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How can the U.S. military avoid another 9/15 an analysis of the inability of U.S. military leaders to provide an adequate strategy for responding to the 9/11 attacks

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NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

HOW CAN THE U.S. MILITARY AVOID ANOTHER 9/15: AN ANALYSIS OF THE INABILITY OF U.S. MILITARY LEADERS TO PROVIDE AN ADEQUATE STRATEGY FOR RESPONDING TO THE 9/11 ATTACKS

by

Jim Mauldin

December 2007

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The purpose of this thesis is to identify the actions the U.S. military should take to ensure the next time it is called upon to provide a campaign strategy to the President, the U.S. military does not repeat the shortfalls of 9/15/2001, which called for a Direct Approach against an irregular adversary, Al Qaeda. The thesis presents a Game Theory analysis of Toft's "Strategic Interaction Theory" to develop an optimal strategy for conducting future asymmetric conflicts. It finds the optimal strategy is to be equally capable of either a Direct or Indirect Approach and to employ whichever approach the adversary is employing. The thesis then reviews U.S. military operations between 1947 and 2001 and finds that 208 of the 210 known engagements optimally required a U.S. Indirect Approach. Despite the overwhelming preponderance of indirect action during this period, an assessment of the U.S. military educational system that produced the military uniformed leaders at the time of the 9/11 attacks shows it focused on the Direct Approach, rendering these leaders ill-prepared to advise the President on 9/15. The thesis concludes with recommendations for future U.S. military preparations for asymmetric warfare, calling for an equally balanced education of U.S. officers in Direct and Indirect Approach strategies.

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EXECUTIVE SUMMARY

On September 15th, 2001, three days after the September 11th attacks, the Chairman of the Joint Chiefs of Staff, General Hugh Shelton, presented the National Security Council with three Department of Defense developed Courses of Action for a retaliatory strategy against Al Qaeda and the Taliban in Afghanistan. All three plans called for direct action against these non-state, irregular forces and while presenting General Shelton admitted the inadequacy of the plans. How is it possible that the best strategy the uniformed leaders of the U.S. military could propose was a direct approach strategy against an indirect approach strategy-employing adversary?

This thesis examines this question through a number of lenses. First, it offers a general analysis using game theory to analyze the work of Ivan Arreguín-Toft, in *How the Weak Win Wars: A Theory of Asymmetric Conflict.*[1] Next, the conclusion drawn from this analysis is compared to the organizational history of the Department of Defense and the U.S War Colleges' education of the senior uniformed military leaders responsible for the plan presented at the NSC meeting on 9/15.

The key findings, in this thesis, are:

1. The optimal mixed strategy for the U.S. military is:

    a. To possess an equal capacity to conduct either a Direct Approach strategy or Indirect Approach strategy

    b. To force or allow the adversary to commit the first strategic move and respond with the same approach strategy being employed by the adversary.

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[1] Ivan Arreguín-Toft. *How the Weak Win Wars: A Theory of Asymmetric Conflict.* New York: Cambridge University Press, 2005.

2. The U.S. military must institute a curriculum within the U.S. military officer professional education program that equally balances Direct and Indirect Approach strategy foci.

3. The military recommendations presented on 9/15 were inadequate strategies for responding to the 9/11 attacks because:

   a. The recommendation did not respond with the same approach strategy being employed by the adversary (Indirect), who had committed the first strategic move

   b. The U.S. military did not possess an equal capacity to conduct a Direct Approach strategy and Indirect Approach strategy, namely because…

   c. The men responsible for leading the U.S. military and recommending strategy to the President were not products of an officer professional education program with an education that equally balanced Direct and Indirect Approach strategy foci.

The thesis proceeds as follows: Chapter I examines the 9/15 meeting and the U.S. military's strategy orientation, then game theory is used to analyze Toft's "strategic action theory" in order to determine an optimal strategy for asymmetric warfare. Chapter II defines the strategy related legal responsibilities of the uniformed leaders of the U.S. military and analyzes the history of the strategies of the adversaries to Department of Defense operations, prior to 9/11. Chapter III explores the strategy focus of the professional military education of the uniformed leaders responsible for the strategy presented at the 9/15 meeting. Chapter IV presents recommendations for future U.S. military preparations that would optimize success on the asymmetric battlefield of tomorrow.

