drea, *Nomonhan: Japanese-Soviet Tactical Combat, 1939* Leavenworth Papers, (Fort Leavenworth, Kansas: Combat Studies Institute, US Army Command and General Staff College, 1981), 16.

35 See Chie Nakane, *Japanese Society*, (Berkeley: University of California Press, 1970), esp. 87-103. While the relevance of her description to current-day Japanese society is in some respects debatable, no one has better captured the nature of Japanese society in the period under discussion here – a period which, it is well to remember, lies just halfway between the Japan of today and the end of the post-feudal society of the Tokugawa Shogunate. Also see Humphreys, *The Way of the Heavenly Sword*, p. 95. The well-known and often-cited study by the American anthropologist Ruth [Fulton] Benedict, *The Chrysanthemum and the Sword: Patterns of Japanese Culture* (Boston: Houghton Mifflin, 1946), is handicapped by the circumstances under which Benedict had to conduct her work during World War II.

36 The psychological, cultural, and social – and even neurological – correlates of the various arms and services are worthy of serious study, but for this purpose it suffices simply to observe the phenomenon of greater interest regardless of its origins or meaning.

37 Leonard A. Humphreys, "The Japanese Military Tradition," in *The Modern Japanese Military System*, edited by James H. Buck (Beverly Hills: Sage Publications, 1975), 32-3; *Idem*, *The Way of the Heavenly Sword*, 12-16 and 99-103; Yoshito Kita, "The Japanese Military's Attitude Towards International Law and the Treatment of Prisoners of War," in *The History of Anglo-Japanese Relations, 1600-2000. Volume III: The Military Dimension*, edited by Ian Gow and Yoichi Hironaka, 257-60.

38 Theodore F. Cook, "The Japanese Officer Corps," 9 and 307.

39 William D. O'Neil, *Interwar US and Japanese National Product and Defense Expenditure*, CIM D0007249.A1 (Alexandria, Virginia: Center for Naval Analyses, June 2003), 15. The methodological complications involved in such a comparison are significant and the report should be read carefully to understand exactly what the comparison means.

40 *Ibid.*, 33-5. The methodological complications in this comparison are greater still and again careful reading of the report is advised.

41 Ironically, Japanese orders (to support their own armaments program, in large measure) helped a great deal in preserving the American machine tool industry through the ravages of the Depression. See Buford Rowland and William B. Boyd, *US Navy Bureau of Ordnance in World War II* (Washington: Bureau of Ordnance, US Navy, 1953), 434.

42 United States Strategic Bombing Survey (Pacific) [USSBS], *Interrogations of Japanese Officials*, Vol. 2 (Washington: Naval Analysis Division, 1946), opposite page 374; and USSBS, *Japanese Air Power*, (Washington: Military Analysis Division, July 1946), 29. These figures are based on quite incomplete and rather inconsistent official Japanese data; see USSBS, *Japanese Air Power* for details and cautions. Many of the tabular data used throughout contain typographical errors which must be corrected on the basis of checks of internal and cross-source consistency.

43 The USAAF was the operating command under which all U. S. Army air units fell. The USAAC remained the relevant administrative command.

44 Office of Statistical Control, *Army Air Forces Statistical Digest: World War II* (Washington: US Army Air Forces, 1945), 163. Includes aircraft based in Alaska as well as Pacific islands. Includes 283 aircraft officially classified as *second line* or *miscellaneous*.

45 Compiled from data in US Navy Department Bureau of Aeronautics, "Monthly Status of Naval Aircraft," 29 November 1941. Includes aircraft assigned to the Pacific Fleet, Asiatic Fleet, and Marine Air Wing 2. Includes aircraft in overhaul, awaiting overhaul, or short-term storage, and combat-classified aircraft employed in support roles, as well as 71 aircraft officially classified as *obsolescent*. Excludes lighter-than-air and aircraft officially classified as *obsolete*.

46 For Japanese air order of battle on the eve of the Pacific War see USSBS, *Japanese Air Power*, 5.

- 47 USSBS, *Air Forces Allied with the United States in the War Against Japan* (Washington: Military Analysis Division, 1947), 13. Also see USSBS, *Japanese Air Power*, Exhibits D and E, 34 et seq.
- 48 R[ichard] J. Overy, *The Air War, 1939-1945* (New York: Stein and Day, 1980), 150.
- 49 Author's analysis of data compiled from "Monthly Status of Naval Aircraft" for this period.
- 50 Author's analysis based on following – For IJN and IJA production: USSBS, *The Japanese Aircraft Industry* (Washington: Government Printing Office, 1947), 155 and 167; USSBS, *Interrogations of Japanese Officials*, Vol. 2, opposite page 374, with quadratically-interpolated intercalary estimates as necessary. Based on analysis of information from various sources it is estimated that approximately 75% of IJA production went to theaters against the US in this period, and approximately 90% of IJN production. For USAAF deliveries to theaters against Japan (including China and Alaska): *Army Air Forces Statistical Digest*, 183, with cubic interpolation as necessary for intercalary estimates. For USN production, *Army Air Forces Statistical Digest*, 129-31. Based on analysis of data from "Monthly Status of Naval Aircraft" for this period, it is estimated that no more than 60% of USN production went to the Pacific.
- 51 Jonathan B. Parshall and Anthony P. Tully, *Shattered Sword: The Japanese Story of the Battle of Midway* (Dulles, Virginia: Potomac Books, November 2005), esp. 66 and 486. In addition to decisively superseding all previous English-language accounts of the Japanese side of the Midway battle this new book provides a wealth of material regarding Japanese naval aviation in the early part of the Pacific War.
- 52 The difficulties of the environment are summarized in Eric Bergerud, *Touched With Fire*, 55-118.
- 53 Zero is the name commonly used for the Mitsubishi model A6M, designated Type 0 Fighter by the IJN and code-named *Zeke* by the Allies. See René J. Francillon, *Japanese Aircraft of the Pacific War* (Annapolis: Naval Institute Press, 1988); information on the characteristics of the Zero is found on 362-77, while 46-59 cover Japanese aircraft designation systems.
- 54 Ray[mond] Wagner, *American Combat Planes of the 20th Century: A Comprehensive Reference* (Reno, Nevada: Jack Bacon & Co., 2004), 295-306, 314-22, and 458-63.
- 55 See Joint Publication 1-02, *DOD Dictionary of Military and Associated Terms*, <http://www.dtic.mil/doctrine/jel/doddict/>, s.v. defensive counterair and offensive counterair.
- 56 Ray Wagner, *American Combat Planes of the 20th Century*, 306-14.
- 57 *Ibid.*, 325-40.
- 58 All strength figures from *Army Air Forces Statistical Digest*, 163-4.
- 59 Ray Wagner, *American Combat Planes of the 20th Century*, 464-71. For operational statistics see Office of Naval Intelligence Air Branch, *Naval Aviation Combat Statistics: World War II*, OPNAV-P-23V No. A129, (Washington: Office of the Chief of Naval

Operations, 17 Jun 1946), 20-1, but take note of cautions regarding data for land-based sorties on 9 and 23.

60 For more specific information see Army Air Forces Board, *Test of Comparative Performance Between the Japanese "Zeke" 52 and the P-38, P-47 and P-51 Type Aircraft*, (Orlando, Florida: Army Air Forces Proving Ground Command, 3 Apr 1945); Eric M[elrose] Brown, *Duels in the Sky: World War II Naval Aircraft in Combat* (Washington: Naval Institute Press, 1988), *passim*; *Intelligence Service, Flight Characteristics of the Japanese Zero Fighter*, Informational Intelligence Summary No. 85, (Washington: US Army Air Forces, Dec 1942); and *Report of Joint Fighter Conference, NAS Patuxent River, Md., 16-23 Oct 1944, passim*. Inconsistencies among these and other assessments reflect sample variations in aircraft performance and differences in assessment criteria, among other causes.

61 USSBS, *Air Forces Allied with the United States in the War Against Japan*, 13.

62 USSBS, *Japanese Air Power*, 30.

63 A total of 6,153 for USN and USMC, and 2,750 for USAAF. See Office of Naval Intelligence Air Branch, *Naval Aviation Combat Statistics*, 67 and *Army Air Forces Statistical Digest*, 265-8.

64 *Naval Aviation Combat Statistics*, 76. The report suggests caution in using these figures.

65 The aircraft used in this period actually were designated FM rather than F4F, but were of the same design. The difference in designation resulted from their manufacture in a plant operated by General Motors rather than one operated by Grumman. For this purpose, the FM was simply another series of F4F.

66 USAAF, 3,182 aircraft (*Army Air Forces Statistical Digest*, p. 164); USN and USMC Pacific air forces, 7,027 aircraft ("Monthly Status of Naval Aircraft," 31 December 1943). Japanese figures from USSBS, *Japanese Air Power*, p. 29. Corresponding figures for the end of 1942 are 3,778 for the Americans (1,749 USAAF plus 2,029 USN/USMC) against 3,200 Japanese. Thus the US entered 1943 with a narrow advantage (having begun 1942 at a major disadvantage) and ended it decisively superior. In the American case, losses included substantial numbers of aircraft retired for obsolescence or "war weariness."

67 For a succinct summary of differences, together with an analysis of early-war carrier operations, see James P. Levy, "Race for the Decisive Weapon: British, American, and Japanese Carrier Fleets, 1942-1943," *Naval War College Review*, 58, No. 1 (Winter 2005): 137-50.

68 Numerous detailed studies have shown that the military capability of an aircraft carrier, measured in any of a number of possible ways, is an increasing function of full-load displacement and that the relationship is nearly strictly proportional over a fairly broad range of possible displacements. Assuming that the individual ships are properly designed and sized relative to the technological and military constraints of the time, aggregate displacement is thus a good proxy for military capability.

69 Carriers are counted for this purpose as of their date of first readiness for war in the Pacific, typically several months after formal commissioning. Carrier tonnages are compiled from data in Roger Chesneau, (Editor), *Conway's All the World's Fighting Ships, 1922-1946*, Conway's All the World's Fighting Ships (London: Conway Maritime Press, 1980). Dates of readiness for war of IJN carriers are estimated from data contained in Anthony Tully, "Japanese Carriers: Tabular Records of Movement," <http://www.combinedfleet.com/cvlist.htm>, updated 5 November 2005 (accessed May 2005). For USN carriers commissioning during the war, the readiness date is taken as that on which the carrier first sortied for a strike mission, usually from Pearl Harbor, as determined or estimated from data contained in "*Dictionary of American Naval Fighting Ships*," <http://www.history.navy.mil/danfs/> (accessed May 2005). The small carrier USS Ranger (CV 4, commissioned 1934) is excluded as it was never employed in the Pacific throughout the war and was considered unsuitable for fleet operations. Also excluded are converted merchant ships unable to steam at the high speeds necessary for fleet operations.

70 David C. Fuqea, "Task Force One: The Wasted Assets of the United States Pacific Battleship Fleet, 1942," *The Journal of Military History*, 61 (Oct 1997): 707-34.

71 T[errence] J[ames] McKearney, "The Solomons Naval Campaign: A Paradigm for Surface Warships in Maritime Strategy," (M.A. thesis, Monterey, California: Naval Postgraduate School, 1985).

72 Between the wars, the Philippines and the Panama Canal Zone had been important American outposts, with relatively substantial garrisons. The Japanese had maintained forces on Taiwan.

73 Some of this may have been situational, inasmuch as Marine Corps forces were generally relatively limited in size and scope of operations. It does appear, however, that in leaving much of the responsibility for logistics and support to the Navy, senior Marines may have felt freed and impelled to stay closer to tactical issues.

74 On Bataan, American forces were defeated far more by starvation and disease than by direct enemy action. Corregidor was carried by assault, as was Wake, but these were the last such significant victories the Japanese were to achieve against American ground forces, localized and temporary tactical reverses aside.

75 USSBS, *The Effect of Air Action on Japanese Ground Army Logistics* (Washington: Military Analysis Division, 1947) details not only the erosive effects of air attack but also the underlying inadequacies that interdiction exacerbated.

76 Alvin D. Coox, "Japanese Intelligence in the Pacific Theater: Its Non-Revolutionary Nature," in *The Intelligence Revolution: A Historical Perspective*, edited by Walter T. Hitchcock (Washington: Office of Air Force History, 1991); Japanese Intelligence Section USSBS, G-2, *Japanese Military and Naval Intelligence Division*, (Washington: Government Printing Office, Apr 1946).

77 Eric Bergerud, *Touched With Fire*, pp. 165-75 and Richard B. Frank, *Guadalcanal: The Definitive Account of the Landmark Battle*, (New York: Random House, 1990), 141 et seq.

**O'Neil Slide Addendum:
Transformation and the Officer Corps - The case of Japan and the
United States between the World Wars.**

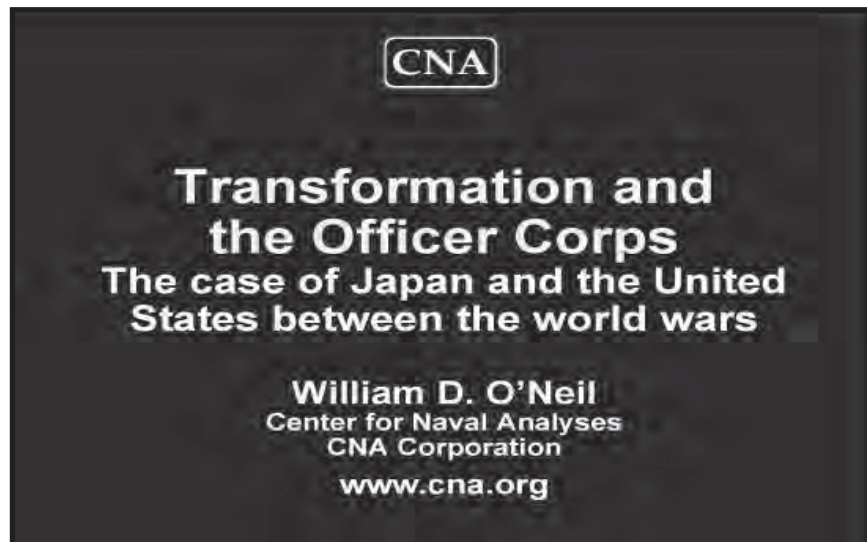


Figure 1

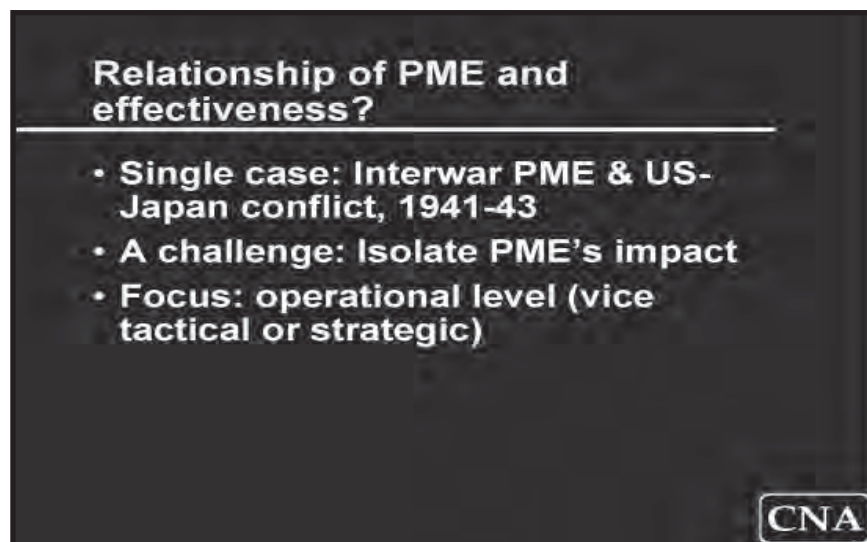


Figure 2

Summary

- U.S. “ahead on points” by end of 1942, opened lead through 1943
- Only at end of 1943 did U.S. cumulative inputs of forces and matériel draw even with and ahead of Japan’s
- No real U.S. advantage in geography, tactics, or quality
- Difference was in operations
- Interwar PME ⇒ U.S. operational edge




Figure 3

Focus: Armies

<u>U.S. Army</u>	<u>Japanese Army</u>
• Maneuver infantry + combined arms	• All-elite light infantry
• Force concentr'n, mass	• Force economy, convergent operations
• Professional, millicrat	• Warrior spirit
• Multi-echelon planning	• Plan from top
– Multi-focus	– Ops dominated
– Risk margins	– No margins
– Feedback allowed	– Plan taken as given
• Broad competence	• Narrow elite




Figure 4

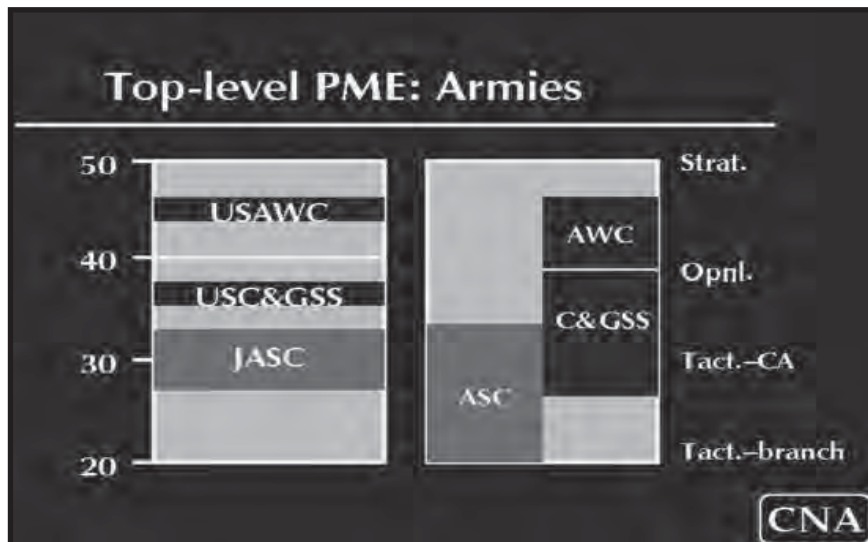


Figure 5

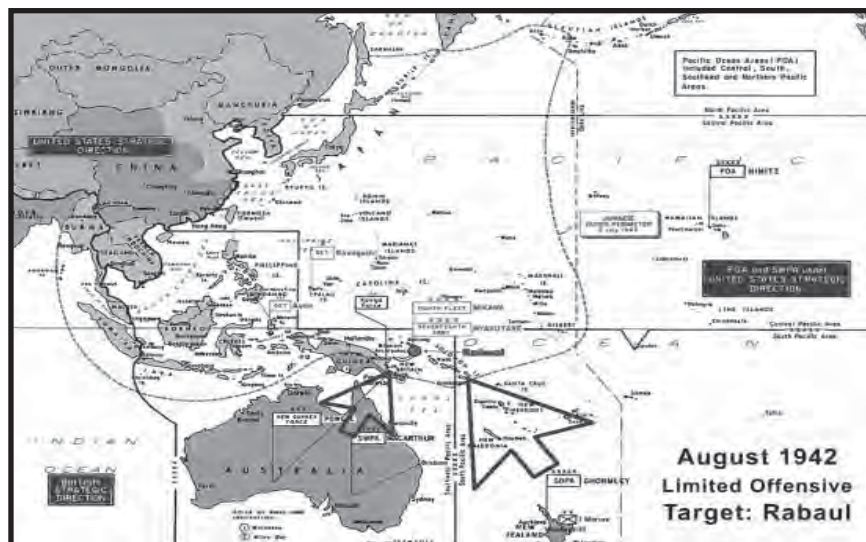


Figure 6

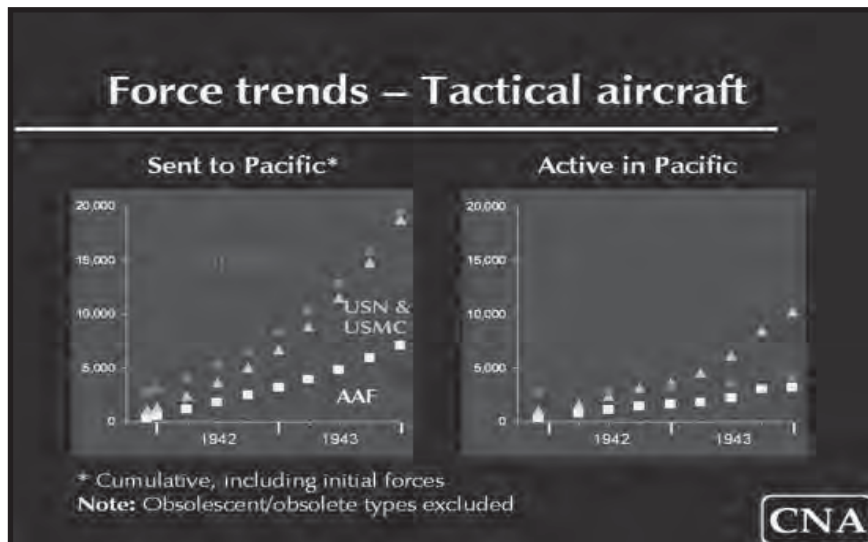


Figure 7



Figure 8

Mid-1942 to end-1943 summary

In 18 months of brutal conflict, U.S. and Allied forces under U.S. direction:

- **Made only slight territorial gains, but**
- **Reversed the war's momentum and**
- **Gravely eroded Japanese forces**