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I. AN OPTIMAL APPROACH TO ASYMMETRIC CONFLICT

A. THE NCS MEETING ON 9/15

On 15 September 2001, President Bush assembled his National Security Council at Camp David to develop a strategy for retaliating against the perpetrators of the 9/11 attacks. The then Chairman of the Joint Chiefs of Staff, General Hugh Shelton, presented the National Security Council with three Department of Defense developed Courses of Action for a retaliatory strategy against Al Qaeda and the Taliban in Afghanistan. A *Washington Post* article reported the following on the three courses of action:

> The first called for a strike with cruise missiles, a plan the military could execute quickly if speed was the President's overriding priority. The missiles could be launched by Navy ships or Air Force planes from hundreds of miles away. The targets included al Qaeda's training camps.

> The problem, Shelton said, was that the camps were virtually empty and therefore the missile attacks would not be that effective. Clearly, Shelton was not enamored of this idea, nor were the others. Bush had brushed off the possibility from Day One that his response would be an antiseptic "pinprick" attack.

> Option Two combined cruise missiles with manned bomber attacks. Shelton said Bush could initially choose a strike lasting three or four days or something longer, maybe up to 10 days. The targets included Al Qaeda training camps and some Taliban targets, depending on whether the president wanted to go after the Taliban militarily at the start. But this too had limits. As Cheney had said the first night of the crisis, there were few high-value targets in Afghanistan, a country devastated by two decades of war. Another disadvantage was that it could reinforce perceptions that the United States wanted a largely risk-free war on terrorism.

> Shelton described the third and most robust option as cruise missiles, bombers and what the planners like to call "boots on the ground." This option included all the elements of the second

option along with U.S. Special Forces, the elite commandos, and possibly the Army and Marines being deployed inside Afghanistan. But he said it would take a minimum of 10 to 12 days just to get initial forces on the ground-in reality it took far longer-because bases and overflight rights would be needed for search-and-rescue teams to bring out any downed pilots.[2]

These courses of action (COAs) could be very crudely summarized as: COA 1 (Bomb them with smart munitions); COA 2 (Bomb them with smart munitions and manned bombers… for up to 10 days); COA 3 (Get "boots on the ground" to direct bombing them with smart munitions and manned bombers). The irony of these strategies was that as he presented the options, General Shelton continued to reinforce the accepted fact that there was little in Afghanistan worth bombing in the first place. President Bush reportedly remarked to members of his staff that the Shelton presentation was "unimaginative". The *Washington Post* reports that CIA Director, George Tenet, and his Counterterrorism Center Director, Kofer Black, designed the actual strategy that became the initial phases of Operation Enduring Freedom, which led to the overthrow of the Taliban regime and the dispersion of Al Qaeda elements, including Usama bin Laden, from Afghanistan.[3]

B.   THE U.S. MILITARY AND DIRECT CONVENTIONAL MANEUVER WARFARE

The ability of the U.S. military to defeat an adversary in a direct conventional maneuver battle is unparalleled, as witnessed in Operation Desert Storm and the initial seizure of Baghdad in Operation Iraqi Freedom. In addition to the conventional ground maneuver preeminence of U.S. forces, the U.S. military has displayed the capability to establish near absolute, if not truly

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[2] Bob Woodward and Dan Balz, *Washington Post,* Thursday, January 31, 2002; "10 DAYS IN SEPTEMBER: Inside the War Cabinet: At Camp David, Advise and Dissent: Bush, Aides Grapple with War Plan, p A01.

[3] Bob Woodward and Dan Balz, *Washington Post,* Thursday, January 31, 2002; "10 DAYS IN SEPTEMBER: Inside the War Cabinet: At Camp David, Advise and Dissent: Bush, Aides Grapple with War Plan.

absolute, control of desired air and sea space to support these conventional campaigns. The conventional combined arms campaign is the forte of the U.S. military. However, preeminence in this manner of warfare does not directly translate to preeminence in all manners of warfare.

The U.S. military has not always succeeded in warfare where the adversary chooses not to engage in conventional warfare, as witnessed in Vietnam and currently in both Afghanistan and Iraq. These campaigns have been categorized under a number of rubrics, over the years. Whether they are called, Unconventional Warfare (UW), Irregular Warfare (IW), Counterinsurgency operations (COIN), Low-Intensity Conflict (LIC), or Military Operations Other than War (MOOTW); all have the common theme of not being direct campaigns of conventional maneuver battle but, being indirect. In these indirect warfare campaigns, the adversary has attempted, and in some cases succeeded, to erode the power, influence, and will of the U.S. military rather than seeking to destroy it on the field of battle.