Allied victory was not guaranteed, but Japanese victory was no longer possible

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Figure 9

Summary (recap)

- **U.S. "ahead on points" by end of 1942, opened lead through 1943**
- **Only at end of 1943 did U.S. cumulative inputs of forces and matériel draw even with and ahead of Japan's**
- **No real U.S. advantage in geography, tactics, or quality**
- **Difference was in operations**
- **Interwar PME gave U.S. operational edge**

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Figure 10

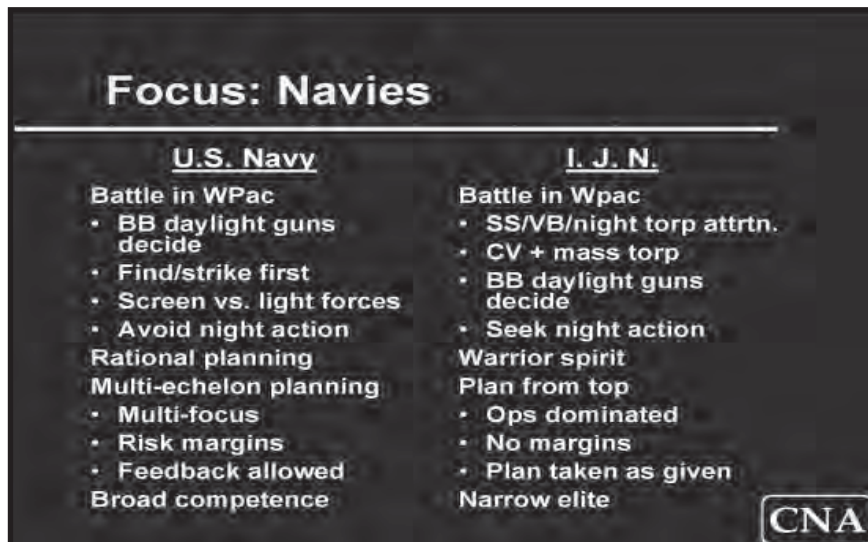


Figure 11

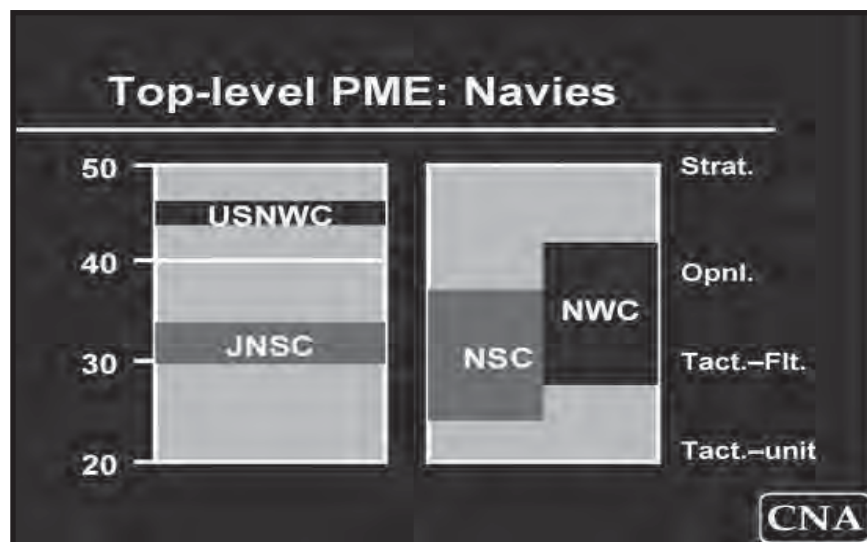


Figure 12

Advantage U. S. : Marines

- **USMC pursuit of amphibious warfare complemented USN role, aided Army**
- **Marines and Army could operate together (grudgingly) – shared PME helped**
- **No Japanese equivalent (SNLF not withstanding)**

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Figure 13

Problem child: US Army Air Corps

- **Single focus on precision daylight “strategic” unbalanced air doctrine – and forces**
- **Fostered by lack of Army effort at air-ground integration – reflected in Army PME**
- **Neglect of air defense in PME ⇒ inadequate doctrine and forces**
- **Neglect of air-ground in PME ⇒ inadequate doctrine and forces**
- **Correction in war was costly**

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Figure 14

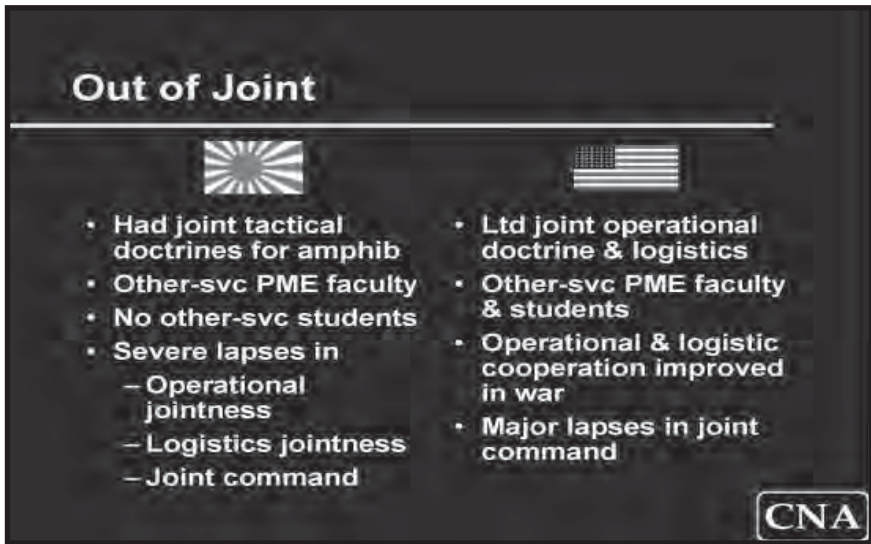


Figure 15

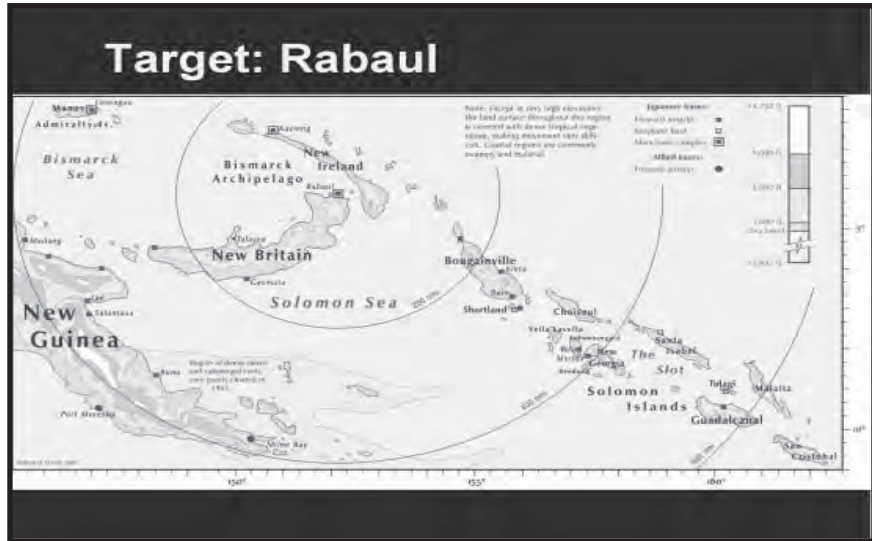


Figure 16

Day 3, Session 2 Question and Answers

Moderated by
Dr. Curtis S. King—Combat Studies Institute

Dr. King

I think Will had mentioned that he had a lot of material in the Navy—probably what the backup slides included. I urge you all—both papers are quite extensive, and cover a lot of material that was not in the briefings and, when we publish the proceedings, make for real good reads, that additionally material will be excellent.

Let me be real brief with some sort of commentator role here, and then get to questions as fast as possible. I see a connection between these briefings. I want to outline that connection, and bring in a third area from my own background, which is Russian Soviet history. So let me start by saying that, among other commonalities in the two briefings, the influence of outside factors on transformation.

I'm saying this, and I'm choosing the word transformation carefully, because I think that's obviously the theme of this whole conference. But we've discarded that word—you know, revolution in warfare, or revolution in military affairs, and so on—because people are scared of that term, and I believe rightfully so. But in some ways, I think we're starting to talk as if transformation was also a revolution, as opposed to simple change, and we're wrestling with that, I know, in this whole conference.

My point would be, though, outside influences had a huge factor on the two transformations—or changes, in the smaller sense—that took place in the force. For Cadet Command, political factors, the politics of the world, the drawdown because of the end of the Cold War, and the internal politics of congressmen, and the heads of universities. This, and budgetary factors had a whole heck of a lot to do with the drawdown, or cutback in the ROTC Cadet Command—not because of some great vision of the future what Cadet Command should look like. Now, Art has said that vision may come to fruition, but I see it more as gradualist, driven by outside factors, not because of internal vision, if you will.

For the US and Japanese PME, how much they're influenced by culture—I don't have to reiterate what Will covered so well already, but whatever the Japanese—the national culture, of course, but the cultures of the militaries; the idea of the Americans looking at it as a profession in the sense of a lawyer, doctor, this kind of profession, whereas it's an elite caste in the Japanese unit.

So you can't make such great dramatic changes that you might want to make doctrinally. Both sides going into the war—as Will points out in his paper—on the Navy side still believe in the battleship line; all this talk about aircraft carriers still doesn't come to fruition until the fighting actually takes place.

My own examples, the Russians and the Soviets sought to inject a revolution in warfare, if you will, in putting Marxist ideology—it was a socialist way of war in the 1920s, and guys like Frunza and Svechen and Tukachevsky battled with that. Ultimately, they discarded it. You know, pieces were still there—some good ideas came about—but in particular, for those of you who are aware of it, Tukachevsky's idea of this continuing offensive, this expanding torrent, that as you've invaded another country, because you were a revolutionary army, you got stronger. Well, it turns out that the rules of the military that as you advance, you tend to get weaker—you know, it's not a hundred percent rule, but it generally still applies, even to Marxists. [Laughter]

So, having said that, my conclusion is this, and I want to tie this back to General Scales. So much what he said I thought was very interesting, provocative, so well done, and I agree with so much of it—the idea of a collective, collegial reform, and no grandstanding, and these things. But I also wish to caution that there's very few visionaries out there. He spoke of visionaries, and here, I might disagree with him, especially looking at the German Army and the inner warriors, and you guys could talk about this, of course, by yourselves.

But I don't see armies winning wars relying heavily on visionaries. I see them—in Will's example, particularly—having competent staffs that make changes more gradualistic as they go, and that is a lot—to my mind—the change is all about: It's incremental and it's slow. There are visionaries; there's just no doubt about it. But you don't want to sit back and rely on them.

Well, enough from Curt King. Let's take the questions.

Audience Member

I just have a question about Cadet Command. I noticed on the figures that it provided something like an enrollment of 275,000 on the Junior ROTC program. My question is of that figure, over say the last ten years, what percentage of those cadets have later joined the Armed Forces?

Dr. Coumbe

That's a tricky business. Right now, we're using about 40 percent joining one of the Armed Forces—either enroll in ROTC, enlist in the service, or in some way, keeping a military connection. So it's hovered over the last decade between 40

and 50 percent establish that connection. That can go back to the 1970s—it's always been a very strong connection.

Audience Member

My question is for Dr. Coumbe. Thank you for the presentation. It was nearly as scary as that given by the Canadians yesterday. [Laughter] I must have been in a cave for the last 40 years, but could you explain to me—and this is a straightforward question—what do these so-called brigades and battalions do?

Dr. Coumbe

Well, the battalions, of course, are the ROTC detachment. They train—

Audience Member

Okay. Okay. I understand then. But how about the brigades?

Dr. Coumbe

The brigades exercise oversight. In other words, the brigades manage scholarship allocations, they manage the funds, they allocate the funds. They manage the incentives. They in fact manage everything that the Senior ROTC attachment does—personnel, logistics, and especially, the most important, probably, is the scholarships.

Audience Member

How did that work in the early 1960s? Who did that then?

Dr. Coumbe

In the early 1960s, they didn't have a scholarship program.

Audience Member

Ah. So we've created this monster organization to dole out money. Okay. Thank you. [Laughter]

Dr. King

John, in the back.

Audience Member

Yeah. My question is for Will O'Neil. It might be a bit peripheral, Will, to some of this stuff, or maybe an added layer of complexity, but did your research give you any indications of how these cultures fed their PME graduates back into the PME education system as instructors?

Mr. O’Neil

In both cases, people who were particularly proficient in the course often were retained as instructors. In other words, if you did very well at Leavenworth, you might get to spend another year or two at Leavenworth as an instructor. The more senior positions at Leavenworth tended to be filled by Army War College graduates. In the Japanese case, they also retained particularly high ranking graduates as instructors. More commonly, people who did very well in the Staff College were sent abroad for a year or two of study—very frequently to Germany; that was the most desired; the United States was one of the least desired destinations for that—and then might come back as instructors. But in all these cases, the instructor staff was dominated by graduates of the programs. Now, in the US case, in those days, the war college had some civilian instructors. Another thing that was true was that all of these programs had other service instructors. The Japanese, if you were an Army officer, you did not go to the Navy Staff College and vice versa, but you might go to teach, because the staff colleges taught a certain amount of coordinated—I won’t say joint—Army-Navy operations. In the US case, each service sent its personnel to the other services’ war college in significant numbers. So far as I know, nobody from the US Navy attended Leavenworth. The Marines went to everybody’s, including the French War College—but they were the most ecumenical of the group.

Audience Member

John Lynn, from the University of Illinois. Where I am, the faculty head of the ROTC program there—all three units—and you could tell those who want to have an elite school ROTC program to stuff it. [Laughter] We don’t take a back seat to anybody in engineering. The Navy and the Air Force absolutely adore us; the Army does pretty damn well too. And by the way, WARRIOR FORGE is a great program, and I am so proud of the kids we send out there. Okay. [Laughter] Now the question. For Mr. O’Neil: I find what you’re saying really fascinating and reached many of the same conclusions. But I think we can underplay some of the technological advantages we had. I’m terribly impressed by that book, *Fire in the Sky: The Air War in the South Pacific*, showing that planes I had thought were just disasters really worked very well in air combat. And it didn’t take a second generation of fighters to get that kind of advantage—the Wildcat actually used well; it was a damn good plane. If you give the American technology more credit—and the Japanese infantry weapons often were awful, at times—what does that do to your formula of saying it was all in the command?

Mr. O’Neil

If you look at the aircraft, for instance, what you get is a critical case, and you look at where the 15,000 missing Japanese airplanes go, very few of them fell in

air-to-air combat. So it doesn't make any real difference. Most of them were lost due to operational causes, reflecting inadequate support and logistics, and of the remainder, most were lost either due to air-to-ground or due to anti-aircraft. So the thing that everybody focuses on—and I love Eric Bergerud's book too, and I think it's marvelous—and I think that these things tend to be somewhat deceptive because of the focus on air-to-air combat. Air-to-air combat was a relatively minor killer of airplanes in World War II.

Dr. King

If I can follow up on that in the paper, Will points out also that many Japanese pilots, by midpoint in the war, are out there on the islands, air strips, with their planes, starving—they're emaciated. So their own personal performance is partly failing, due to a logistical system that is falling apart.

Mr. O'Neil

Also, many of them fell to things like malaria—again, reflecting inadequacies of support.

Audience Member

Lieutenant Colonel Vlasak, Department of Military History. You said you also had some information on naval officer developments. If you please briefly address what you see as some of the key distinctions, or differences, between the Japanese Army and Navy's Professional Military Education systems, specifically with regard to their cultural awareness's, as reflected in their language preferences. You hinted at what the Army's prejudices were, but was it any different for the Navy? How do you see that?

Mr. O'Neil

Yes it was. Where the Army had been modeled on the German Army, the Navy had been modeled on the British Royal Navy, so they were a more cosmopolitan force, they tended to be somewhat more internationalist in outlook, where the Army officer wanted to study German, or perhaps Russian—anything but English—the Navy officer was expected to have a knowledge of English, and some of the Navy officers in fact were quite fluent in it. The Army had higher social prestige in Japan for historical reasons, and the Navy tried harder. This was one of the many, many reasons for friction between the Japanese Army and Navy. The two services were competitors for political power in Japan. It lent an element of venom to their conflict that was absent in the US. That is sort of a broad picture of the cultural differences between the two services in Japan. Did I answer your question?

Audience Member

I think so. How did you see that playing out at the highest level of command in terms of decision and strategy?

Mr. O'Neil

Well, one of the things that was very apparent after the war was the Navy was much better at covering it's number than the Army was, so it came off initially with far better press in the West than the Army did. Very few navy officers for instance got tried as war criminals, whereas a great many high level army officers did. During the war, the Japanese Navy's staff culture was a lot like the Army's. It wasn't quite so narrow and elite and so on, but it worked out in very much the same way, and another element of their culture, which I didn't emphasize, but was the very strong element of seniority—you know, you got command when your number came up, more than because George Marshall thought you were really capable of doing this job. That led to some very uneven results. The staff would always carry on—the staff in the Japanese Army always carried on, no matter who was in command. But when the commander was not a strong character, it was ruled by staff, and that showed up a lot.

Audience Member

[Weak audio] —and this is sort of in response to Dr. Lynn's question, that Will's point about operational troops of the PME of the American system, with respect to this issue of how the performance was—particularly in Guadalcanal [inaudible] Campaign, the Sovereigns Campaign—for example, this issue of air crews is a key one—not just their planes, but air crews—and the fact that the Japanese had their operational assets dedicated to the recovery, whereas what the US did, the US had the entire [inaudible] loaded with radar, and they were called Dumbo, and their job was to get these really valuable veteran combat students' brains [inaudible] the Army and Navy out of the water, back to Cactus, and back in the air—and that's an operational maneuver.

Mr. O'Neil

That was something that was concocted at the time. If you're going to talk about transformation, well, that was when combat SAR (search and rescue) got invented. People said, "Geez, we've got pilots who are going down out there, and that's a really important thing to get those guys back, and so we'll figure out a way to do that." They also invented Air Medevac. They said, "Gee, we've got casualties on Guadalcanal. We can't treat them adequately on the island; we can't wait. We've got cargo planes coming in—they're going back empty—let's fill them up with casualties. That was the first aerial Medevac operation. So that was an illustration of the kind of thing that the US culture led to.

Dr. King

Yes, in the back.

Audience Member

In the Navy, currently, for example, when our ensigns graduate college, rather than going to a SWO school, and if they're going to be an engineering officer, going to an engineering school, they're now sending them straight to the fleet, and so you'll have, for example, a 22-year-old ensign with no training commanding a division of engineers, which is setting these young officers up for failure. Then, on the other hand, we now are requiring, for promotion to chief petty officer, that you have at least a two-year degree, and if you want to make senior chief and master chief, you're going to have a bachelor's or master's degree. We're also seeing that we're going to have ships here in the near—combatant ships that are commanded by a master chief, and all the division officers are chiefs and senior chiefs. So there is promotion and training and education at the enlisted ranks. I wonder if the Army is having anything similar, or is this something uniquely Navy? Or if you guys—I don't know if you have any experience that—if you could address that?

Dr. King

I would comment that I was a 21-year-old division officer. [Laughter] In fact, I was a 21-year-old command duty officer on a ship that had about 100 nuclear weapons on it, so I'm not sure I think that you need to have a lot of PME before you go do things like that.

Dr. Coumbe

Well, Curt, if I could back that up, that's a problem that we have in [inaudible] divisions, in terms of who the Navy sends to us for education. I mean, over a period of a couple years, I taught more dentists than I did surface warfare officers. That seems to be an institutional problem within the Navy as to how they regard PMEs [inaudible]. But just a quick kind of—

Mr. O'Neil

PME has never been a high Navy priority.

Dr. Coumbe

Yeah.

Mr. O'Neil

It was higher between the wars than anytime else.

Dr. King

And that is—Art, I was teaching at a college which had its ROTC chapter closed, and I'll tell you, I wept bitter tears when they left—they were a great resource to have on campus. But for Mr. O'Neil, do you have any idea on numbers, or for example, how many PME grads were on the staff in, let's say, the Southwest Pacific, versus their Japanese counterparts?

Mr. O'Neil

The general war in World War II was that nearly every division in the US forces was commanded by an officer who was a graduate of Leavenworth, and/or the Army War College. It would have at least one and often two officers on the staff—usually the chief of staff and the G3 were Leavenworth graduates, and a significant proportion of the regimental commanders were Leavenworth graduates—and that's about as far down as the PME reached. Now, I don't have the bios of the people in the Southwest Pacific. It may have reached a little farther down at that time, simply because we hadn't built up the mass of forces that we were to have later. But that's a good general rule about where the PME trained officers were.

Dr. King

We probably have time for one more question. Sir?

Audience Member

To go back to one thing, about the technical on the boats. The Army boat people did the same thing, where you have warrant officers in command, and the transportation force, basically, there was an awful lot of warrant officers in command, and they pretty much [inaudible]. But my real question goes back to the airmen and junior officers. We have a critical, critical shortage of lieutenants and captains right now in our reserve system—we have over 30 vacancies just in my battalion that we're not able to fill with junior-grade officers. They're not out there, and we're having to go to direct commissionings that do not have the military type background. They may have some enlisted time, they may have a college education, they may be going to vet school, but they don't have the professional military education. But we're so critically short that we're going out and we're having to grow our own officers. So the cutting at ROTC is really showing up, I think, as a Navy right now, what we have—there's not enough officers out there.

Unknown Member

Yeah. We're raising our mission by 600 officers a year, starting next year, so we're attempting to address that.

Dr. King

That concludes the panel.

“Looking In The Mirror: Applying the Scholarship on the Interpretation of US Army Performance in World War Two to Current Operations”

MSG Peter Clemens, USAR

March 2005 marked the end of the second year of combat operations for the US Army in Iraq. Operations continued to defeat the insurgency, improve security, strengthen Iraqi police and military forces, and support a successor government in Iraq. Although the Army remained decisively engaged, interpretation of its performance on the battlefield and in the civil-military sphere has started in the Army and with military analysts, academics, and citizens. While contemporary news accounts and analysis discussing the Army's operations are plentiful, the body of knowledge providing more in-depth discussion and interpretation on these operations has only begun to emerge. In the coming years as more books and analytical articles are published on Army operations in Iraq, different schools of interpretation will result, often providing conflicting conclusions on the successes, failures, key decision points, and missed opportunities. In parallel, assessing the military and political dynamic of its Iraqi and terrorist opponents will provide other references to measure the Army's performance.

The Army has engaged in three distinct campaigns in Iraq, combat operations to topple the Hussein regime, security operations to defeat the insurgency, and civil-military operations to assist the establishment of a democratic Iraq. Interpreting how the Army executed these campaigns will contribute to the emergence of different schools of thought. Two years into the conflict, the first books detailing operations and interpreting the Army's successes and failures have appeared on bookshelves. Many of these early contributions, written by embedded journalists, are haphazard publications and offer little insight into operations. There are, however, a number of noteworthy books—written both by journalists and military professionals—which have appeared: COL Walter Boyne's, *Operation Iraqi Freedom: What Went Right, What Went Wrong, and Why* (2003), GEN Tommy Frank's, *American Soldier* (2004), David Zucchino's, *Thunder Run: The Armored Strike to Capture Baghdad* (2004), *On Point: The U.S. Army in Operation Iraqi Freedom* by the U.S. Army Center for Army Lessons Learned (2004), Rick Atkinson's, *In the Company of Soldiers* (2005), and Katherine Skiba's, *Sister in the Band of Brothers: Embedded with the 101st Airborne in Iraq* (2005). Focused on the campaign to dispose the *ancien regime*, these works offer little on the fight against the insurgency or the civil-military campaign. Nonetheless, they mark the first efforts in what will become a flood of books and articles interpreting the Army's operational performance.

To provide the intellectual background necessary to understand and contribute to the debate on how the Army did in Iraq, Army professionals would be well served to become acquainted with the literature of another debate concerning Army performance. For sixty years, a virulent discussion has existed on the question, “In the Mediterranean and European Theaters of Operation (MTO and ETO) during 1944-1945, who were better soldiers, the Germans or the Americans?” To understand the tenets of this discussion and apply them to operations in Iraq, professional soldiers and analysts should review some of the significant books and articles which have contributed to this discussion over the decades. The complexities in interpreting how the Army performed in 1944-1945 can serve as a guide to a new generation grappling with challenge of understanding how the Army performed in Iraq.

The paragraphs that follow are not intended as a comprehensive review of the literature on the Army in the MTO and ETO, but instead highlight what are considered the significant schools of thought and some of the important books and articles on this subject. A definitive interpretation on how the Army executed its missions in Iraq will not be arrived at quickly. Instead, like its World War Two predecessors, the debate will likely continue for decades as political and emotional views of the conflict evolve, new information is revealed, and differing schools of thought emerge.

In the MTO/ETO during 1944-45, who were better soldiers, the Germans or the Americans?

This contentious debate has resounded for six decades. Unlike twenty years ago, the interpretation that the Wehrmacht was the superior force no longer dominates how performance of the US Army is considered. For the four decades following 1945, Wehrmacht martial superiority remained the principal interpretation on US Army performance and not until the mid-1980s did a paradigm shift begin lending to a more favorable explanation on the performance of the US Army in the MTO and ETO.

Interpretation of the US Army’s performance against the Wehrmacht was controversial before the guns fell silent in 1945. At the war’s close many positive histories appeared on the US Army’s performance, namely memoirs of senior participants, and divisional and unit histories. These works, generally short on documentation, lacked academic rigor and balance. Most unit histories were pictorial in nature, long on anecdotes, and prepared by unit Public Affairs officers. These works presented a theme of admirable performance of the US Army against its German opponent.¹

Despite winning the war, the decline of the US Army's reputation vis-à-vis the Wehrmacht began early. Degradation of the US Army's performance and the inflated image of the Wehrmacht was "complex in origin."² The notion of Wehrmacht superiority traced its roots to wartime, when it was convenient to exaggerate German capabilities as a ready explanation for the ineptness of defeated British, French, and American commanders and troops. Furthermore, the abundance of anecdotal stories by American veterans describing military incompetence and debacles reinforced a view the American military was an institution afflicted by the wartime acronym SNAFU.³

From a historiographical standpoint, the records and individual experiences of the German and American armies available to historians were vastly different. American records were substantial bodies of correspondence, anecdotes, and interviews, from all ranks. Conversely, German records were narrower based, principally official Wehrmacht records and the testimony and memoirs of senior German officers. Very little material from mid and lower level German officers and soldiers were available, a gap that left undisclosed German accounts of their own failings, incompetence, weaknesses, and atrocities. In popular literature, the publication of Liddell Hart's, *The German Generals Speak* in 1948 and the appearance by the early 1950s of many senior German officers' memoirs successfully put forth an interpretation of German martial prowess, tactical superiority, and better battlefield performance versus all their adversaries. German defeat was explained away by the brute strength of overwhelming Allied numbers and materiel, and the idiotic decision-making of Adolf Hitler. Politically, these histories resonated well in the emerging Cold War period given the necessity to rehabilitate Germany as an integral part of the North Atlantic Treaty Organization.⁴

Perhaps the most important academic book critical of US Army performance came from within the ranks of the Army itself. In 1947, Colonel S.L.A. Marshall's *Men Against Fire*, contended that less than one-quarter of American infantrymen ever fired their weapon in battle and American infantry units were notorious for failing to gain fire superiority over the enemy, resulting in their inability to close with and destroy enemy forces. Given Colonel Marshall's credentials as Deputy ETO Historian and supposed exhaustive research methods and company-level interviews, Marshall's thesis remained relatively unchallenged for decades.⁵

The degradation of US Army performance in World War Two reached its zenith in academic circles, popular history, and the US Army during the early 1980s, and was reflective of the anti-Vietnam War backlash the Army experienced.⁶ Three highly regarded works gave further academic foundation to this pro-Wehrmacht interpretation. Trevor Dupuy's *Numbers, Predictions, and War* published

in 1979, applied statistical analysis to the outcomes of 81 combat engagements between the American and German armies in 1943 and 1944. He assigned quantitative factors to these engagements' variables, i.e. "offensive/defensive posture, logistics, weather, terrain, communications, firepower, relative numerical strength, equipment, morale and leadership."⁷ These numeric factors were inputted into the Quantified Judgement Model (QJM) and then applied to the engagements. The results indicated the Wehrmacht was between 20% and 40% more effective than their American counterpart, which Dupuy attributed to superior German utilization of manpower, battle experience, superior tactical doctrine, leadership, discipline, and battle drill.⁸

Two years later Russell Weigley's *Eisenhower's Lieutenants* appeared. Now considered a classic, this work gave the US Army "faint praise,"⁹ asserting that its divisions lacked sufficient combat power to engage in a war of attrition against the Wehrmacht. Weigley argued,

"Pitted against the German Army, the United States Army suffered long from a relative absence of the fine honed professional skill of the Germans, officers and men, in every aspect of tactics and operations..... the German Army remained qualitatively superior to the American Army, formation for formation, throughout far too many months of the American army's greatest campaign. In the end, it was its preponderance of material resources that carried its army through to victory in World War Two."¹⁰

Following the next year, Martin van Creveld's *Fighting Power* argued combat superiority of the Wehrmacht derived from its small-unit cohesion, training, tactics, and battlefield leadership. Van Creveld asserted the US Army held a managerial view of war, considered its soldiers as replaceable cogs, and imposed an individual replacement system that destroyed unit cohesion. In van Creveld's opinion, the American infantry and officer corps was totally outclassed by the Germans on the battlefield.¹¹

Not all military professionals and historians accepted this interpretation, however. In 1986 the first of John Sloan Brown's writings¹² were published which challenged this pro-Wehrmacht interpretation by arguing the performance of the US Army in the MTO and ETO was much better than previously believed. Brown intended his writings to initiate debate, believing that, "The mythology of German combat superiority is deeply rooted. It will be some time before it has been objectively reconsidered."¹³ His first article, "Colonel Trevor N. Dupuy and the Mythos of Wehrmacht Superiority: A Reconsideration," published in January 1986 in *Military Affairs* (aka *Journal of Military History*), set out to correct

the unrelenting notion of Wehrmacht superiority in aspects of tactics, leadership, training, discipline, weapons, and battlefield performance. Since the 1940s Brown believed, the interpretation of Wehrmacht superiority, both in academic forums and within the US Army, left many believing the US Army only succeeded in defeating the Wehrmacht through application of overwhelming numbers and firepower—brawn with little finesse.¹⁴

In what became a series of point/counterpoint *Military Affairs* articles, Brown critically evaluated Dupuy's book *Numbers, Prediction, and War*. Brown questioned what he termed "the mythology of German combat superiority."¹⁵ In challenging the statistics Dupuy used to justify his thesis of Wehrmacht superiority, Brown's criticisms focused on two issues. First, he believed the sample of engagements analyzed by Dupuy was skewed toward battles involving elite German panzer and panzer grenadier divisions. While these units were less than 15% of the Wehrmacht's strength, Brown asserted these units appeared in Dupuy's sample set at three times the rate they should. Dupuy's analysis, Brown believed, compared the elite of the Wehrmacht against the entire US Army.¹⁶

Second, Brown was concerned that Dupuy's QJM statistical model incorrectly factored the variables of defense, and artillery and air support. He believed QJM underestimated the tactical advantages of the defense by a factor of two. Given that the Wehrmacht fought 90% of its engagements in the West on the defense, determining an accurate numerical factor was critical to QJM being predictive. Conversely, Brown argued QJM rated the effectiveness of artillery and air support too high, giving American divisions more offensive power than they really possessed. To demonstrate how the QJM was capable of different results, Brown carefully adjusted the numeric variables for defense, artillery, and air support. The results from these changes in QJM generated radically different results, showing a qualitative edge of American divisions against their German counterparts, exactly opposite of Dupuy's thesis.¹⁷ Brown concluded:

"Colonel Trevor N. Dupuy's painstakingly acquired historical data is an invaluable contribution. Appropriately analyzed, it offers convincing evidence that American divisions of 1943-1944 were more efficient than their German counterparts man for man, weapon for weapon, and asset for asset. This opens a new paradigm. A conventional explanation for American World War Two victories was overwhelming quantitative advantages. Colonel Dupuy's data suggests quantitative advantages were not sufficient to offset the difficulty of assigned missions, and Americans summoned up a qualitative edge as well."¹⁸

A first-rate scholar, Brown could not be ignored and simply dismissed as a crank. A 1971 graduate of the US Military Academy, he trained as an Armor officer. As a Captain, he attended the University of Indiana, earning a PhD in History in 1983. As a Major, he finished the US Army Command and General Staff College (CGSC) as an Honor Graduate.¹⁹ From his academic work at Indiana and CGSC, Brown wrote *Draftee Division*, a well-researched scholarly work on the history of the 88th Infantry Division, the first of the conscript American infantry divisions to see extensive combat. The 88th Division was part of the US Army's bold 90-division plan to expand the 1940 Army of nine Regular Army divisions and 18 National Guard divisions into a mix of infantry, armor, and airborne divisions capable of defeating the Axis Powers.²⁰ By 1945, of the Army's divisional combat maneuver units, nearly half were so-called Draftee Divisions, composed of a thin crust of regular career soldiers, the rest being conscripts and wartime officer candidates. Brown traced the 88th Division from initial mobilization, through its training, and deployment to Italy where in 1944 and 1945 it achieved a fine combat record. He believed the 88th Division was representative of how the War Department's Mobilization Training Program successfully produced combat ready infantry divisions superior to their German counterparts.²¹ "With good leadership, sound training both in the United States and overseas, and a solid logistical structure behind it, the 88th Division was an example of the American mobilization system at its finest."²²

Brown's writings were the first serious scholarly attack on the accepted thesis of Wehrmacht superiority and his writings had their desired effect, they initiated debate. In a later issue of *Military Affairs*, Colonel Dupuy published an article to rebut Brown's criticisms titled, "Mythos or Verity? The Quantified Judgement Model and German Combat Effectiveness."²³ After Colonel Dupuy explained the basis of his analytical methodology and conclusions of Wehrmacht superiority, he countered Brown's criticisms. Dupuy staunchly defended his methodology, data collection, and quantification of the battlefield. But in this Dupuy had mixed success, for it was evident that in devising his statistical factors for the QJM, human judgement was necessary, judgements that despite Dupuy's best efforts were interpretation and translation of historical data into numeric factors. In the end, Dupuy remained unconvinced by Brown's arguments and contended the US Army achieved victory through brute strength and not tactical prowess.²⁴

Military Affairs published two more point/counterpoint articles, one by Brown in the July 1987 issue titled, "The Wehrmacht Mythos Revisited A Challenge for Colonel Trevor N. Dupuy."²⁵ In this article Brown reiterated his criticisms of the QJM methodology, but believed these inaccuracies were correctable. He challenged Dupuy to re-run the QJM with a more accurate, representative set of data and to adjust the numeric factors regarding defense, artillery, and close air sup-

port. Brown remained confident that these adjustments to QJM would show the US Army's combat effectiveness was equal, if not superior to the Wehrmacht.²⁶ In the October 1987 issue, Colonel Dupuy countered these challenges in his article, "A Response to the Mythos of Wehrmacht Revisited."²⁷ He flatly refused to take up Brown's challenges and dismissed them as having no merit.²⁸

With these articles, the two years of debate in *Military Affairs* ended. Besides entertaining readers, what was accomplished? Brown, with *Draftee Division* and his *Military Affairs* articles, had forcefully advanced a new interpretation more favorable to the US Army's performance. Brown's well-reasoned writings were the beginning of a paradigm shift in how the performance of the US Army was viewed. Within a few years a number of highly regarded scholarly books emerged building on Brown's interpretation. Of note were Joseph Balkoski's fine divisional history on the 29th, *Beyond the Beachhead* (1989), Michael Doubler's, *Closing With the Enemy* (1994), *When the Odds Were Even* (1994) by Keith Bonn, Richard Overy's, *Why The Allies Won* (1996), *The GI Offensive in Europe* (1999) by Peter Mansoor, Robert Rush's, *Hell in Hürtgen Forest* (2001), and Rick Atkinson's, *An Army at Dawn* (2002).²⁹

These works discounted the interpretation that the US Army won by brute strength alone. Noting the US Army generally lacked overwhelming strength to defeat the Wehrmacht, it relied on innovation driven from the lower ranks of enlisted and officers, adaptability, standardized thorough training of its soldiers, mobility, and superior logistical support. The US Army generated a tremendous amount of combat effectiveness from its 90-division force, and given the relative smaller size of this force compared to its adversaries, the Americans were compelled to maintain it at a high-level of capability to endure nearly continual combat operations. As Peter Mansoor states, "The ability of the American Army to sustain its efforts over an extended campaign tipped the balance in Western Europe."³⁰ The US Army, these authors contend, achieved victory by applying relentless pressure through constant, aggressive operations.

Contributing to the debate on interpretation of the Army's performance was the appearance of *Military Effectiveness*, a three-volume series published in 1988. Edited by two well-versed and widely published military historians—Williamson Murray and Allan Millet—different authors offered interpretations on how effective the major belligerents' militaries were during the first half of the 20th Century. The first two volumes of the series dealt with the First World War and the Interwar years respectively and provide an underpinning to understanding how the warring powers performed in the Second World War, the subject of volume three. Each chapter discusses and interprets how effective a belligerent was at the different levels of war—political, strategic, operational, and tactical.

Allan Millet prepared the chapter on the United States in the Second World War, a daunting challenge covered quite well within 45 pages. While generally praising the United States' effectiveness at the political, strategic and operational levels, Millet argues a middle ground between Brown and Dupuy when discussing Army tactical effectiveness in Europe. In addressing the complex issue of tactical effectiveness, Millet notes two significant factors: the pace of operations, and combat motivation and initiative. After a relatively quick and expansive mobilization of the Army from 1942 to 1944, the "actual test of battle revealed a need for rapid adaptation that the armed forces could not easily perform within a strategic context that stressed a rising crescendo of offensive operations. The pace of combat against both Germany and Japan in 1944 meant that casualties among American ground combat divisions made tactical improvement a difficult task."³¹ The author notes the over commitment of ground forces in sustained operations and the difficulty integrating trained replacements—especially junior officers and NCOs—into units before combat, hobbled the tactical effectiveness of many units.³² Millet's chapter provides a comprehensive overview on the factors contributing to understanding the difficult concept of military effectiveness, and while our campaigns in Iraq are not simply a replay of 1944, nonetheless for military professionals his article puts forth many points to consider when analyzing current operations.

A Mirror on Army Operations in Iraq?

Do the lessons of the Army in the MTO/ETO apply to interpreting operational performance in Iraq? Certainly. Military professionals and analysts now face many of the same challenges in understanding how well the Army executed its multiple campaigns in Iraq as did their predecessors in interpreting how the Army performed in the MTO/ETO. As literature on the current conflict emerges, Army professionals and analysts must be intellectually equipped to critically review what is being published and the conflicting interpretations they present. Judging writing on accuracy and intellectual honesty can only result when readers possess the ability to discern fact from fiction, recognize when data is manipulated, and understand when interpretations are flawed due to personal agendas. Applying intellectual rigor to the emerging historiography on Army operations in Iraq remains a daunting challenge. Understanding the critical issues faced by our predecessors when they interpreted the Army's performance in the MTO/ETO will provide this generation of military professionals an intellectual guide to evaluate Army operations in Iraq. After six decades of heated discussions, varied schools of interpretation exist on how the Army performed in World War Two, and no definitive answer has yet to emerge. Interpreting the Army in Iraq will likely prove just as difficult.

Notes

- 1 Despite the lack of intellectual rigor in many divisional histories, it is noted that one of the more exceptional histories was prepared in 1949 on the ill-fated 106th Infantry Division, R. Ernest Dupuy's, *St. Vith, Lion in the Way* (Russell Weigley, *Eisenhower's Lieutenants*, (Bloomington: University of Indiana Press, 1981), p. 761.)
- 2 John Sloan Brown, *Draftee Division: The 88th Division in World War Two*, (Lexington: University of Kentucky Press, 1986), p. 168.
- 3 Brown, *Draftee Division*, p. 168-169; and Peter Mansoor, *The GI Offensive in Europe: The Triumph of American Infantry Divisions, 1941-1945*, (Lawrence, Kansas: University of Kansas Press, 1999), p. 6.
- 4 Brown, *Draftee Division*, p. 168-169; and Mansoor, *The GI Offensive in Europe*, p. 6.
- 5 Mansoor, *The GI Offensive in Europe*, p. 6.
- 6 This pro-Wehrmacht interpretation touting German martial prowess found its way into the widely-read popular history books written during this decade, namely John Keegan's *The Second World War* (1990), Max Hastings's *Overlord* (1984), and John Ellis' *Brute Force* (1990).
- 7 Mansoor, *The GI Offensive in Europe*, p. 6.
- 8 Mansoor, *The GI Offensive in Europe*, pp. 6-7.
- 9 Mansoor, *The GI Offensive in Europe*, p. 7.
- 10 Weigley, *Eisenhower's Lieutenants*, pp. 729-730.
- 11 Martin van Creveld, *Fighting Power: German and U.S. Army Performance, 1939-1945*, (Westport: Connecticut: Greenwood Press, 1982), pp. 4, 33, 79, 168.
- 12 Brown, *Draftee Division*; John Sloan Brown, "Colonel Trevor N. Dupuy and the Mythos of Wehrmacht Superiority: A Reconsideration," *Military Affairs*, January 1986, pp. 16-20; and John Sloan Brown, "The Wehrmacht Mythos Revisited: A Challenge for Colonel Trevor N. Dupuy," *Military Affairs*, July 1987, pp. 146-147.
- 13 Brown, *Draftee Division*, pp. 174-175.
- 14 Brown, "Colonel Trevor N. Dupuy and the Mythos of Wehrmacht Superiority," pp. 16-20.
- 15 Brown, "Colonel Trevor N. Dupuy and the Mythos of Wehrmacht Superiority," p. 20.
- 16 Brown, "Colonel Trevor N. Dupuy and the Mythos of Wehrmacht Superiority," pp. 17-19.
- 17 Brown, "Colonel Trevor N. Dupuy and the Mythos of Wehrmacht Superiority," pp. 17-19.
- 18 Brown, *Draftee Division*, pp. 174-175.

19 Major Brown was promoted to Brigadier General. From 1998 to 2004, he was the commander of the US Army's Center for Military History.