A number of authors have stated that the reason the U.S. military has been and is unsuccessful in these indirect warfare campaigns is because of the overwhelming emphasis placed on becoming and maintaining its preeminence in the direct warfare campaign. Further, two scholars have inferred direct attribution for this phenomenon of focusing on conventional warfare back to the earliest days of the U.S. military. Rothstein and Beckett each present the Commander of the Continental Army, General George Washington, as the genesis for the concept of developing and maintaining a conventional warfare focused U.S. military, to the detriment of an unconventional or indirect warfare focus.

Rothstein writes:

The U.S. Army's history of unconventional warfare began with continental militia in the American Revolution, which first fought its better-armed and better-trained opponents with a combination of political organization and guerrilla tactics. But when George

3

Washington took command of the immature Continental Army, his first order of business was to create an army that could fight in the properly accepted European manner. Washington wanted a proper army; he wanted a conventional army.[4]

In explaining the response to an alternative guerrilla campaign strategy forwarded by the Continental Army's third ranking general, Charles Lee, Beckett writes:

Washington, however, recoiled from encouraging an internal conflict damaging to the social fabric and, in any case, believed that only winning a conventional war would demonstrate the legitimacy of the new nation.[5]

These descriptions of General Washington's strategy have potentially inspired the creation of the world's preeminent conventional military force. However, both the inferences by the authors and whatever inspiration the concept, in these two quotes, provided to the later establishment of a U.S. military near totally focused on conventional warfare fail to recognize the reality of either General Washington's military background or how he actually executed his campaigns.

On May 28, 1754, Washington, with only a year of military experience, ordered the first shots of the French and Indian War while leading forty men and a dozen Iroquois Indians while successfully defeating a French element using unconventional tactics. In Washington's second engagement, he was defeated and forced to surrender when employing conventional tactics against the unconventional tactics of the French and Indians. In the third and final

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[4] Hy Rothstein. *Afghanistan and the Troubled Future of Unconventional Warfare.* Annapolis: Naval Institute Press, 2006, p. 27.

[5] Ian F.W. Beckett, *Modern Insurgencies and Counter-Insurgencies: Guerrillas and their Opponents since* 1750. New York: Routledge. 2001, pp 3-4.

engagement in which Washington participated, in May 1755, while serving under the command of British Major General Braddock, the French and Indians, employing unconventional tactics, again defeated Washington's side, who employed conventional tactics. [6]   Even with these tactical victories by the element in each that employed indirect warfare, the war itself was largely decided by the conventional strategy of the British.   Nonetheless, Washington's initial military experience surely impressed upon him the power of indirect warfare, especially when the opponent chooses conventional warfare.

After taking a fifteen-year break in military service and upon taking command of the Continental Army, Washington proceeded to implement a strategy that relied on a combination of conventional warfare and indirect warfare, having personally witnessed the value of the latter in the French and Indian War. These included indirect warfare campaigns such as, naval privateer operations to secure supplies and guerrilla element activities. The latter led to the evacuation of the Carolinas by the British, among other successes. Eventually, these all contributed to the Continental Army victory.   Seemingly, Washington must have known in certain situations conventional warfare was required and in other situations, indirect warfare was the most applicable method of war.

Beckett concedes, "In many respects, the outcome of the war in the South, to which the British switched their main effort in 1779-80, actually depended more on the irregular conflict at the local level than on conventional battles between the British and Continental armies."[7]   The Second Continental Congress chose Washington, in 1775, as their commander-in-chief of the Continental Army.[8] No one can then assume that Washington did not personally

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[6] Langguth, A.J. *Patriots: The men who started the American Revolution.* New York: Simon & Schuster, 1988. pp 289-313.

[7] Beckett, p 3.

[8] McCullough, David. *1776.* New York: Simon & Schuster, 2005. pp 20-35.

understand this situation and therefore appreciate the value of applying indirect warfare against a conventionally operating foe, four years into his command of the Continental Army.

If Rothstein and Beckett are correct in interpreting George Washington's leadership as the genesis of a conventional warfare focus in the U.S. military, the explanation then is that the U.S. military learned the wrong lesson from Washington's leadership. Washington's balance of conventional and indirect warfare ultimately led to victory. His success was not simply the result of a sole focus on conventional warfare.