20 To put development of the US Army's combat power in perspective, German rearmament began in 1933 with Hitler's ascension to power. Despite the extraordinary devotion of national resources and the excellent base of cadre from the Reichswehr, the Wehrmacht as late as 1938 was still not ready for war. Conversely, the United States did not begin its rearmament until July 1940. In just over two years, the Americans began deploying divisions for combat in North Africa and the Pacific, and by 1944 it had fielded most of its 90-division force at distances greatly in excess required of European armies. (Sources: Williamson Murray, *The Change in the European Balance of Power, 1938-1939: The Path to Ruin*, (Princeton, NJ: Princeton University Press, 1984), p. 219; and Mansoor, *The GI Offensive in Europe*, p. 13.)

21 Brown, *Draftee Division*, pp. 2, 10-11.

22 Mansoor, *The GI Offensive in Europe*, p. 8.

23 Colonel T.N. Dupuy, "Mythos or Verity? The Quantified Judgement Model and German Combat Effectiveness," *Military Affairs*, October 1986, pp. 204-210.

24 Dupuy, "Mythos or Verity," p. 209.

25 John Sloan Brown, "The Wehrmacht Mythos Revisited: A Challenge for Colonel Trevor N. Dupuy," *Military Affairs*, July 1987, pp. 146-147.

26 Brown, "The Wehrmacht Mythos Revisited," pp. 146-147.

27 Colonel Trevor N. Dupuy, "A Response to 'The Wehrmacht Mythos Revisited,'" *Military Affairs*, October 1987, pp. 196-197.

28 Dupuy, "A Response to 'The Wehrmacht Mythos Revisited'" pp. 196-197.

29 Mansoor, *The GI Offensive in Europe*, pp. 8-9.

30 Mansoor, *The GI Offensive in Europe*, p. 6.

31 Williamson Murray and Allan R. Millet, editors, *Military Effectiveness, Volume 3: The Second World War*, (London: Allen & Unwin, 1988), p. 78.

32 *Military Effectiveness Volume 3*, p. 83.

**Clemens Slide Addendum:
Applying the Scholarship on the Interpretation of US Army
Performance in World War Two to Current Operations**

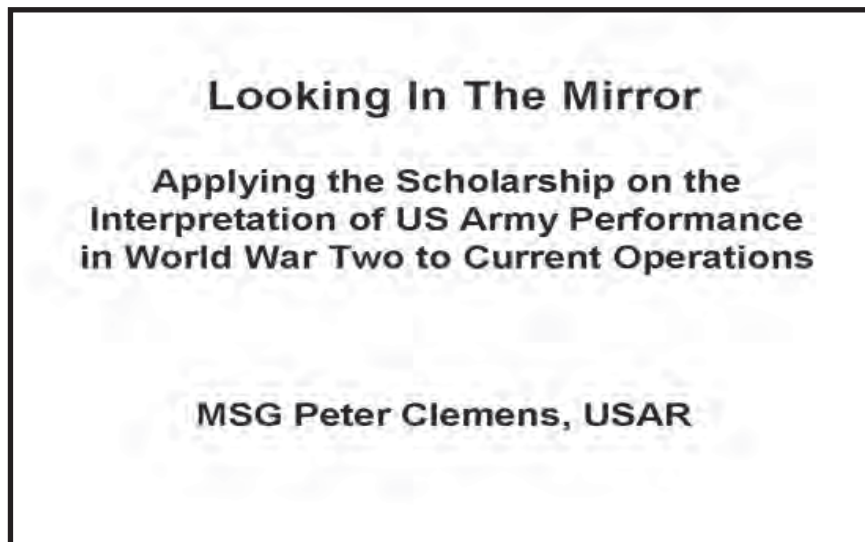


Figure 1

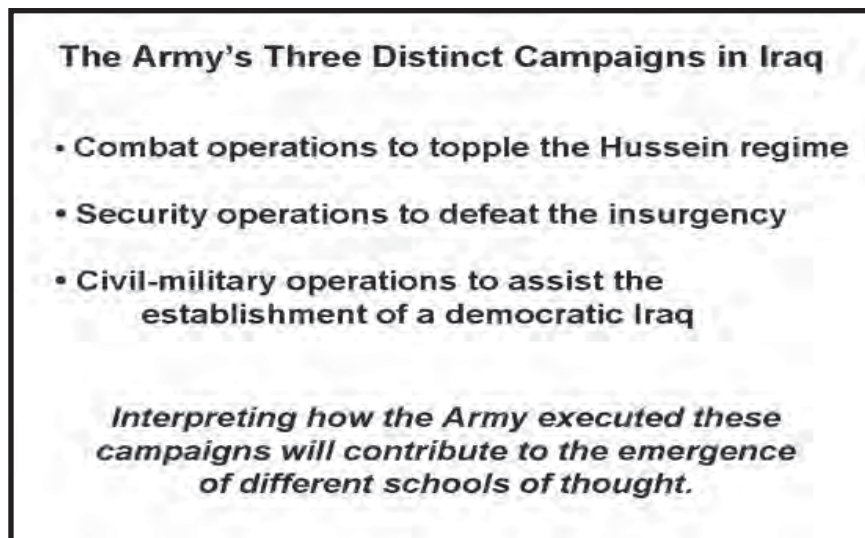


Figure 2

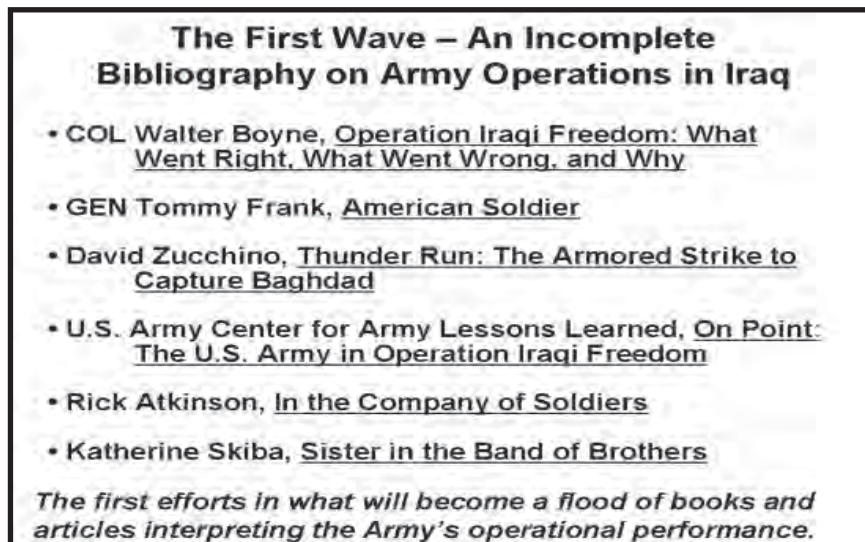


Figure 3

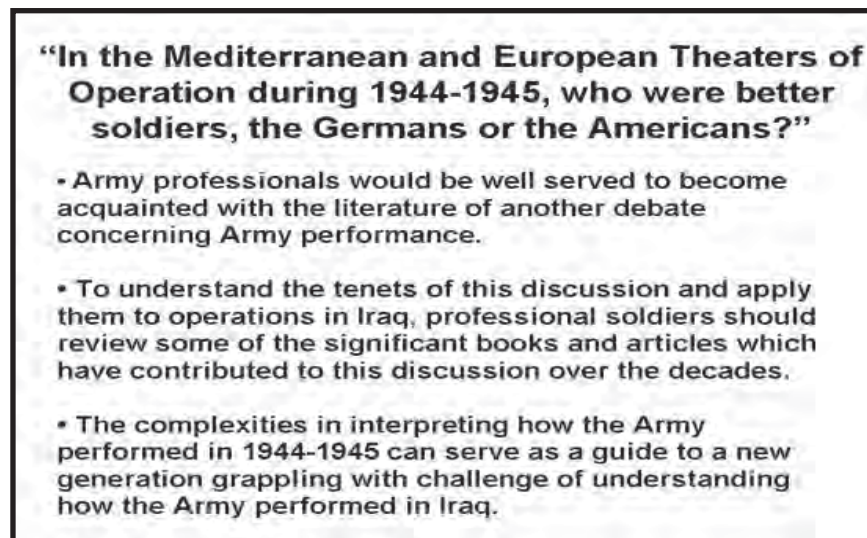


Figure 4

Interpretation of the US Army's performance against the Wehrmacht remains controversial.

- At the war's close many positive histories appeared on the US Army's performance. These works, generally short on documentation, lacked academic rigor and balance.
- The decline of the US Army's reputation vis-à-vis the Wehrmacht began early. Degradation of the US Army's performance and the inflated image of the Wehrmacht was "complex in origin."
 - German martial prowess, tactical superiority, and better battlefield performance versus all their adversaries.
 - German defeat was explained away by the brute strength of overwhelming Allied numbers and materiel, and Hitler's idiotic decision-making.

Figure 5

Important Books of the Wehrmacht Superiority School of Thought

- Liddell Hart, [The German Generals Speak](#)
- Colonel S.L.A. Marshall, [Men Against Fire](#)
- Trevor Dupuy, [Numbers, Predictions, and War](#)
- Russell Weigley, [Eisenhower's Lieutenants](#)
- Martin van Creveld, [Fighting Power](#)
- John Keegan, [The Second World War](#)
- Max Hastings, [Overlord](#)
- John Ellis, [Brute Force](#)

Figure 6

Wehrmacht Superiority Reconsidered – Important Books and Articles

- John Sloan Brown, "Colonel Trevor N. Dupuy and the Mythos of Wehrmacht Superiority: A Reconsideration," in Military Affairs
- Williamson Murray and Allan Millet, Military Effectiveness
- John Sloan Brown, Draftee Division
- Joseph Balkoski, Beyond the Beachhead
- Michael Doubler, Closing With the Enemy
- Keith Bonn, When the Odds Were Even
- Richard Overy, Why The Allies Won
- Peter Mansoor, The GI Offensive in Europe
- Robert Rush, Hell in Hürtgen Forest
- Rick Atkinson, An Army at Dawn

Figure 7

A Mirror on Army Operations in Iraq?

- Military professionals now face many of the same challenges in understanding how well the Army executed its multiple campaigns in Iraq as did their predecessors in interpreting how the Army performed in the MTO/ETO.
- As literature on the current conflict emerges, Army professionals must be intellectually equipped to critically review what is being published and the conflicting interpretations they present.

Figure 8

DOCTRINE IN THE POST-VIETNAM ERA: CRISIS OF CONFIDENCE

Christina Madsen Fishback

“I think it is so important to improve the quality of what we are doing by a magnum jump...I want to really leave in your mind a mission of doing it better...of establishing standards and enforcing them, of making people do it again if they are wrong...we will contribute and save lives and have a better Army and it will take years for this to percolate all the way...believe what you are doing, don't believe what I say.”¹

On June 7, 1973, Lieutenant General William DePuy stood before soldiers at a briefing he delivered at Fort Polk, Louisiana prior to his appointment as the commander of the Training and Doctrine Analysis Command (TRADOC). He talked at length about the state of affairs within the army and discussed his mission as the new TRADOC commander charged with reorganizing the Army in the post-Vietnam era. DePuy's tenure at TRADOC lasted from 1973 to 1977. DePuy exited gracefully with a legacy earning himself a place as one of the most influential military figures of the 20th Century.

The 1976 Field Manual 100-5, Operations became the point of reference of DePuy's career legacy. Doctrine, in DePuy's mind was what provided the “blueprint” that directed forces in battle.² DePuy came to believe that doctrine had the most significant impact on the way the Army would fight in war. DePuy believed that the Joint Chiefs of Staff or the Office of the Secretary of Defense ought not to be involved in the business of writing doctrine. Far removed from the actual fighting forces the JCS and OSD, according to DePuy, should allow those doing the fighting to write the doctrine themselves. DePuy proved less visionary when he conceptualized the intellectual development of the officer. He viewed moral and intellectual skills as a desired *supplement* to adequate training to command, but not as a necessity.

DePuy's legacy is apparent in today's Army. Although DePuy is portrayed by scholars of the period as being rigid in his approach to writing a new doctrine, it is important to remember the feeling and attitudes of the Army at the time as well as the spirit DePuy brought to rebuilding the Army was through a new vision.

In this paper, I intend to discuss the influence that this doctrine and the response to it had in the post-Vietnam Army. Specifically, the shift of doctrine to a conventional paradigm breathed new intellectual life into an institution in crisis. Secondly, I will discuss how the shift toward conventional doctrine after Vietnam came about and address current scholars' criticism that those who wrote and

conceived doctrine in the years after Vietnam did not have the foresight to face the Army's fear of unconventional war. Regardless of criticisms, this was a very positive and inward looking time for the Army. Finally, I will discuss the implications for the current Army. While examining the period after the Vietnam War, I will refrain from making any comparison between the two conflicts, but see them as connected through the legacy of the doctrine of the post-Vietnam era. The will that propelled the Army to rebuild after the Vietnam War is being tested once again, and the question of how, and if, the Army's doctrine is serving the Army's interests is being raised yet again. Is the Army capable of being more flexible and finally facing the demons of its past?

At the end of the Vietnam War, the United States Army stood on the brink of a major organizational change. This change ushered in a new era for the Army and resuscitated a force hollowed by a near decade of combat in the jungles of Vietnam. There began a shift within the Army to reform and rebuild the organization, doctrine being one of the starting points. Doctrine became crucial in the 20th Century American Army because of the "authoritative fundamental principles by which military forces guide their actions...when well conceived and clearly articulated, doctrine can instill confidence throughout and army."³ Newer and more lethal technology and equipment placed stronger emphasis on exploiting the best way to train with and employ weaponry. A new doctrine would infuse life into the Army's new mission statement.

The Vietnam conflict officially ended in 1975, but the withdrawal of troops began much earlier. The negative fallout from the conflict already had a crippling effect on the post-Vietnam Army. Repeated stories of fraggings, illicit drug use, atrocities such as My Lai, and the American public's loss of faith in the military tarnished the Army's image after Vietnam. The Army desperately needed release from the shadows of the conflict. The answer came in the resuscitation of traditionally held notions of honor, professionalism and discipline. Because of the all-volunteer Army in 1973, senior leaders felt it was paramount to lure the most skilled and principled candidates. The Army ultimately wanted to package a philosophy appealing to thoughtful and determined young citizens who would adopt the profession of arms. The package that the philosophy came in was a new revitalized doctrine.

The United States Training and Doctrine Command (TRADOC) became the agency that gave direction to the Army for all matters concerning doctrine. TRADOC was born on 1 July 1973, commanded by General William DePuy, at Fort Monroe, Virginia. "Men come and go, weapons change, but doctrine is constant."⁴ DePuy believed that doctrine united forces into a strong, organized and synchronized Army. Doctrine was the linchpin of the new Army vision, at least in DePuy's mind. TRADOC existed to develop and oversee programs of training

reform; weapon, equipment and force modernization, and doctrine revision.⁵ An organizational movement in the Army known as STEADFAST in 1973 broke essential Army commands into different sub-command groups in an effort to avoid micro-management and in-fighting that occurred within the command structures during the previous decade. The restructuring helped to isolate duties and talents of commanders who best suited the positions. It also represented a psychological house cleaning after the Vietnam War, experimenting with the hope that efficiency and a well-ordered Army would produce much needed results.

At the helm of the reform movement was General Creighton W. Abrams and his Assistant Vice Chief of Staff Lieutenant General DePuy. The reorganization established that command of TRADOC involved the designation of a four-star general to command the new bureaucratic body, focusing on training, teaching and developing doctrine in the Army.⁶ Under TRADOC's command umbrella were the Army's training centers for basic courses, intermediate-level centers, the Army's branch schools, specialist schools, military schools and colleges, Army ROTC, and analytical and war gaming activities.⁷ DePuy took command of the newly formed TRADOC in 1973 emphasizing the need to be better prepared to fight and win the next war.

DePuy outlined his vision long before he took command of TRADOC, steadfastly advocating a trinity of goals he felt necessary to achieve the aggressive, lethal force he desired to see in the Army. Research and development; organization, training and education; and doctrine represented the most important aspects of DePuy's vision of the essentials to bring about a modern Army. FM 100-5 held significance, not only because it immediately revolutionized the Army, but also because it set the minds of officers ablaze with the possibilities that new doctrine brought—or didn't bring.

A key factor that shaped the new conception of doctrine was the Arab–Israeli conflict. The Israeli conflict signaled a return to large-scale conventional warfare. The service journals following the Arab-Israeli War in 1973 showed a surge in critical analyses of the war and its implications for the American Army appeared in publications such as *Parameters*, *Army*, and *Military Review*.

On the development side of the house, DePuy spearheaded the expansion of technology in the armor and aviation branches. After the Arab–Israeli War, the lethality of weapons and the high levels of firepower revolutionized technology. The Army searched for new, more lethal battle helicopters that complimented armor and infantry in battle. The Black Hawk and Apache attack helicopters spent the 1970s in development due in large part to the urgings of DePuy. The armor branch also experienced a revitalization of technology. Some of the heavy tanks that emerged in the 1970s carried the Abrams name: the M1 and the M2 and M3 Bradley fighting vehicles.⁸ These technologies developed with the concept of a

smaller, more lethal force capable of overcoming superiority in numbers with superiority in technology and materiel. With new equipment and technology came new ways of fighting and new ways of training.

DePuy emphasized more than anything else in his early years as commander of TRADOC the importance of training. One of his proteges, Donn A. Starry, an armor commander, discussed with DePuy the necessity of cooperation between armor and infantry troops. DePuy was Starry's superior and many traditional infantry officers criticized DePuy for being Starry's disciple. DePuy, however, appreciated the concept of a mobile infantry force that had the addition of armor. Mechanized infantry benefited from both increased protection along with a higher degree of flexibility and mobility. His foresight in this arena has lasted to this day in mechanized infantry units.

In order for infantry and armor units to gain the most out of training, respective branch schools existed already in 1973. DePuy wanted to refocus the schools, emphasizing the training of young armor officers to become familiar with the work each member of a unit did on the tanks and equipment used. He believed the training of armor officers to be inadequate. DePuy observed the training young officers received prior to their taking command of a platoon or company. At the officer basic course, they were being trained to be company commanders before taking a platoon leaders position; and at the advanced course, officers were being taught to command battalions instead of commanding companies. DePuy believed in training officers for what they were preparing to do, not for jobs they would not take until later in their careers.⁹ He stood by the conviction that training officers and soldiers alike ought to get the "most out of the mechanisms they have inherited."¹⁰ DePuy saw the Army as having functioning parts, and each part had a manual much like buying a "lawn mower and you get a little booklet that tells you how to put it together and how to operate the thing."¹¹ To reduce command to following basic rules and principles set forth in a universally used manual seemed to him an ingenious concept.

DePuy decided to write and act as editor of the doctrine within his first couple of years as TRADOC commander and expedited the process by making deadlines. He remained an active participant in the writing of the manual at every step of the way. DePuy and Starry had been successful in bending the ears of a majority of commanders who endorsed the new changes in doctrine. To write the new doctrine, DePuy consulted the Combined Arms Center (CAC) at Fort Leavenworth Kansas. DePuy approved the selection of Major General John H. Cushman as commander CAC. Several students at the Command and General Staff College were asked by Cushman to participate in discussions about the new doctrine. Cushman and DePuy expressed different ideas about how best to foster the creative process. Cushman believed in allowing more freedom for creative

momentum while DePuy thought that the officers writing doctrine ought to be kept under his own tight supervision.¹²

The work done on doctrine at this critical juncture produced two schools of thought: the DePuy school, and the Cushman school. The DePuy school “held that the institutional purposes of doctrine were as important as its substance and that doctrine should therefore be simple, clear and specific.”¹³ The Cushman school on the other hand, stated that the “substance of the doctrine was more important than its institutional purposes...doctrine’s only requirement was that it ‘stand the test of actual combat.’”¹⁴

The lively debates among the schools of thought did not hamper DePuy’s vision of what he wanted the doctrine to be in the end. Cushman’s manual was never published. DePuy desired a break with the past and saw Cushman’s manual as one that resembled the boring presentation and language of the older field manuals. DePuy was determined to dazzle with bold and crisp words to articulate the new doctrine. DePuy showed displeasure with the outcomes of the Leavenworth written manual and urged a rewrite. When Cushman emphasized the difficulties of drafting a new manual and disagreed on fundamental issues such as how the doctrine should function, DePuy opted to write an outline himself and enlist the help of other general officers, most specifically Starry.¹⁵ In 1976, the publication of the doctrine manual generated both negative and positive reactions from military leaders and thinkers.

The final product of FM 100-5 reflected the lessons observed from the 1973 Arab–Israeli War. The doctrine emphasized the substitution of firepower over manpower in the event that a force was outnumbered, joint operations with the Air Force, and integration of new weapons systems and technology.¹⁶ Active defense provided supreme mobility and maneuverability to concentrate efforts.¹⁷ Beyond all else, the manual recognized the “new lethality” of the battlefield.¹⁸

The Army’s strategic outlook was clear in the manual—that the Army should be prepared to fight and win in the initial stages of battle or be defeated.