C.   APPROPRIATE STRATEGIES: DIRECT VS INDIRECT

The lesson of balancing conventional, or direct, and indirect warfare, witnessed and applied by General Washington, is the subject of a recent study by Ivan Arreguín-Toft. Although Toft examines historical data on conflicts other than the French and Indian War and the American Revolution, his conclusion mirrors that which one can assume General Washington learned and applied. Toft presents a "strategic interaction theory" in his recently published *How the Weak Win Wars: A Theory of Asymmetric Conflict.*[9] Toft's theory is essentially a contest or two-player game between a Strong Actor and a Weak Actor.

A Strong Actor can be defined as a state entity possessing Diplomatic, Informational, Military, and Economic (D-I-M-E) resources greatly outweighing those of their opponent, specifically Military. A Weak Actor can be defined as a state or non-state entity possessing limited, or no, D-I-M-E resources, specifically

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[9] Ivan Arreguín-Toft. *How the Weak Win Wars: A Theory of Asymmetric Conflict.* New York: Cambridge University Press, 2005, pp 38-43.

Military.[10] Each actor has two strategies to employ in any conflict with the other, a Direct Approach or an Indirect Approach. A Direct Approach can be defined as a strategy synonymous with conventional military operations at the maneuver warfare end of the conflict spectrum. Toft defines Direct Approach as, "target[ing] an adversary's armed forces with the aim of destroying or capturing that adversary's physical capacity to fight, thus making will irrelevant."[11] An Indirect Approach can be defined as a strategy synonymous with irregular warfare or similar forms of operations at the low-intensity conflict end of the conflict spectrum. Toft defines Indirect Approach as, "most often aim[ing] to destroy an adversary's will to resist, thus making physical capacity irrelevant."[12] A model of Toft's "Strategic Interaction Theory" is depicted in Figure 1.

Weak Actor Strategic Approach

		Direct	Indirect
	Direct	Strong Win	Weak Win
Strong Actor Strategic Approach	Indirect	Weak Win	Strong Win

Figure 1.   Toft's "Strategic Interaction Theory"[13]

Toft's model depicts the asymmetry of conflict between a Strong Actor and a Weak Actor. The asymmetry of the starting position of a Strong or Weak Actor

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[10] Toft, p 2; NOTE: Toft defines his utilization of the terms "Strong Actor" and "Weak Actor" by comparison of each actor's 'relative material power'. He then defines 'relative material power' as, "the product of a given state's population and armed forces." He acknowledges that other 'quantifiable proxies' are used elsewhere to determine state power and concedes, "no single measure appears to be sufficient on its own." Later, when defining 'strategy', Toft refers to, "the totality of an actor's resources directed toward military, political, economic, or other objectives." (p 29) For the purposes of this study, the author will utilize the *Joint Publication 1-02, "DOD Dictionary of Military and Associated Terms* D-I-M-E construct of defining state power, which closely represents Toft's state power definition. (JP 1-02, as amended through 14 September 2007 and retrieved from http://www.dtic.mil/doctrine/jel/doddict /data/i/02716.html).

[11] Toft, p 34.

[12] Toft, p 34.

[13] Toft, p 39

attributes to his conclusion that if the conflict is conducted with similar strategies, the Strong Actor will win. This is logical, since the employment of similar strategies would mean the Weak Actor would be attempting to go "toe-to-toe" with a Strong Actor, who by definition possesses the greater resources. However, he concludes that if the conflict is conducted with dissimilar strategies, the Weak Actor will win. This is also a logical conclusion if one considers that it means the Strong Actor will be employing his wealth of resources in a manner that is not addressing the manner the Weak Actor is seeking to determine the outcome. This negates the power of the Strong Actor's starting position and his associated wealth of resources.

Toft validates his theory by analyzing 202 historical cases of asymmetric conflicts from 1816 to 2003. He uses the histories of these conflicts in the *Correlates of War Project* data set which list over 4,000 conflicts, during this period. He considered conflicts asymmetric if the halved product of one actor's armed forces and population exceeded the simple product of its adversary's armed forces and population by 5:1 or more.[14] The available data enabled Toft to consider only 173 of the 202 asymmetric conflicts. Toft's research and analysis of this data, given the parameters of his coding, shows that when actors employ similar strategies (e.g. Direct-Direct and Indirect-Indirect) the Strong Actor won 76.8% of the 151 historical cases. When actors employ dissimilar strategies (e.g. Direct-Indirect and Indirect-Direct) the Weak Actor won 63.6 of the 22 historical cases. [15]

One manner of analyzing Toft's "strategic interaction theory" is by applying mathematical game theory. John Nash was one of the first to develop both noncooperative game theory and cooperative game theory in the 1950s. His work remains some of the bedrock principles of economic theory and Nash was

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[14] Toft, p 43.