...the first battle of our next war could be its last battle...This circumstance is unprecedented: We are an Army historically unprepared for its first battle. We are accustomed to victory wrought with the weight of materiel and population brought to bear after the onset of hostilities. Today the US Army must above all else, *prepare to win the first battle of the next war.*¹⁹

Many within the Army had trouble with the tactical aspects emphasized. The new doctrine fueled an intense debate after publication. Critics complained that the Active Defense did not take into account that the mobility and maneuverabil-

ity were limited by what was known of Soviet tactics at the time.²⁰ Additionally, the doctrine did not acknowledge the problem that nuclear capabilities would pose. The doctrine was a “radical departure from the Army’s operational tradition, but [sic] underestimated the key elements of depth, maneuver and initiative, and it paid insufficient attention to the human element in battle.”²¹ The doctrine put a premium on the “new lethality” as well as new technology, emphasizing it over the importance of the soldier. These omissions, perceived by many as gross deficits, prompted a movement to revise the doctrine. Even Starry admitted that the doctrine was lacking in many areas and committed to revising the doctrine for its next incarnation in 1982. The 1982 manual gave the forward motion back to the field commander who at all times worked in concert with other branches to exact the most favorable outcome in battle.

With a transfer of military and international focus to the European theater and toward the Soviet threat at large, the Army wanted to create a force that would be more precise in maneuverability and technology superior to counter a potentially much larger force. While the United States Army fought in Vietnam, the Soviet Army rapidly surpassed the U.S. in numbers and weapons, developing a much larger and menacing force. The fighting and equipping of the Vietnam War sapped resources and left the Army crippled in the aftermath. The United States Army needed to be faster, leaner and more cunning to win over a force that had a decisive advantage in numbers.

The United States Army’s development of conventional doctrine should have come as no surprise therefore in response to the potential Soviet military prowess. There are lingering questions, however, over why the Army was so eager to shift focus to a conventional battlefield. Several historians have raised arguments about how the Army, in an attempt to revive its past glory, desired a return to the kind of operations it was comfortable training for and fighting in, therefore the Army quickly shifted focus to the Soviet Union after years fighting an elusive enemy in the jungles of Vietnam preferring instead the open land armored warfare against Soviet heavy, conventional forces.²² Some scholars alleged that the U.S. doctrinal shift toward conventional scenarios was a way of “erecting barriers to avoid fighting another Vietnam War.”²³ Soviet forces, most importantly, represented worthy adversaries—easier to find, fix, and at the very least, attack in the open. The return to a conventional focus provided a respite from the struggles of the Vietnam War and its aftermath. The return to “the cradle of orthodoxy” provided an opportunity to escape the nightmares of Vietnam.²⁴

Career officers who stayed in the Army after combat tours in Vietnam acknowledged the challenges that faced them in the years ahead. Scholars of the period believed that rebuilding the Army would require “candid self-appraisal.”²⁵ The rebuilding of the Army had to come from within its own ranks. Colin Powell

said of the Army in the year 1973 during the transition to the all-volunteer force, “As we dragged ourselves home from Vietnam, the nation turned its back on the military.”²⁶ He recalls his time from 1973-1974 as a battalion commander in the 2nd Infantry Division in Korea, “we were moving from the old Army to the new, from draftees and enlistees to an all-volunteer force...It was the end of the hard-drinking, hell-raising, all-male culture in which I had grown up.”²⁷ Change in the Army did not just begin with doctrine, but left impressions upon the Army culture itself. There were doubts within the profession itself about how the Army conducted the war. General Bruce Palmer conceded that the United States wrongly believed that “Yankee ingenuity, industrial military might, modern military organization, tactics and techniques, and a tradition of crisis solving in war would surely bring success in Vietnam,” and furthermore within the Army that leaders suffered from the “can-do syndrome” when rationalizing how to overcome handicaps imposed on them by having to fight within territorial boundaries of South Vietnam.²⁸ More tellingly, Palmer refers to the way in which the Army in Vietnam was forced to fight a “passive strategic defense.”²⁹ The new 1976 doctrine heralded the return of the offensive. The debate over doctrine furthermore was a way that the officers within the Army closed ranks to fight for the survival of culture and professionalism in the years after the devastating effects of Vietnam.

An event that further encouraged the return to conventional doctrine resulted from the Arab–Israeli conflict in 1973. The United States Army learned from the war, as did the Israelis, that military might and perceived superiority alone never guaranteed victory.³⁰ Superior numbers and better weapons bought from the Soviets instead gave the advantage to the Arabs, who possessed less well-trained forces.³¹ The war exposed the flaws in the Israeli military approach and served as a wake up call for the United States Army, which relied heavily upon doctrine emphasizing light infantry and airmobile operations.

The doctrine born in the aftermath of the Arab–Israeli War “Active Defense” was the brainchild of William DePuy. Field Manual (FM) 100-5 was the capstone manual of the Army, from which all other manuals would follow.³² The last revision of the document had occurred during the Vietnam conflict in 1968. To many in the Army, the doctrine in the early to mid 1970s was highly outmoded. The doctrine conceived in 1976 and 1982 emphasized a combined arms effort with use of mechanized infantry, armor, electronic warfare and air support in cooperation to pursue a coordinated plan of attack. By the 1980s, this doctrine became obsolete yet again because the Army militarily caught up with the rest of the world, even overcompensating for technological inferiorities that existed in the post-Vietnam years.³³ The years required to build the kind of lethal Army that emerged in the 1980s proved a time of blossoming confidence and burgeoning talent in the form of young and old officers alike poised to create and debate the doctrine of the future.

Low Intensity Conflict (LIC) has been the most prevalent form of warfare since 1945, despite the perception in the late 1970s and early 1980s that the international climate leaned toward a conventional battle in Eastern Europe.³⁴ Recent scholars have criticized the US Army's inability to adapt to the growing threat of unconventional threats and view it as a military culture that has frozen in an antiquated cultural mindset. Indictments of the modern US Army have come from active duty personnel, retired officers and civilian military scholars in the years after Vietnam. In opposition to the lessons of a long protracted war, some Army officers still believed in the years following the Vietnam War that superior firepower and numbers gave a decisive edge despite setbacks in Vietnam.³⁵ American military culture in the post-Vietnam era continued to center on the use of quick and decisive force.

It is helpful to examine some trends in British military culture around the same time because of their open discussions of lessons learned from low intensity conflicts. British military officer Frank Kitson wrote *Low Intensity Operations: Subversion, Insurgency, Peacekeeping* in 1971, while the American Army fought in Southeast Asia. The American Army did not take to heart the wisdom British advisors offered to them in the early advisory stages of the Vietnam War that they had gained during operations in Malaya and Kenya. Kitson discusses the British approach to insurgency "the best weapon is a keen, sharp mind...requiring quick responses, not overwhelming firepower" that at all times to be "ahead of the game or at the very least thinking of the next step."³⁶ The British Army placed heavy emphasis on the political aspects of an insurgency, to exhaust all of the possibilities before having to apply the use of decisive military force. Kitson's work is visionary in the field of LIC. One of the greatest errors Kitson sees in the American conduct of LIC is making the mistake of preparing for the "next or last war" because in order to do so, it requires that the military erase "centuries of conditioning."³⁷ If in fact the American Army was culturally predisposed to the conventional war paradigm did they have the ability to change in the face of "centuries of conditioning?"

A new debate has emerged within the American Army in recent years. The United States government in the years after Vietnam viewed the Soviet Union as the greatest threat, and the Army took its cue from this and built a force that could defeat a massive Soviet Army on the plains of Western Europe. American society and the United States government were eager to forget or bury the Vietnam experience in the years following the conflict. The US government tacitly supported the Army's move away from counterinsurgency operations, or any conflict resembling Vietnam both through inaction and through looking the other way while providing the funds for a new force structured to fight conventional forces. While the military looked like it was gearing up for the next big conventional invasion, it also looked as though the American Army was eager to

get back to the kind of wars it was comfortable winning in its past, and culturally what they were most comfortable with. The conventional mindset emphasizes what the American Army believes about itself as an organization with desire for direct and decisive action strategically and tactically, also highlighting the importance that decisiveness plays in the cultivation of the warrior ethos.

Two recent works by active duty American Army personnel provide possible answers to the question of how an army might overcome a rigid institutional memory and culture. An examination of the military culture is the first step taken in both John Nagl and Robert Cassidy's works on doctrine in the US Army concerning low intensity conflicts. Borrowing a phrase from Thomas Edward Lawrence, Nagl describes the difficult process of adapting to insurgency tactics as "learning to eat soup with a knife."³⁸ Nagl asserts that the American Army's rigidity to adapt their strategic mindset led to tactical losses in Vietnam and the inability to incorporate new lessons after the conflict. Describing the American Army, Nagl examines the American way of war with four significant components: the perception by the United States of being either at war or at peace or an inability to understand limited war, the reliance on technology, faith in the United States as being morally right, and an aversion to unconventional war.³⁹ Suggestions offered by Nagl to change the mindset in the American Army include education and encouraging young officers to think innovatively. The "can do" attitude of American commanders in Vietnam exposed the lack of "healthy skepticism" needed to make positive changes.⁴⁰

Cultural resistance has been a topic in other recent significant works on American military culture. Cassidy's *Peacekeeping in the Abyss: British and American Peacekeeping Doctrine and Practice after the Cold War*, is a superb analysis of the divergence (and recent convergence) in doctrine between the British and American armies in the post Cold War era. The biggest concern referenced when discussing the similarities between the two cultures is the dilemma of how to maintain an army for imperial policing while also having one for conventional war.⁴¹ The British military emerges from the comparison as more capable of maintaining this strategic balance. The American Army at the end of the Cold War era created an army that was not agile in the conduct of wars other than the conventional type.⁴² The United States Army clung to a conventional war paradigm.

To explore the reasoning behind the emphasis on conventional war, Cassidy defined doctrine as a military's *institutional memory*. Doctrine as institutional memory opens an area for debate over whether the Army has any real control over how it presents its desires or if it is merely reflecting what it *believes* to be the best of its abilities. Military doctrine is an institution's memory and reflects the triumphs of its history. This is at all turns infused with the warrior ethos.⁴³

Doctrine's function is to take the best of what an Army already possesses and incorporate those strengths into a vision of the future. Doctrine's function and utility in the United States Army is not always clear to those who fight and soldier in the Army. The "muddy boots" soldier sees little need for doctrine while the thinking soldier craves to dissect and discuss it. Is it a functional manual adhered to rigidly, or is it theory that is to be widely interpreted in a flexible manner by the commander in the field? Much of the doctrine, specifically post-Vietnam era doctrine, is a relic of memory—of what the Army remembers itself to have been in the past, and furthermore much less as a vision of what the future might hold. What is the significance when discussing the post-Vietnam era? Doctrine written in the post-Vietnam Army era excluded the Vietnam experience of fighting an unconventional war and revived a vision of an army prepared to fight a conventional army.

Locating the significance of the doctrinal shift in the post-Vietnam era requires a look at studies of history and memory. The doctrine represented a consensus among those within the Army about how the Army was to take shape, also how it wanted to view itself in the years to come. The past glory of an Army that fought valiantly in the conventional was being channeled to revitalize flagging confidence within the Army because "there is a magic about memory that is appealing because it conveys a sense of the past coming alive once more."⁴⁴

For an Army that had suffered a loss of a cultural identity over the years during the Vietnam conflict, the desire to resurrect the past was understandable. Using the work of French sociologist Maurice Halbwachs and examining collective memory, there is "considerable resistance on the part of those immersed within a tradition to accepting the reality of...transformation...the defenders of a tradition, therefore, are likely to buttress its places of memory."⁴⁵ In other words, the doctrine revitalized past glory and provided the vehicle for the institutions own memory—what it believed to be the best of what it had before the Vietnam War ravaged it.⁴⁶

Once again, the paradigm has shifted to the unconventional battlefield and old wounds are re-opened. The American soldier has traditionally been viewed as apolitical, therefore it is easy to imagine why the American soldier and furthermore the Army proper is uncomfortable fighting in Low Intensity Conflict (LIC). The soldier in LIC is concerned with the changing political face of the environment he is in on a *daily* basis. The insurgent is fought against in the abstract, the main target is an ideology, not necessarily the insurgent himself, but the population. American civil-military relations dictate that in order to gain objective civilian control over the military, the military must be politically sterile and neutral.⁴⁷ With LIC, the reality is that the soldier is required to possess a higher degree of military and political savvy.

Additionally, the diversity of conditions with LIC makes it difficult to discuss theory or doctrine that is static and recyclable. The conditions under which LIC take place differ each time they occur. Clausewitz discussed theory and its military application

Theory exists so that one need not start afresh each time sorting out the material and plowing through it, but will find it ready to hand and in good order. It is meant to educate the mind of the future commander, or, more accurately, to guide him in his self-education, not to accompany him to the battlefield⁴⁸

This highlights important issues in the application of theory in low intensity conflict. Because the reasons and conditions for a conflict are fluid, the frustration of studying the war means that one must start over each time a conflict comes along. It is of supreme importance for officers and advisors to be familiar with writings by other authors on the subject of LIC. Curriculum at officer staff colleges must train in classic military thought, but also in works that are relevant to current threats.

A recent story in the American press highlighted the absence of working doctrine for the war in Iraq and the reaction of the American military. While Clausewitz states that wisdom and self-education are only to accompany the soldier on the battlefield, the common soldier is desperate for doctrine, not necessarily theory. Soldiers bound for Iraq and Afghanistan stuffed dog-eared copies of the 1940s Marine Corps *Small Wars Manual* into their packs, evidencing a thirst for doctrine and guidance. The manual discusses how to conduct a cordon and search, the social and psychological aspects of small wars, and the not as helpful sections on the care and feeding of pack mules.⁴⁹ Doctrine is not a crutch in the modern American military but represents institutional memory.⁵⁰ It is one of few options available to the American soldier on how to fight LIC.

The Marine Corps *Small Wars Manual* acknowledges the diversity of conditions that comprise LIC, and the ability to adapt to situations—to be flexible while maintaining the internal structure of military units is paramount to operations.⁵¹ Even more complex in modern conflicts is the enemy's ability to intimately know and exploit an army's weakness. An Indonesian commander who experienced guerrilla war as both as an insurgent commander and later as a counterinsurgent commander offers advice in fighting small wars. Abdul Harris Nasution states that using guerrilla tactics against a larger, well-equipped army is the only defense of a small nation not as well equipped, to counter a large, modern force. Nasution implies that guerrilla war itself does not bring victory, but the guerrilla drains enemy resources and emotional resolve. Furthermore, necessary for *total* victory is an equally formidable conventional force.⁵² Nasution believes

that guerrillas should be fought with the same ferocity with which they fight. This raises contemporary questions about operations in both Vietnam and Iraq. There may be strong local insurgent leaders, but not a strong national sense. Not all of the people fighting are supportive of the insurgents' perspective. This makes the soldier's job much more difficult as he must learn to differentiate between who is an enemy and who is not.

A soldier's business is not simply the application of violence, but being able to mold to fit the conflict. A military must be prepared to handle conflicts large and small. The term "thinking outside the box" with respect to the operations in Iraq has inspired a legion of American military officers to write about and urge other military personnel to embrace change in the years ahead. According to a recent RAND study, two camps have emerged in the American civil-military structure. The question over the future direction of the US military created a traditionalist and reformer group.⁵³ The traditionalists, as might be guessed, want the status quo to remain, albeit with evolutionary change, slowly incorporating technological and tactical lessons. The reformer group wants drastic and immediate change in military structure and strategy.⁵⁴

Those directly involved with the military have not met the idea of change in the American military with open arms. A recent study found that American military personnel at the higher levels were more enthusiastic than were junior officers.⁵⁵ Military officers are the acknowledged experts in their field and are expected to take the lead in any innovation in military affairs. Difficulties with getting officers to think innovatively are due largely to the trouble of removing themselves from, or thinking objectively about, the culture in which they exist. A retired US Army officer recently commented on the nature of military reform implying that consensus when leaders share a "common cultural bias" helps to generate more fruitful debate to decide which options are more viable than others are.⁵⁶ On the other hand, however, a cultural bias also means that there will be less openness to ideas that are too far outside the parameters of what the group is comfortable with.

Many different factors shape whether or not a military officer is open to innovation as there are different cultures within each branch of the American military. The Air Force stresses the importance of technology and the Army and Marines stress the human element of combat.⁵⁷ When considering career experience, such as combat, time in service, rank, it is understandable why it is difficult to expect an officer corps to come to a consensus on the best approach to transformation and innovation of a particular branch of the military. Further complicating matters is that to acknowledge a need to shift to the unconventional mindset would render most armor and heavy artillery obsolete. There is a crisis looming in these respective branches if faced with the dramatic changes that are necessary. Both

the armor and artillery branches will face challenges to their self-identity and internal resistance if their way of life is threatened. One observer insists that the loss of a self-image occurs in these branches if it comes from the outside, from fighting a conflict, and will be more traumatic than if the change were to be generated from within the branches themselves.⁵⁸

A significant aspect of this dilemma is that the Army is so completely subservient to the civilian government that it takes the lead from them. Leadership is lacking yet boldness and aggressiveness are discouraged in today's Army. When writing doctrine, operations are shaped upon how the Army views the enemy's fighting capabilities. This causes a dilemma on a large scale when the Army has an inadequate picture of how and where the next conflict will be fought, and can only look at worldwide trends. It is impossible to foresee what size force might the American Army face in the next twenty or thirty years—it is an abstraction. The conventional force built in the 1980s and 90s allowed the Army to rapidly achieve initial successes in Afghanistan and Iraq. It was the fault of the government and planners at the highest level who failed to anticipate and resource the next phase of those conflicts—counterinsurgency operations.

Scholarship in the area of the new and challenging mission for the military confounds those who write about it because it is too soon to know how new doctrine and tactics in LIC will play out in the larger strategic environment with regard to operations in Iraq. The current international environment and the war in Iraq will add volumes to the already growing literature on Western approaches to LIC.

The constantly changing mission of the soldier reflects the shifting threats of national and international security. The frenetic rate of acceleration in military operations in the last few years appeared to knock one of the world's strongest military off its feet. The "revolution" in military affairs has been occurring for years, but being a world at war demands that it pick up the pace. With regard to current trends in transformation, before the most recent counterinsurgency manual was written in October 2004, US Army Chief of Staff General Peter J. Schoomaker introduced the Army's new mission statement, describing the Army at war, entitled "The Way Ahead." The pamphlet recognizes the need to change and adapt, the words "adapt" "balance" "flexible" appear, yet the words "decisive" do also and part of the mission includes to "decisively end conflicts."⁵⁹ The mission statement itself is conflicting. Many Army leaders know that modern conflict will be long and arduous. Yet it appears that the strategic military culture in the US Army clings to the decisive battle and decisive defeat even if it is not attainable in the near future. The answer in "The Way Ahead" is the elusive balance of an ever-ready conventional force as well as a versatile unconventional force. "Our Army will retain the best of its current capabilities and attributes while develop-

ing others that increase relevance and readiness to respond in the current and projected strategic and operational environments.”⁶⁰

The lessons of the post-Vietnam era and the use of doctrine shed light on the importance of leadership in a time of uncertainty in the Army. Even if the 1976 doctrine hit the desks of officers of the time with a resounding clunk, it began a firestorm of intellectual activity and one of the most significant periods in the 20th Century Army. It remains to be seen what the aftermath of the Iraq War will bring for the Army as a culture. It is hoped that the leadership that emerges from the conflict has the will to stand up to the challenge of rebuilding an Army that has suffered through an unpopular war. At the heart of the Army’s cultural identity is leadership and commitment to the profession and the Army rarely suffers a shortage in either. Going back to DePuy’s comments on June 7, 1973 at Fort Polk, for all of the criticisms leveled at him for his rigidity, he says something remarkable to the troops, “believe what you are doing, don’t believe what I say.” This was a rather prophetic statement, as many at this time were listening to their inner voices, of what they believed the future of their own Army to look like. In order for the Army to move forward, to the next conflict, it was necessary for a deeper appreciation of its own voice, its collective voices, and the mistake might have been not to heed the voices of the past. Standing at the gates of a new revolution and paradigm shift in military affairs, will the Army cling to the past or will it speed ahead with the best of what it possesses, and furthermore, be prepared for the difficult task to adapt once more long held beliefs about its own culture?

Notes

- 1 Briefing by LTG DePuy, 7 June 1973 [at Fort Polk, Louisiana]; *Selected Papers of General William E. DePuy*. Compiled by Colonel Richard M. Swain. (Fort Leavenworth, KS: Combat Studies Institute, US Army Command and General Staff College, 1994) 66.
- 2 William DePuy. "Unification: How Much More?" *Army* 11, no. 9 (April 1961) 30-38. *Selected Papers of General William E. DePuy*, 37.
- 3 as quoted in Paul Herbert, *Deciding What Has to Be Done: General William E. DePuy and the 1976 Edition of FM 100-5, Operations* (Fort Leavenworth, KS: Combat Studies Institute, U.S. Army Command and General Staff College, 1988) p. 3.
- 4 DePuy. "Unification: How Much More?", 37.
- 5 Anne Chapman, Carol Lilly, John L. Romjue and Susan Canedy. *Prepare the Army for War: A Historical Overview of the Army Training and Doctrine Command, 1973-1998*. (Fort Monroe, VA: Military History Office, United States Training and Doctrine Command, 1998) 1.
- 6 *Ibid.*, 8.
- 7 *Ibid.*, 8.
- 8 Chapman, 38-40.
- 9 Romie L. Brownlee and William J. Mullen, *Changing an Army: an Oral History of General William E. DePuy, USA Retired* (Carlisle, PA: US Army Military History Institute, 1986), 183.
- 10 *Ibid.*, 186.
- 11 *Ibid.*
- 12 *Ibid.*, 54.
- 13 *Ibid.*
- 14 *Ibid.*, 55.
- 15 *Ibid.*, 59.
- 16 Chapman, 57.
- 17 *Ibid.*
- 18 *Ibid.*
- 19 FM 100-5, *Operations*, 1 July 1976, p. I and 1-1.
- 20 Huba Wass de Czege, and L.D. Holder. "The New FM 100-5." *Military Review* 62 (July 1982): 54.

21 Ibid., 55.

22 There is quite a bit of scholarship in this area, to name some of the most germane to this topic, see the following works: Roger Spiller, "In the Shadow of the Dragon: Doctrine and the US Army After Vietnam." *RUSI Journal*. 142, no. 6 (1997), Andrew F. Krepinevich, *The Army and Vietnam* (Baltimore and London: The Johns Hopkins University Press, 1986), Stephen J. Mariano, *Peacekeepers Attend the Never Again School* (Monterey, Ca.: Naval Post-Graduate School, 1995), Deborah D. Avant, *Political Institutions and Military Change: Lessons from Peripheral Wars* (Ithaca and London: Cornell University Press, 1994).

23 Andrew J. Krepinevich, *The Army and Vietnam* (Baltimore and London: The Johns Hopkins University Press, 1986) 274-275.

24 Roger Spiller, "In the Shadow of the Dragon: Doctrine and the US Army After Vietnam." *RUSI Journal*. 142, no. 6 (1997): 43.

25 Sam C. Sarkesian, *The Professional Army Officer in a Changing Society* (Chicago, Ill.: Nelson-Hall, 1975) 4.

26 Colin Powell with Joseph Perisco, *My American Journey* (NY: Random House, 1995), 175.

27 Powell, 197.

28 Bruce Palmer. *The 25-Year War: America's Military Role in Vietnam* (Lexington, KY: University Press of Kentucky, 1984) 176.

29 Ibid.

30 see Edgar O'Balance, *No Victor, No Vanquished: The Arab-Israeli War, 1973* (Navato, Ca.: Presidio Press, 1978)

31 George Gawrych, *The 1973 Arab-Israeli War: The Albatross of Decisive Victory*. (Fort Leavenworth, KS: Combat Studies Institute, US Army Command and General Staff College, 1996), 79.

32 Herbert.

33 Jonathan House, *Combined Arms Warfare in the Twentieth Century*. (Lawrence, KS: University Press of Kansas, 2001), 240.

34 Ian Beckett, *Modern Insurgencies and Counter-Insurgencies: Guerrillas and their Opponents since 1750*. (London: Routledge, 2001), vii.

35 Harry Summers specifically in his work *On Strategy: A Critical Analysis of the Vietnam War* (Navato, Ca.: Presidio Press, 1982), which after Vietnam became required reading at the U.S. Army War College and for a time Summers taught a capstone course at the War College. Much of Summers' criticism was leveled at the administration for

flawed strategy and the military was credited with attaining tactical successes but seen as having little control over the strategic aims which were dictated by the administration and Department of Defense.

36 Kitson, 131.

37 Ibid., 201.

38 John Nagl. *Counterinsurgency Lessons from Malaya and Vietnam: Learning to Eat Soup with a Knife*. (Westport: Praeger, 2002)

39 Nagl, 43-44. See also Russell F. Weigley. *The American Way of War: A History of United States Military Strategy and Policy* (New York: MacMillan Publishing Co., 1973)

40 Ibid, 132, 202.

41 Cassidy, 45.

42 Ibid., 85.

43 Clifford Geertz defines a people's ethos as the "tone, quality, character of their life, its moral and aesthetic style and mood; it is the underlying attitude toward themselves and their world life reflects." from *The Interpretation of Cultures* (New York: Basic Books, 1973) 126.

44 Patrick Hutton, *History as an Art of Memory* (University Press of New England, 1993), 76.

45 As quoted in Patrick Hutton, *History as an Art of Memory* (University Press of New England, 1993), 79.

46 For a particularly insightful examination of a group of officers known as the "Never-Again School," see Stephen J. Mariano, *Peacekeepers Attend the Never Again School* (Monterey, Ca.: Naval Post-Graduate School, 1995) Thesis. Mariano argues that the Army's avoidance of the limited war paradigm continues to shape Army culture. (p. 7).

47 Samuel Huntington. *The Soldier and the State: The Theory and Politics of Civil-Military Relations*. (Cambridge, Mass.: The Belknap Press of Harvard University Press, 1957), 83-84.

48 Carl von Clausewitz. *On War* Edited and Translated by Michael Howard and Peter Paret. (Princeton, NJ: Princeton University Press, 1976), 141.

49 Greg Jaffe, *Wall Street Journal* "Marines Rediscover a 1940s Manual" <http://www.globalpolicy.org/empire/intervention/2004/0408manual.htm>. August 6, 2004.

50 Cassidy, 26.

51 *Small Wars Manual: United States Marine Corps* (Washington D.C.: G.P.O., 1940)

- 52 Abdul Harris Nasution. *Fundamentals of Guerrilla Warfare*. (New York, NY: Praeger, 1965), 9.
- 53 Glen C. Buchand, *Future Directions in Warfare: Good and Bad Analysis, Dubious Rhetoric, and the "Fog of Peace"* Prepared for: Conference on "Analyzing Conflict: Insights from the Natural and Social Sciences," (UCLA, April 24-26, 2003), 2.
- 54 Ibid.
- 55 Thomas G. Mahnken and James R. FitzSimonds. "Revolutionary Ambivalence: Understanding Officer Attitudes toward Transformation." *International Security* 28.2 (2003); 112-148.
- 56 Huba Wass de Czege. *Military Art and Transformation in the Age of Globalization*. (Draft, unpublished), 2004.
- 57 Ibid, 117.
- 58 Carl Builder *The Masks of War: American Military Styles in Strategy and Analysis* (Baltimore, Md.: The Johns Hopkins University Press, 1989) 189.
- 59 *United States Army: The Way Ahead*. <http://www.army.mil/thewayahead/relevant.html>.
- 60 Ibid.

**Fishback Slide Addendum:
Doctrine in the Post-Vietnam Era**

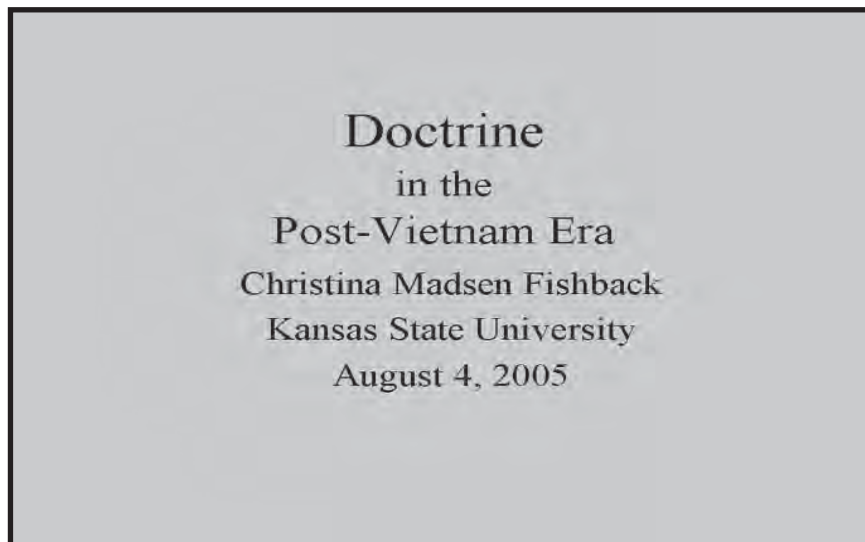


Figure 1

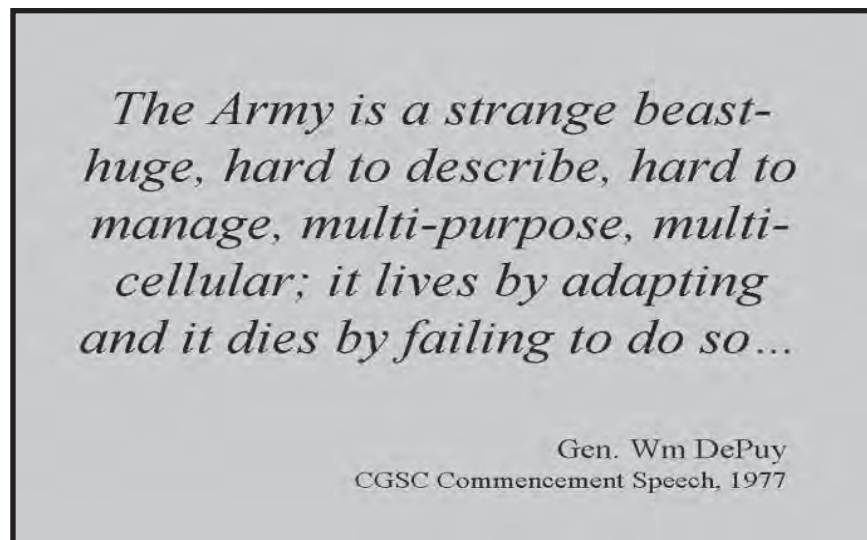


Figure 2

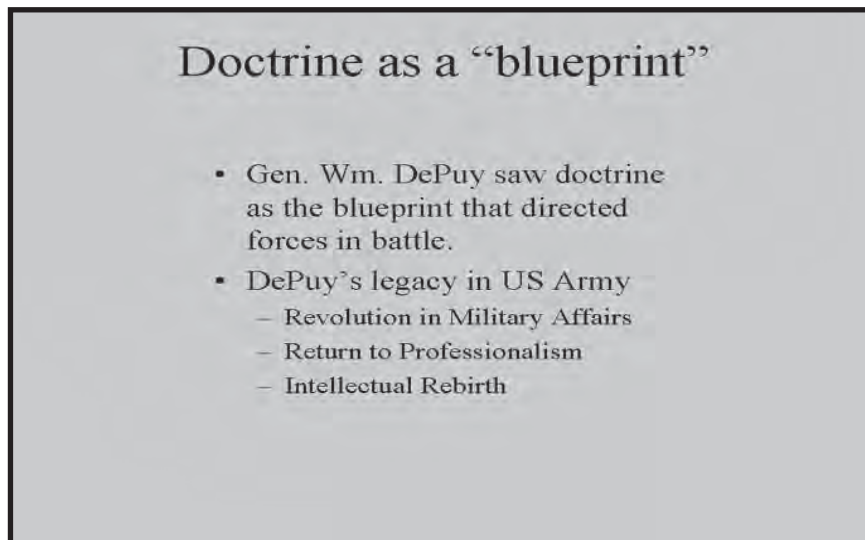


Figure 3

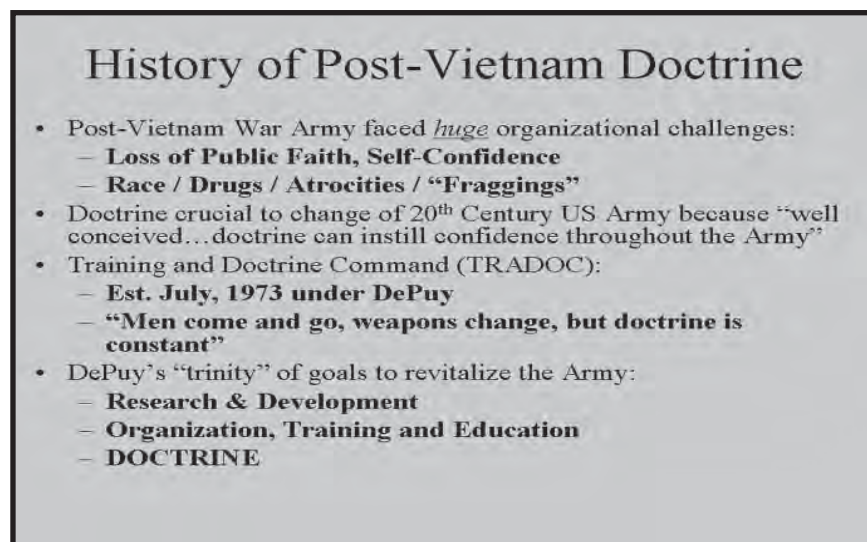


Figure 4

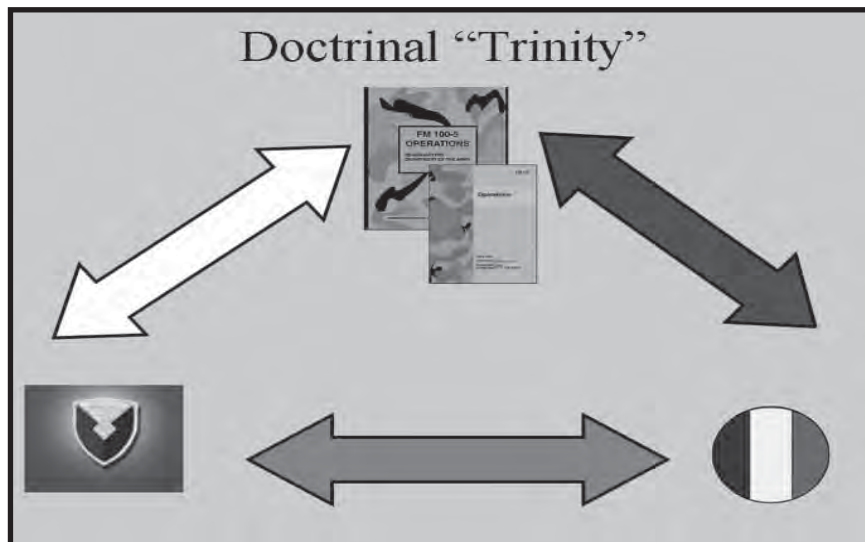


Figure 5

Field Manual 100-5, *Operations* 1976

- Shaped by the 1973 Arab-Israeli War; signaled return to large-scale conventional war
- DePuy's role in writing the doctrine
- Other early contributors were Generals Abrams, Starry and Cushman
- DePuy had specific doctrine in mind; pragmatic
- New doctrine fueled intense debate as part of new intellectual spirit and professionalism

The cover of the Field Manual 100-5, Operations, 1976, features a stylized graphic of a bird in flight against a background of clouds. The text on the cover reads: "FM 100-5 OPERATIONS", "HEADQUARTERS DEPARTMENT OF THE ARMY", and "1976".