[15] Toft, pp 43-45. NOTE: Data on 29 of the original 202 cases did facilitate coding.

awarded the 1994 Nobel Prize in Economics. [16] Nash's work readily applies to economic situations where tangible outcomes are easily derived from a variety of standard business metrics, like a cost benefit analysis. Nash's work is thought less applicable in political science because of the requirement to assign values, which are exceedingly difficult to determine when factors like opponent's psychological value of an action becomes a variable but is less than tangible. Ironically, game theory was not only developed by the U.S. military, but it was specifically developed to solve the largest political-military problem in the history of the world, the U.S./Soviet Nuclear Arms Race in the Cold War.[17] The implications drawn from an application of Nash's Game Theories to a political–military situation not only can provide a potential solution for political–military situations, but the whole concept Nash built his work on was originally intended for such use.

As previously noted, Toft's research and analysis provides historically based statistical results in Strong and Weak Actor asymmetric conflicts. Unfortunately, Toft does not show the statistical results of each type of conflict (e.g. Direct vs. Direct, Indirect vs. Direct, Direct vs. Indirect, Indirect vs. Indirect). Instead, he only published the statistical results of the analysis of similar strategy and dissimilar strategy conflicts. These statistics are insufficient to employ game theory to analyze Toft's "strategic interaction theory".

Although not the most optimal, it is possible to employ game theory without exact statistical results; understanding that the result of this manner of analysis is just as subjective as the inputs used in place of scientifically gathered data. When scientifically gathered data is unavailable, Nash's theories require the use of cardinal values for the variables in a given situation in order to attain the most accurate outcomes. Cardinal values are derived from applying an

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[16] *For all Practical Purposes: Introduction to Contemporary Mathematics,* 4th edition, Gordonsville, VA: W H Freeman & Co., 1996, p 586; NOTE: If not otherwise cited, the applications of Game Theory employed are drawn from this source.

[17] Philip D. Straffin. *Game Theory and* Strategy, Washington: Mathematical Association of America, 1993. p 73.

interval scaling to a previously rank ordered group of options. Rank ordering a group of options provides the ordinal scale of those options, so that only the order of the numbers matters, not their absolute or relative magnitude.[18]

For example, if you were seeking the greatest return from three options (A, B, C) where Option A returns $20, Option B returns $50, and Option C returns $15. An ordinal ranking of these options, where higher is better, would then be: Option B returning $50 (ordinal value of 3), Option A returning $20 (ordinal value of 2), Option C returning $15 (ordinal value of 1). When looking at the ordinal ranking of 3, 2, 1, the degree to which 3 is better than 2 or 1 is not a factor.

If the degree to which 3 is better than 2 or 1 is a factor, an interval scale is required to reflect the ratios of differences between the numbers. The value of each option on that scale is the option's cardinal value.[19] In the previous example, it may be sufficient just to employ the return values of each option as the individual option's cardinal value. In some case it may be more beneficial to apply the ordinal values of the outcomes to a 0-100 cardinal scale. Whatever the logic behind the interval scaling, the cardinal value of an option enables an observer to see the significance of the difference between that option and other available options. Lastly, if the degree to which 3 is better than 2 or 1 is a factor but absolute or relative magnitude is not required, it is possible to employ the ordinal value of an option as that option's cardinal value. If this method was employed in the previous example, it would then be understood that Option B, with an ordinal value of 3, is three times preferable to Option C, with an ordinal value of 1, and is one and a half times preferable to Option A, with an ordinal value of 2. This method, of using ordinal values as cardinal values, does not provide the most accurate outcomes but does provide a general indication of the returns from a game. As previously mentioned, it is difficult to establish an interval scaling in a political-military situation when trying to evaluate with game theory because a wide variety of variables contribute to assigning any given

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[18] Straffin, p 50.

[19] Straffin, p 50.

cardinal value. The model of Toft's "strategic interaction theory" represents a 2x2 game matrix, which can be analyzed with an application of Nash's theories if ordinal values are used as cardinal values.

It is necessary to assign ordinal values to the outcomes, which would generally be true of any Strong Actor or Weak Actor. These ordinal values may not match a specific actor's assessed cardinal value. Due to variance, not only among actors but down to the commanders of the executing forces, therefore varying situation to situation, it must be assumed that ordinal values can be used as cardinal values. This means that for this analysis a 4 is twice as good as a 2, a 3 is three times as good as a 1, et cetera.