Figure 6

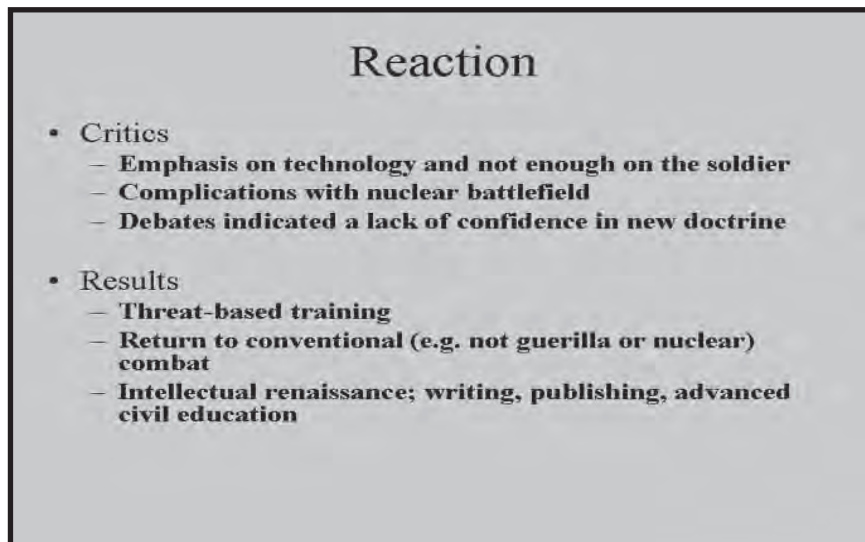


Figure 7

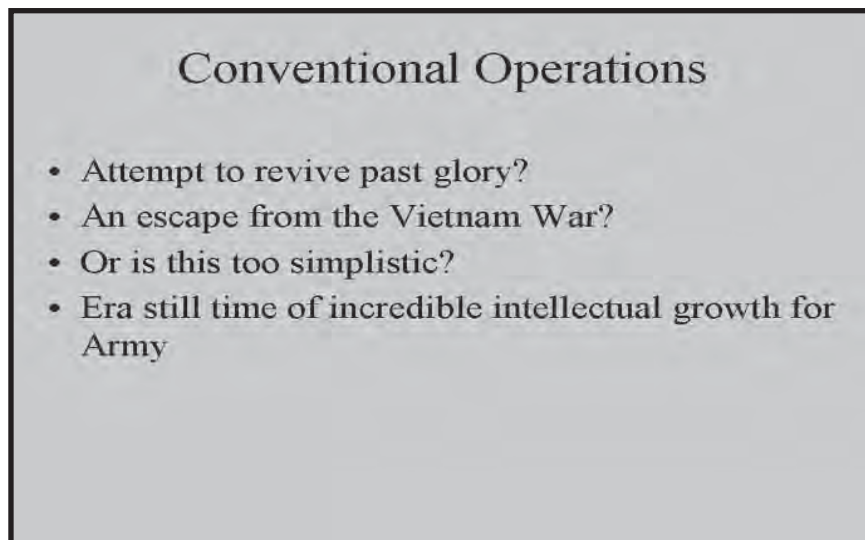


Figure 8

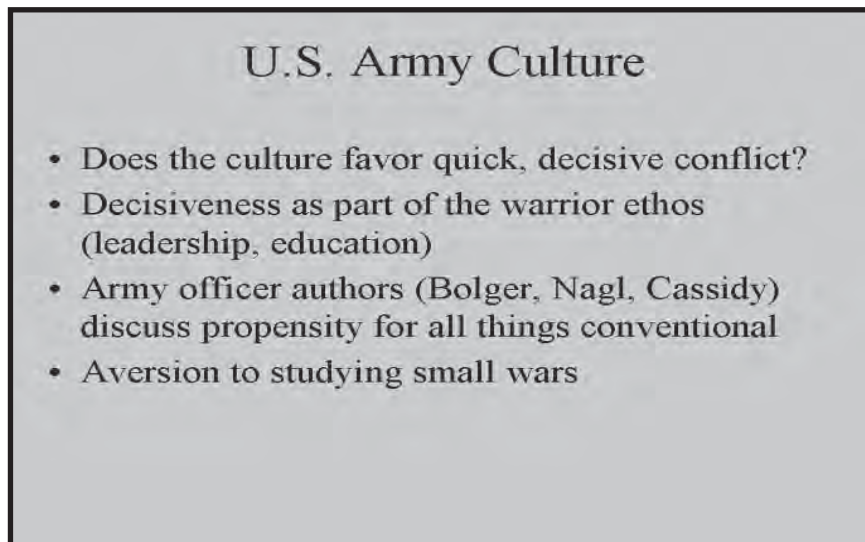


Figure 9

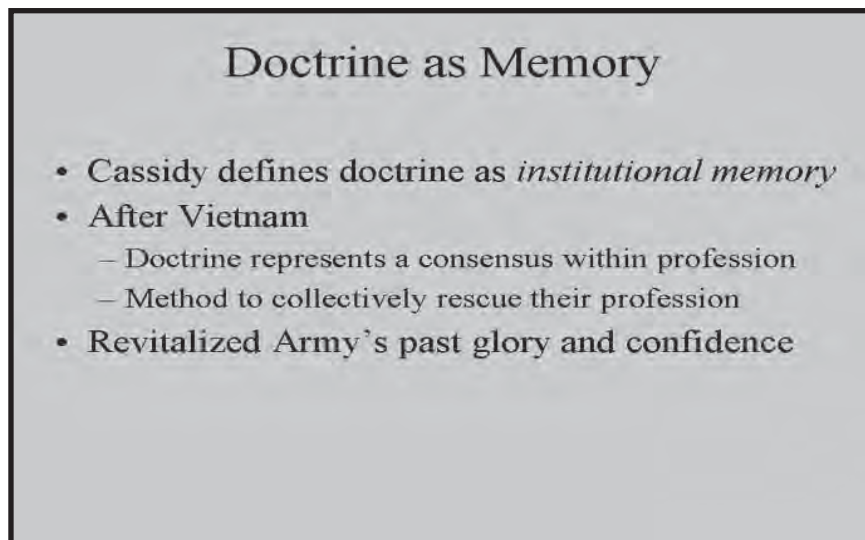


Figure 10

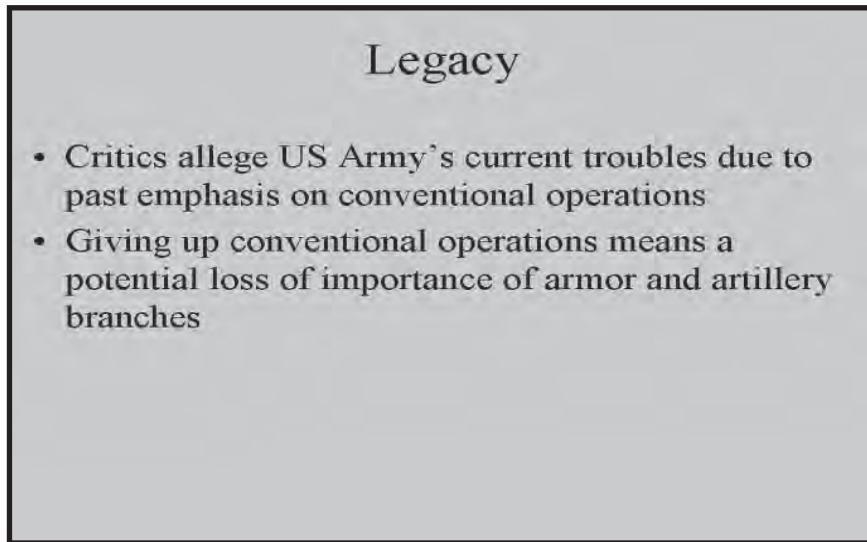


Figure 11

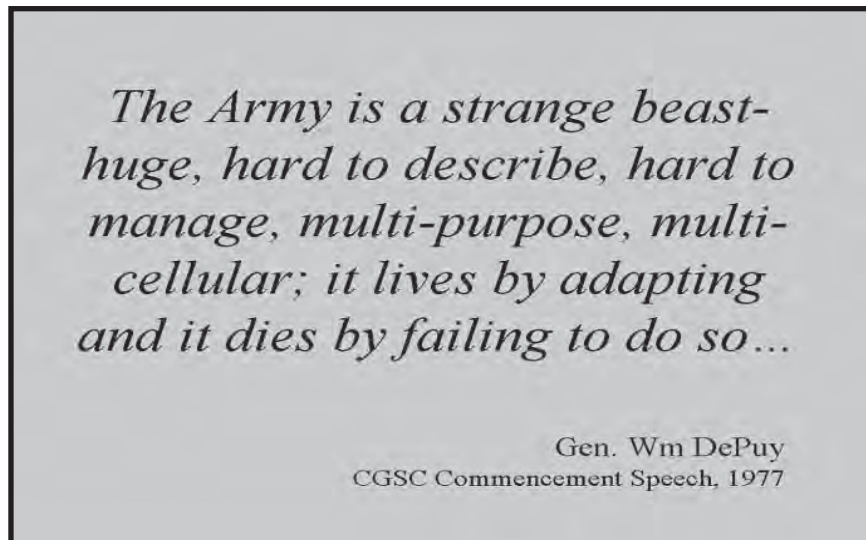


Figure 12

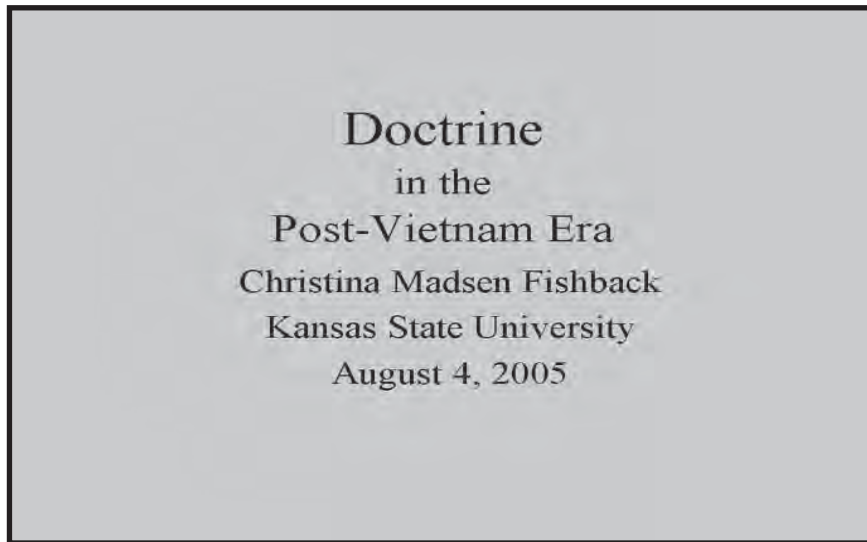


Figure 13

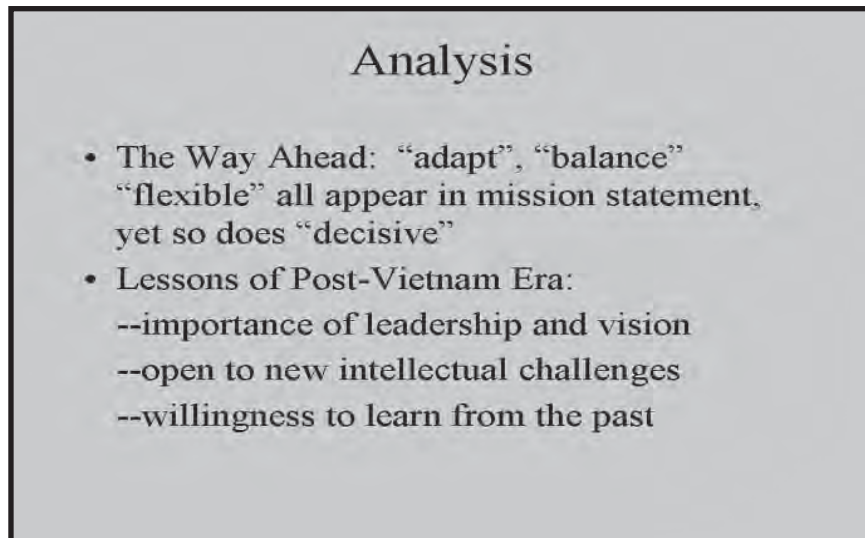


Figure 14

Day 3, Session 3 Question and Answers

Moderated by
John J. McGrath—Combat Studies Institute

Mr. McGrath

Just a few comments before we go to questions and answers, and ultimately, the end of the conference. First of all, Peter, in your list of first-wave books that came out on Iraq, you failed to mention the most important one, because it was done by CSI, and it's called, *On Point*. [Laughter] I think, in many ways, it's the best one talking about the tactical level. We're going to have an *On Point 2* coming out one of these days too.

In many ways, this last session kind of goes full circle back to some of the earlier first sessions we had, where we talked about the different eras of the Army changing in transformation, and all the stuff General Scales said. But in many ways, the debate on the contrast between the German Army in World War II and the US Army was kind of like debate between firepower represented by the US Army, or maneuver, represented by the German Army.

With modularity and transformation and all of that stuff nowadays, that paradigm has kind of been transformed, with firepower being turned into technology—or hardware, as I call it—and the maneuver being turned into number of troops on the ground, or software. I mean, in 1991, we had two engorged corps, fighting a very large Iraqi Army, but in 2003, we basically had two divisions that were taking on the entire Iraqi Army, with a much larger geographical mission, and so we have this new paradigm of technology versus number of troops.

The debate about the World War II German Army, it's kind of like this is a modern-day extension of it. How many troops are necessary? Everybody knows about the great Shinseki debate, that—not enough troops, too many troops. They wear little things on their helmets now that can do the work of ten men or whatever. I think that's a good full circle for this.

On the doctrinal stuff, about the “how to fight” series, I think it is important also to—as historians, when we look at events like this—is to look at the complete historical context, too, because while the Army was fighting in Vietnam, in Europe, the Russians completely modernized their forces, and did a large buildup, and in 1968, along with the Warsaw Pact allies, they basically did a surprise invasion of Czechoslovakia, which totally stunned the NATO observers, because they didn't think the Russians could do that, and we didn't know they were going to do it until they did it.

Up to that time, the standard defense plan for Europe was basically a replay of World War II, that we'll know in plenty of time before the Soviets attack, so we'll be able to bring troops over; and worst case, we'll do a delaying action to the Rhine River, until they all get there, and then we'll counterattack, and win the day.

So by the time Vietnam ended, there were good, concrete reasons to be looking towards a big war. We look at it now and we say, "Oh, yeah, the Cold War, we won that and stuff." But back then, they didn't know we were going to win it, and they didn't know Reagan was going to become president and throw all this money the military's way or whatever, at the time.

I would look at even the aversion to small wars kind of needs to be put into a more general context. It may be an aversion to small wars, but it may also be a fear of losing a big war while paying attention to small wars.

I guess I really don't have that much else to say, but we can open it up to questions and answers. Yes?

Audience Member

Just a comment on doctrine. I've always defined doctrine as sort of [inaudible] in a toolbox, and in the [inaudible] 1976 doctrine, one of the things that interested me is that it really didn't place Army operations either in an overall context, or really have any kind of balance in terms of the kinds of operations that we would conduct.

Going back to the toolbox analogy, there really was only one tool in that toolbox—that being a hammer. [Laughter] We had two varieties of defensive operations, and it really lacked any kind of discussion in terms of offense, defense—the low-intensity stuff—or really anything else. I've always seen the value in the 1976 doctrine, and what Depuy did is not in that particular document, but in the overall debate and the entire process that we initiated literally over the 25 years following, because if you take the 1976 doctrine on operations, and then you compare it to each one of the succeeding volumes, each one is a successive improvement over the last. I think the next one in '82 starts, "Oh, yeah, we also do offensive operations." Then I think it was around '86 where we started talking about the operational level of war. So I mean, I really see a great revolution in the way the officer corps thought, and maybe this kind of goes back to something that was said the other day about the [inaudible] process and the boathouse gang. I really see it as more a spark than anything else.

Ms. Fishback

Yeah. I think that's kind of what a lot of my research has kind of pointed out to me, in that even with the development of the SAMS (School of Advanced Military Studies) course in 1983, I mean, if it wasn't for that '76 version, I don't think some of those guys would have been sitting there, listening—if it wasn't for Depuy, it wasn't for that group of officers after Vietnam, that really reclaimed that profession for themselves—I think that we probably wouldn't have those guys sitting back there, listening.

Audience Member

This one's for the master sergeant. First of all, I think it's interesting, having listened to our Canadian cousin talking about the professionalism of the Canadian Army, and here at the intellectual home of the Army, these officers and professors are addressed by a master sergeant. That says a lot about this Army; it says a lot about that sergeant. Sergeant, I was wondering, Miss Fishback talked about an intellectual renaissance of the Army, starting, say, in 1976. I notice in your third generation of histories, that you had there—one was by Sergeant Major Robert Rush; the rest were by Majors Pete Mansoor, Michael Dobler, John Brown—do you think there's a linkage there?

MSgt Clemens

Well, I think certainly you can make an argument that probably one of the great pillars, I think, of the Army is the fact that we do have intellectual soldiers. I mean, you look at that list you just mentioned. Everyone of those individuals, you have a sergeant major; I think Michael Dobler was a lieutenant colonel in the reserve; we all know Mansoor is a lieutenant—I think he's colonel now, if I recall. But the point is, you have an emphasis in our Army on the intellectual side of warfare, if you want to call it that. I think that's what's fascinating about the emergence of this whole body of literature. I know one of the things with my paper, you can make an argument that it was a little heavy on this debate between, at the time, Major Brown and Colonel Depuy. But I think that's reflective of like what Christina was saying about the fact that you do have this kind of renaissance, this explosion of the last 30 years, of publishing of—critically evaluating. I mean, in this morning's discussion, we talked—or the paper by the Center for Naval Analysis—talked about this kind of activist staff, I think is what was on the chart, and this notion that you are not just going to sit there and not say anything. I mean, you're being paid to think. That's one of the things on the NCO side of the house that you're starting to see that kind of intellectual thinking. And certainly, Sergeant Major Rush's book is an excellent, excellent book. So I would think yes—a renaissance of the last 30 years? Certainly. I would argue that.

Audience Member

Yeah, for Sergeant Clemens, I would suggest that the whole business about the World War II military history is a great example of history being written by the victors being a truism that is false. Military history, more often than not, is written by the losers, because they have a hell of a lot more to explain. [Laughter] Okay? World War II being one example, the Civil War being another, the Spanish Civil War being a third. Okay? The second thing is, I would suggest that you might want to extend your research into comparing the US Army's performance in the initial occupation of Germany, versus the initial—post-combat civilian operations in Iraq. I mean, I did a lecture on that for my own college when we did a package on that, and I subtitled the lecture, "Babes in Deutschland," which could be taken any number of ways, and some very interesting parallels are there, and I think you would do well to extend your research in that direction.

I would also comment, not only what you said about winners and losers, but the American Army fights extremely well [inaudible]. What we don't do well is we don't sustain [inaudible]. I think what we also [inaudible] study is to take a look at our CSS or our CS operations that we do and apply that to what's going on in—to Iraq. We need to know how to secure water, electricity, civil affairs—all those things that are not focused on. I mean, it seems like most of our academic is on tactics, and sustainability comes at the operational level, in which we support the infrastructure. How do you build up and support and take care of those basic needs, once you eliminate what's already been there? We created a huge vacuum, and we didn't have sufficient support force to fill that vacuum. That's what I see is the big problem. So I would like to see some of this. Of course, I had a preview of this, but I'd like to see a little bit more of a logistical background and how you sustain operations. I mean, that seems to be our problem.

MSgt Clemens

I think, in response to that, real quick, we all know the history of the individual replacement system, but I think, in a lot of ways, that debate itself is starting to come full circle. I mean, before, I think up to the '70s, '80s, it was damned, because this destroyed unit cohesion—that was kind of the essential argument against the individual replacement system. But when you look in the greater context of the limitations of the fact— We only fought in the West with a 45-division force, roughly, and we didn't have the luxury of taking whole divisions out of the line for a month or two months at a time, retrain them, reintegrate packets of replacements that weren't individuals, but came as battalions, let's say. Because a lot of people say, well, we should have followed the German model. The Germans pulled units out of the line, in order to refit—they would let their unit be destroyed; then they would pull it out, they would refit it, and reinsert it

back in the line in three months. We never had that sort of advantage. So I think when you talk about practices, that's one of the things that—like the individual replacement system—there is this debate going on. Maybe it wasn't such a bad system in World War II—we certainly could have improved it—but now you can apply those same lessons to today. You know, as we take casualties, should we do individual replacements? Should we come as a platoon? I mean, there's a lot of lessons we can learn from predecessors. I think one of the kind of motivations behind this paper real quick that I wanted to write on is the fact that, you know, it's interesting. Yesterday we had a major who was here from CGSC giving a logistics paper; you look in his bio: "Graduated from college 1994." So his frame of reference is basically Kosovo—I mean, Desert Shield/Desert Storm is history. I mean, and heaven help—he doesn't have any reference on the Cold War Army. So the point is, it's important that—especially the field grade officers who are going through Leavenworth now, that, hey, there were some good books written back before your time that might apply to current operations, and you really should go back and maybe take a look at them. And these aren't necessarily ancient history—they were written in the '80s. But that's just kind of the framework that—you know, time moves on, I guess.

Audience Member

My question and comment is directed at Ms. Fishback. A warning, a semantic warning: I think what happened in '74 and on, and the revival of the Army after Vietnam, had (a) very little to do with glory, in the mind of anyone in the Army, (b) you said "escape from Vietnam," or you know, recovery is probably a better word. But what I'm suggesting is, look at how you use those terms. General Depuy, I'm certain, the word glory never passed his mind during those years—of any kind. He was concerned with effectiveness, efficiency, the recovery of the Army and the morale of the Army. My other comment, I think, is perhaps more pertinent, and that had to do with the thing about the small wars. In 1977 and '78, it's true that the curriculum of the General Staff College, with one exception—the material taught by the history squad—did not address small wars.

But the organization that's sponsoring this conference here was created as part of that renaissance, as part of that development, and if you look at the first couple of Leavenworth papers, look at the title of what they are. The first one was Bob Doughty's thing, which addresses the involvement of doctrine. That was tied directly—directly—to the development of 100-5; it was sort of a companion piece to help explain how doctrine changed, and so forth. And if my memory serves—it's a little fuzzy right now—but on the first three or four or five, one of them was Roger Spiller's paper on the intervention in 1958 in Lebanon. I think there was another one on finished operations. I just don't remember, but I do

remember that, for the most part, they dealt with small wars, and it was part of the getting from Vietnam, in a sense, but yet it wasn't the big battle in Central Europe—that's my point. So you might want to look and see what the first ten titles in the CSI Leavenworth paper series were, because they were indicative of where we wanted to shift the interest to.

Ms. Fishback

Okay. Well, to respond to using the words *glory* and *escape*, I think I was just pointing to some of the current literature and sort of what historians and critics have said, and describing some of what the argument is right now. As far as the literature that you were talking about, I'm familiar with that as well, but also, I was looking at a more broad scope, the MMAS, the things that were coming out at that time, and then also, all the service journals—*Military Review*, *Parameters*. There have been a couple of studies, one that was a naval post-grad masters degree by—it was called, "Peacekeepers Attend the Never Again School," by Stephen Mariano, I believe. So I mean, I've looked at sort of all of that, but I do appreciate your pointing that out to me. Thanks.

Audience Member

Somewhat of a follow-up to that, because I'm recalling, as we talk about what we went through between the withdrawal from Vietnam, through the '70s, and then beginning to rebuild the Army in the '80s, I left Vietnam in '75, with Vietnam collapsing, and to a degree, there were a number of us who thought that, "Okay, Korea's next." You had a situation in Portugal where we thought we were going to have the first NATO member declare a communist government. We had conflicts breaking out in Angola and Mozambique and Cuban Expeditionary Forces. I'd be interested to see you continue this examination of what was going on in the Army, and how these things that were happening around us impacted on their perception of what the next mission was likely to be. It's also sort of this period where you start leading to people arguing the Weinberg doctrine and the other conceptions of how we were going to use force and when and where we were going to use force. I guess I didn't hear much of that, but it comes a little bit later than some of the period you were talking about, and it's a little broader than some of the issues you were covering, and if anybody else has some comments on how those things played into what was going on.

Ms. Fishback

Yeah. I think because of the scope of the paper, and then also, I had to convince—my actual paper—but my masters thesis goes into that, and then even beyond my masters thesis, I have many more interests that could probably end up making the dissertation topics that—

Audience Member

The next paper. [Laughter]

Ms. Fishback

Yeah.

Audience Member

I think the active defense bothered General Depuy very much, I think he said it wasn't in the tradition of the United States Army to be on the defense, but always on the offense. So I think that's one of the reasons he placed a great deal of emphasis on military history. One thing you have to look at, or revisit, is the Green Book series of World War II. Now, they try not to give the opinions of the authors, but they're the best I've ever seen in terms of describing what actually happened—in all the areas, including logistics. I think we would be ill-served not to go back and look at them. There is volume of course on the occupation of Germany--which I find difficult to compare to the current occupation of Iraq because of the homogeneity of the population, and the total defeat, de-Nazification, and other things we had done. We had started planning that well in advance in 1943-44, according to this book, so we would be prepared. General Marshall directed that study to go forward as to what we would do in peacetime. So I just suggest that the Green Book be added to that collection.

Mr. McGrath

I would like to second that about the greatness of the Green Book series. Yes the person way in the back.

Audience Member

This question is for either of the two presenters. Earlier it was talked about the importance of Leavenworth in the intellectual scheme of the United States Army. Some of the names that came up in your two presentations struck me. Pete Mansoor, Mike Doubler, Dan Bolger, you didn't mention Doug MacGregor but he is certainly an intellectual player, L. Don Holder, I threw in H.R. McMasters—he is on the CSA reading list—and then Bob Doty. What all these guys have in common is they were all on the faculty at the Military Academy in various departments. I wonder if either of you have looked at if this is one of the main intellectual centers--is the faculty at the Military Academy an incubator for intellectual thought? Because we send young officers off to some of the best grad schools in the country to prepare to teach there, and the results are on your publications list.

Unknown Member

Rick Schrader can answer that question.

Dr. Schrader

I have been at both ends of that particular thing, and I think there is nothing unique about West Point that makes them good. What happens is the selection process for the people that go to teach at West Point preselects those people that are predisposed to be able to do just what you're saying.

Audience Member

It provides them the opportunity.

Dr. Schrader

Yeah. It gives them a chance to think. But what I'm saying is there's nothing particular that happens there that changes things. They're good before they get there, and they're better when they leave, because they've had an opportunity to think through things.

Audience MemberUnknown

Right. They've had the advance sort of screening that Ms. Fishback talked about.

Dr. Schrader

Yeah. Sure. But it doesn't have anything in particular to do with West Point.

Audience Member

This is for Sergeant Clemens. A hundred years ago, the measure of a professional military was the education and training of its officers, where I would submit today, the measure of a modern military is the education and training of its NCO corps. In comparing the German and American corps of World War II, what insights does that comparison offer for us today?

MSgt Clemens

Well, I think we certainly would—obviously, you want to be a “muddy boot” soldier when you need to be, but there's an intellectual component. I think in our earlier presentation on proficient military education, that's one of the things both on the officer and the NCO side of the house that there's a lot of emphasis put upon that developing the intellectual part of it. That certainly won't hurt, because the important thing is, you obviously want to have a vision beyond just a tactical level of pushing the platoon, and I think that's one of the motivations I had to preparing this paper was the fact that I've been getting a series of questions from people say, “Hey, you know, I'm trying to figure out—how do we figure out how we're doing—effectivenesswise?” I'm getting this from NCOs. So I'll say, “Well, maybe you should read a couple books.” That's one reason I didn't put the Green Books on there, because if you hand them a tone like that, they tend to kind of—

the eyes roll back in their head, and that's the end of the discussion. But if you work through a couple of these books, and—as we've been hitting on here—you know, written by a lot of military intellectuals, who've come right through here, and we know the titles now—and if you take those books and say, “Here, read the *G.I. Offensive in Europe*, and read Michael Dobler's book, *Closing with the Enemy*.” If you read those two books, and then as you start getting all these analytical studies from whoever on what we're doing in Iraq, I mean, at least you have kind of a frame of reference. I think the thing that's appealing—just as Christina was saying—there has been this. I would really say a great dissertation out there is, “The Intellectual Rebirth of the US Army, Post-1973,” and you know, you've got a bibliography already started. You're seeing that, and I think you're seeing that on the NCO side now. We had talked about it earlier, the fact that now, you're going to Sergeant Majors Academy. You know, you're not going to show up at Sergeant Majors Academy with three credit hours of college—you'd better show up with something more, or you're never going to get there. You better know how to write a coherent one or two pages—not just an operations order, but something coherent—because it's shocking out—I mean, I'm an intel analyst, and trust me, it's shocking how many people cannot write a coherent one page on something; it's just the way it is. But we're putting emphasis on that now. There's this whole idea of—like we mentioned—the activist staffs, and part of those staffs are NCOs; they have to be educated. I'm not sure if I really answered your question—I kind of talked around it.