With this assumption, it is then possible to assign ordinal values to the outcomes depicted in Toft's model. Beginning with the Strong Actor, who by definition possesses greater D-I-M-E resources, specifically Military, than an opposing Weak Actor, it is logical that a Strong Actor would favor a Direct vs. Direct conflict over any other manner of conflict with a Weak Actor. In Toft's model, this manner of conflict both results in a win for the Strong Actor and logically would result in greater returns for the Strong Actor's economy, by way of producing greater requirements for the Strong Actor's military industrial complex. In this situation, the Strong Actor also has the potential to gain greater diplomatic status in relations with other state entities by displaying the preeminence of its armed forces. Even if the result of this conflict is only an informational gain that serves as a deterrent for potential opponents in future situations, the Strong Actor favors this return. When using an ordinal scale of 1 to 4, with 4 being best, a Strong Actor would assign a Direct vs. Direct conflict an ordinal value of 4.

Any actor would favor a win to a loss, therefore a Strong Actor would favor a win in an Indirect vs. Indirect conflict over either of the other two remaining types of conflict that result in Weak Actor wins. This assessment is made regardless if the Strong Actor possesses a sufficient Indirect Approach capability when the conflict develops or whether the conflict results in tremendous economic gain for the Strong Actor. The potential loss of diplomatic

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status and associated informational damage inherent to losing a conflict would outweigh the Strong Actor's preference or armed forces orientation prior to entering the conflict. The Strong Actor would then assign an Indirect vs. Indirect conflict an ordinal value of 3.

Of the two remaining manners of conflict with a Weak Actor, both resulting in Weak Actor wins, a Strong Actor would favor entering a conflict with an Indirect Approach while the Weak Actor employs a Direct Approach over a Direct vs. Indirect conflict. In an Indirect vs. Direct conflict, because the Strong Actor possesses the greater D-I-M-E resources, the Strong Actor might potentially be able to convert the conflict by applying its wealth of greater resources and make it a Direct vs. Direct conflict. Even though the conflict results in a loss, the Weak Actor is meeting the Strong Actor in the Strong Actor's traditionally most favored manner. In a Direct vs. Indirect conflict, the opposite is the case where the Strong Actor is meeting the Weak Actor in the Weak Actor's traditionally most favored manner. The Strong Actor would then assign an Indirect vs. Direct conflict an ordinal value of 2 and a Direct vs. Indirect conflict an ordinal value of 1.

Upon entering the game, the Weak Actor's situation is the exact opposite of the Strong Actor. By definition, the Weal Actor possesses substantially less D-I-M-E resources. When assigning Weak Actor ordinal values logically one can then assume a Weak Actor would favor employing an Indirect Approach because this approach requires less material resources. In Toft's model, the Direct vs. Indirect conflict results in a Weak Actor win and the Indirect vs. Indirect does not. The Weak Actor would assign a Direct vs. Indirect conflict an ordinal value of 4.

With the same logic applied to the Strong Actor, a Weak Actor would favor a win to a loss. Of the three remaining manners of conflict in this game, an Indirect vs. Direct conflict results in a win, the other two do not. Again, just as with the Strong Actor, this assessment is made regardless if the Weak Actor possesses a sufficient Direct Approach capability when the conflict develops.

Additionally, in this circumstance the Weak Actor is meeting the Strong Actor at "his own game". Nonetheless, a Weak Actor would assign an Indirect vs. Direct conflict an ordinal value of 3.

In the two remaining manners of conflict with a Strong Actor, both resulting in Strong Actor wins, a Weak Actor would favor entering a conflict with an Indirect Approach while the Strong Actor employs an Indirect Approach over a Direct vs. Direct conflict. In a Direct vs. Direct conflict, because the Strong Actor possesses the greater D-I-M-E resources, the Weak Actor simply cannot compete. Whereas, in an Indirect vs. Indirect conflict, the Weak Actor is employing his favorable manner and making the Strong Actor employ a strategy that is his less than favorite means. The Weak Actor would assign an Indirect vs. Indirect conflict an ordinal value of 2 and a Direct vs. Direct conflict an ordinal value of 1.

By assigning Strong and Weak Actor ordinal values to the outcomes of Toft's "strategic interaction theory", the result is, for military implications, the total conflict zero-sum game depicted in Figure 2.

<div align="center">Weak Actor</div>

		Direct	Indirect
	Direct	4,1	1,4
Strong Actor	Indirect	2,3	3,2

Figure 2.   