Audience Member

Part.

MSgt Clemens

That's part of it.

Mr. McGrath

Any more questions?

Audience Member

I'm glad to see my question from this morning is being answered this afternoon. But I guess two questions. One for you Peter: If you could gaze into your crystal ball, and kind of predict how the historiography of the Iraq war is going to look in five, ten years, how would it be written? Then the second question would be for you Christina: Do you see any evidence to suggest that our democratic culture, in its demand for public support and decisive warfare, which quickly leads to victory, and of course the backlash from Vietnam, did that lead to this rebirth

of doctrine that was largely based on conventional conflict? And could you think outside the box and answer that with interpretive dance, please? [Laughter]

MSgt Clemens

That's an inside joke. How will Iraq be written? I think one of the biggest drivers is going to be embedded journalists. I think, in a way, embedded journalist was an absolutely brilliant idea, because you attempt to co-opt the media and get them on your side. One of the problems that we face, however, is the fact—we all know and we all rail about political correctness—a lot of these journalists, when they get back, and get back to their normal peer group, there's going to be a lot of pressures on them to write histories a certain way. They may feel deep down inside that, "When I was with the 101st, I felt this way," and they would write a very positive history. There's going to be a lot of pressures among their peer group, among publishers, to push certain viewpoints, to maybe emphasize failures over successes. So, how will the historiography of Iraq be written? I think right now, the field, at least in the first five years, will be written heavily by embedded journalists.

However, I see them fading away fairly quickly, because it's not the flavor of the week, so they're going to move on to the next story. But I would say that Iraq, unfortunately, is somewhat like Vietnam—there's going to be a lot of emotion with it. That's part of the problem right now, why they're not having some really good books on Iraq written, because there's a lot of emotion, and we all know—unfortunately, I think, the population is disconnecting from the war. "Yes, we support the troops, but I don't support the conflict." I'm not sure how you really resolve that in your mind, but people are—they articulate that.

I think one of the big problems we face is people putting blinders on Iraq, as far as the American public, and they don't want to deal with it. I mean, this week, unfortunately, we've had another 24 casualties. A lot of people, it's not even on the radar net—that's something for the Army to deal with, the Marine Corps to deal with, and that's unfortunate. But I think this is a field that I would just say is a clarion call to—we've talked about military intellectuals—I think it's absolutely critical we don't cede the writing on the history of Iraq to a bunch of ill-qualified embedded journalists with a political axe to grind, because if we do that, the historiography is going to be butchered, unmercifully. So there's good motivation for us to get out there and write good history.

Ms. Fishback

Well, I think the media certainly complicates—I don't really remember exactly your question, but I know that the unpopularity of the war in Vietnam was due in large part to the media, and I had mentioned that it was the first living room war.

But after Vietnam, the Army was so unpopular that they were able to kind of retreat, and in isolation, sort of rebuild themselves. I don't know how the media—I know that now it plays a part in the Iraq war, but—

Audience Member

[Inaudible] the development of doctrine?

Ms. Fishback

I'm not really sure. Like I said, I don't think there's really that much interference outside of the Army. In that respect, no. I mean, I don't think it really interferes all that much.

MSgt Clemens

Can I take a stab at that?

Ms. Fishback

Sure.

Unknown

When we did *America's First Battles* at CSI, the last battle in the book is Ia Drang. What came out of that—and we talked about it—is the fact that good tactical doctrine reinforced bad strategy. In all these books, what we did, we're boots on the ground in Iraq—we're “book-perfect.” But there are other influences on war in the 21st century, and that story can't be told yet. And that's what's going to happen. I don't think much of Tommy Franks' book, frankly, and I think that we need a little bit more intellectual honesty about what went on at that level, to get a full understanding of the picture of what went on, and what's going on now.

Unknown

I'd like to make one comment. Lieutenant General Mick Traynor has written a book about the Iraq war, which is now in the publication process, and it's going to be pretty blistering, not about the performance of the military so much as a “good men in a bad cause” kind of book. But I think it's going to be a critical book. It's not by a journalist—it's by a soldier, or in this case, a Marine.

Mr. McGrath

Okay. We're going to have some concluding comments from Colonel Reese.

COL Reese

Thank you, John. And thank you to our latest panel—a around of applause, please. [Applause] I think by serendipity, we ended up with an interesting discus-

sion, because if you recall—what did you say three months ago, John? When General Scales was here, he cautioned us about the dangers of hanging the future on one grand idea, or one great concept, and the discussion we just had illustrated some of the advantages of intellectual ferment. So, to the degree that we fermented the intellect here at Fort Leavenworth this week, I thank everybody who came and presented and discussed, and met with one another and asked questions—even from the Marines—and contributed to the success of our symposium. [Laughter]

Audience Member

You couldn't have done it without us. [Laughter]

COL Reese

Keep that man's mic turned off, please. [Laughter] No, but I thank all of you for coming. I do appreciate very much the time you have spent preparing for the conference.

One short anecdote. Yesterday afternoon, General Wallace had a meeting with his—I'm not sure what he calls it; I'll say "brain trust," but he invited me, so that can't be right—to discuss what he wanted people to focus on next year in the writing and research areas. I mentioned to him the advantages we get here at Fort Leavenworth from people like you, because we can harness intellectual horsepower from outside the Army to contribute to our cause, because your comments and your presentations will be part of our publication for this conference—it will be distributed worldwide throughout the Army. So again, thank you very much.

**Appendix A
Conference Program**

**Day 1
Tuesday, 2 August 2005**

0800 – 0815 **Opening Remarks**
Colonel Timothy R. Reese
Combat Studies Institute

Session 1

0815 – 0930 **Keynote Presentation**
*Change During War: Contemplating the Future
While Fighting in the Present*
Major General (Ret) Robert Scales

Session 2

0945 – 1115 **Army Transformations Past and Present**
Army Transformations Past and Present
Brigadier General (Ret) John S. Brown
Center of Military History
Army Organizational Changes—The New Modular Army
Ned Bedessem
Center of Military History
*The Evolution of the Stryker Brigade— From
Doctrine to Battlefield Operations in Iraq*
Dr. Jeff A. Charlston
Center of Military History
Moderator
Dr. Richard W. Stewart
Center of Military History

Session 3

1300 – 1430 **Organizing the Maneuver Fight**

Sinai 1973: Israeli Maneuver Organization and the Battle of the Chinese Farm

John J. McGrath
Combat Studies Institute

Asymmetric Warfare and Military Thought

Professor Adam Lowther
Columbus State University

Adopting to Maneuver Warfare in a Civil War Campaign: Union Reactions to Sterling Price's Missouri Expedition of 1864

Dr. Kyle S. Sinisi
The Citadel

Moderator
Professor John A. Lynn
University of Illinois

Session 4

1445 – 1615 **Organizing for the Low-Intensity Fight**

A Red Team Perspective in the Insurgency in Iraq

Colonel Derek J. Harvey
US Army, Pentagon

Moderator
Dr. Lawrence A. Yates
Combat Studies Institute

Day 2
Wednesday, 3 August 2005

Session 1

0800 – 0930 **Incorporating Change in Asymmetrical Operations: Vietnam**

Insurgent Logistics

Lt. Colonel Marian E. Vlasak

Command & General Staff College

*MACV's Dilemma: The United States and the
Conduct of the Ground War in Vietnam*

John R. McQueney, Jr.

Severn, MD

Moderator

Dr. James H. Willbanks

Command and General Staff College

Session 2

0945 – 1115 **Special Topics on Wartime Transformation**

*Use of Private Military Corporations (PMC) to
Supplement Traditional American Ground Forces*

Dr. Thomas E. Hennefer

Olathe, Kansas

Facing Genocide: The US Army as an Agent of Rescue

Dr. Keith Pomakoy

Adirondack Community College

*Case for Using an Afghan Auxiliary Force to Support
Expeditionary Operations in Iraq*

Captain Roberto Bran

2d Infantry Division

Moderator

Lt. Colonel Marian E. Vlasak

Command & General Staff College

Session 3

1300 – 1430 **Organizing for the Logistics Fight**

*Personal Observations of Logistics Operations in
Kuwait and Iraq*

Dr. Robert Darius
Army Materiel Command

Modular Logistics

Major Guy M. Jones
School for Advanced Military Studies

Moderator

Dr. Charles R. Shrader
Carlisle, PA

Session 4

1445 – 1615 **The Canadian Perspective**

*Transforming the Brigade Team on the Battlefield:
Modest Lessons in Coalition Operations From the War
Diary of the First Canadian Armoured Brigade (1 CAB)
in the Italian Campaign, 1943-1945*

Major Michael Boire
Canadian Army
Royal Military College of Canada

Missile Defense: The Canadian Conundrum

Mercedes Stephenson
University of Calgary

Canadian Officer Education vs Training

Pamela Stewart
University of Calgary

Moderator

Mr. James F. Gebhardt
MIPR
Combat Studies Institute

Day 3
Thursday, 4 August 2005

Session 1

0800 – 0930 **Organizing to Fight Insurgency: Lessons From Chechnya**

*Urban Operations, 1994-2005; Information Operations:
Capturing the Media*

Timothy L. Thomas
Foreign Military Studies Office

*Regional and Global Impact of the Chechen War:
GWOT Theater or Russian Imperial Maintenance;
Chechenization and the Balance Sheet*

Glen Howard
Jamestown Foundation

Evolving Nature of Chechen Resistance

Ray C. Finch
University of Kansas

*Sustaining the Struggle: Interplay of Ethno-Nationalism
and Religion*

Njdeh (Nick) Asisian
Foreign Military Studies Office

Impact of a Decade of War Upon Russian Armed Forces

Major Matt Dimmick and Ray C. Finch
University of Kansas

Moderator
Timothy L. Thomas
Foreign Military Studies Office

Session 2

0945 – 1115 **Unit Manning and Training**

*The Organizational Evolution of the Cadet
Command, 1990-2003*

Dr. Arthur T. Coumbe
US Army Cadet Command

0945 – 1115 **Unit Manning and Training** (*cont'd*)
*Transformation and the Officer Corps: Analysis in the
Historical Context of the US and Japan Between the Wars*
William D. O'Neil
Center for Naval Analyses

Moderator
Dr. Curtis S. King
Combat Studies Institute

Session 3

1300 – 1430 **Transformation and Doctrine**
*Looking in the Mirror: Applying the Scholarship on
the Interpretation of US Army Performance in World War II
to Current Operations*
Master Sergeant Peter Clemens, USAR
Department of Homeland Security

1300 – 1430 **Transformation and Doctrine** (*cont'd*)
US Army Post-Vietnam Doctrine
Christina M. Fishback
Kansas State University

Moderator
John J. McGrath
Combat Studies Institute

1440-1500 **Concluding Remarks**
Colonel Timothy R. Reese
Combat Studies Institute

Appendix B

About the Presenters

Njdeh (Nick) Asisian is an Islamic analyst at the US Army's Foreign Military Studies Office, Fort Leavenworth.

Ned Bedessem has been a historian with the US Army Center of Military History (CMH) since 1986. He has worked in the Force Structure and Unit History Branch since 1990 and is currently the team leader for the Center's Modularity Task Force.

Michael Boire, Major, Canadian Army, teaches history at the Royal Military College of Canada, Kingston, Ontario, where he is completing a dissertation on Canadian armor in the Italian campaign. Born and educated in Montreal, Quebec, he has served in command and staff appointments in France, Germany, Bosnia, and Kosovo. He is a graduate of the French Army's School of Cavalry and Armor and of the École de Guerre in Paris. He also serves as a battlefield guide and film consultant.

Roberto Bran, Captain, US Army, is a graduate of the US Military Academy. He deployed to Afghanistan in support of Operation ENDURING FREEDOM, where he served 6 months as an embedded adviser to the Weapons Company, Quick Reaction Force, Afghan National Army (ANA) and 8 months as Inter-agency Strategic Plans Officer, Directorate of Strategic Plans and Policy (CJ5), Combined Forces Command—Afghanistan, where he worked on assorted politico-military projects, including the Afghan Guard Force and the National Reconciliation Initiative. Captain Bran is currently serving as G3 Chief of Training, he also acts as Chief of Training for the 2d Infantry Division, and is pursuing a master of social science degree from the Maxwell School of Citizenship and Public Affairs at Syracuse University.

John S. Brown, Brigadier General, US Army (Ret), has served as the Chief of Military History, CMH, since December 1998. While retaining his position at CMH, he retired from active duty 1 August 2004. General Brown graduated from the US Military Academy in 1971 and served as an armor officer for over 30 years, including commanding a tank battalion in Operation DESERT STORM and later a brigade of the 1st Cavalry Division at Fort Hood, Texas. He earned a Ph.D. in history from the University of Indiana and taught history at West Point.

Jeffery A. Charlston is an Army historian at CMH. Formerly program manager of The George Washington University's Teaching Center, Dr. Charlston also taught a doctoral course in strategy and policy at that institution's Elliott School

of International Affairs and completed the USMA Summer Seminar in Military History before joining CMH. He currently serves as the center's Pentagon liaison and teaches military history as an adjunct associate professor with the University of Maryland University College. Dr. Charlston has recently completed the *Department of the Army Historical Summary FY1999* and is just finishing the United States, 1865-Present volume in Ashgate Publishing's *International Library of Essays in Military History* and, with LTC Mark Reardon, a study of the 1st Stryker Brigade Combat Team through its first tour in Iraq.

Peter Clemens is an intelligence analyst with the Department of Homeland Security. He serves in the US Army Reserve as a senior NCO intelligence analyst assigned to US Special Operations Command. He holds a B.A. in economics from the University of Missouri, a B.A. in international studies from The American University, an MA in history from Kansas State University, and an MA in military studies from American Military University. His most recent professional publication compares the 9/11 Commission Report with the Pearl Harbor investigation, in the *Military Intelligence Professional Bulletin (MIPB)*. He has previously published articles in *Small Wars and Insurgencies* (1995); *Intelligence and National Security* (1998); *Contemporary Security Policy* (2000); and the *Journal of Strategic Studies* (2002).

Arthur T. Coumbe is the historian for the US Army Cadet Command, Fort Monroe, Virginia. He received a B.S. from the US Military Academy and a Ph.D. from Duke University and is a graduate of the Army Management Staff College. As a retired US Army Reserve officer, he served in various command and staff positions, including deputy commander, 902d Military Intelligence (MI) Group, Fort Meade, Maryland; and commander, 260th MI Battalion, Miami, Florida. Dr. Coumbe served as an adjunct faculty member at the University of California at Berkeley, Florida State University, St. Leo College, and Thomas Nelson Community College. He has authored numerous articles and books on Army ROTC history and the Franco-Prussian War of 1870-1871.

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Civil War in Central Bosnia: A Military History, 1992-1994 (Texas A&M University Press, 2003; Croatian translation, Zagreb, Golden Marketing, 2004). Now an independent historical writer and consultant, Dr. Shrader resides in Carlisle, Pennsylvania.

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Appendix C

Acronyms

AAC	Army Air Corps
AAF	Army Air Forces
AAN	Army After Next
ACTS	Air Corps Tactical School
AEF	American Expeditionary Force
AFRVN	Armed Forces of the Republic of Vietnam
AGR	Active Guard/Reserve
AIC	Army Industrial College
AIT	Advanced Individual Training
AMC	Army Material Command
AMF	Afghan Militia Forces
AOR	Area of Responsibility
APC	Armored Personnel Carrier
ARS	Armed Reconnaissance Squadron
ARVN	Army of the Republic of Vietnam
ASAT	Anti-Satellite
ASC	Army Staff College (Japan)
ASW	Anti-Submarine Warfare
AWC	Army War College
BCT	Brigade Combat Team
BMD	Ballistic Missile Defense
BRAC	Base Realignment and Closure
BSB	Brigade Support Battalion
C2	Command and Control
CAB	Canadian Armoured Brigade
CAC	Combined Arms Center
CAF	Canadian Armed Forces
CALL	Center for Army Lessons Learned
CAR	Canadian Airborne Regiment
CCRC	Central Cuban Relief Committee
CDEE	Canadian Defence Education Establishments
CDR	Commander (naval rank)
CF	Canadian Forces
CGSC	Command and General Staff College
CGSS	Command and General Staff School
CJTF-7	Combined Joint Task Force 7

CMH	Center of Military History
CONUS	Continental US
CPT	Captain (army rank)
CRC	Combat Readiness Center
CSA	Chief of Staff of the Army
CSS	Combat Service Support
CTT	Common Task Training
CV	Aircraft Carrier
CVL	Light Aircraft Carrier
DCA	Defensive Counter Air
DCSPER	Deputy Chief of Staff for Personnel
DLI	Defense Language Institute
DND	Department of National Defense (Canadian)
DSP	Defense Support System
EKV	Exoatmospheric Kill Vehicle
FA	Field Artillery
FAC	Forward Air Controller
FCS	Future Combat Systems
FMTV	Family of Medium Tactical Vehicles
FOB	Forward Operating Base
FSB	Forward Support Battalion
FSC	Field Service Company
GAO	Government Accounting Office
GBMD	Ground-Based Midcourse Defense
GHQ	General Headquarters
GVN	Government of Vietnam
GWOT	Global War on Terrorism
HBCT	Heavy Brigade Combat Team
HBCU	Historically Black Colleges and Universities
IBCT	Infantry Brigade Combat Team
ICBM	InterContinental Ballistic Missile
ID	Infantry Division
IDF	Israeli Defense Force
IED	Improvised Explosive Device
IJA	Imperial Japanese Army
IJN	Imperial Japanese Navy
IPSD	International Policy Statement on Defense
ITW/AA	Integrated Tactical Warning and Threat Assessment

JFCOM	US Joint Forces Command
JFLCC	Joint Force Land Component Command
JROTC	Junior Reserve Officer Training Corps
JTF	Joint Task Force
KIA	Killed In Action
KLT	Thousand Long Tons
KMT	Kuomintang (Chinese Nationalist Party)
LIC	Low Intensity Conflict
LMSR	Large, Medium-speed, Roll-on/roll-off Ship
LOC	Lines of Communication
LSA	Logistic Support Area
LSE	Logistics Support Element
LUMES	Light Utility Mobility Enhancement System
MACV	US Military Assistance Command, Vietnam
MAD	Mutually Assured Destruction
MCC	Missile Correlation Center
MHE	Material Handling Equipment
MP	Military Police
MSO	Mission Staging Operations
MSR	Main Supply Route
MTT	Mobile Training Team
NCO	Noncommissioned Officer
NIC	National Intelligence Council
NER	Near East Relief
NORAD	North American Aerospace Defense Command
NSC	Naval Staff College
NTC	National Training Center
NVA	North Vietnamese Army
NWF	National War Fund
OCA	Offensive Counterair
ODB	Officer Development Board
OEF	Operation ENDURING FREEDOM
OER	Officer Evaluation Report
OFT	Office of Force Transformation
OIF	Operation IRAQI FREEDOM
OODA	Observe, Orient, Decide, Act
OPFOR	Opposing Forces
OSC	Operations Support Command
PAVN	Peoples Army of Vietnam

PBS	Public Broadcasting Corporation
PLAF	People's Liberation Armed Forces
PMC	Private Military Corporations
PME	Professional Military Education
PROVN	Program for the Pacification and Long-Term Development of Vietnam
QDR	Quadrennial Defense Review
QRF	Quick Reaction Force
ROE	Rules of Engagement
ROTC	Reserve Officer Training Corps
RPG	Rocket Propelled Grenade
RSOI	Reception, Staging, Onward-movement, and Integration
RSTA	Reconnaissance, Surveillance and Target Acquisition
SAM	Surface to Air Missile
SAMS	School of Advanced Military Studies
SASC	Senate Armed Services Committee
SBCT	Stryker Brigade Combat Team
SNLF	Special Naval Landing Forces
SOF	Special Operating Forces
SRBM	Short Range Ballistic Missile
SSN	Space Surveillance Network
SSZ	Specified Strike Zone
TF	Task Force
TPU	Troop Program Units
TSC	Theater Support Command
TRADOC	US Army Training and Doctrine Command
TTP	Tactics, Techniques and Procedures
UCP	Unified Command Plan
UN	United Nations
USAAC	US Army Air Corps
USAF	US Air Force
USAFISA	US Army Force Integration Support Agency
USAR	US Army Reserve
USMC	US Marine Corps
USN	US Navy
USNORTHCOM	US Northern Command
USSPACECOM	US Space Command

USSTRATCOM
VCSA
WMD
XO

US Strategic Command
Vice Chief of Staff of the Army
Weapons of Mass Destruction
Executive Officer

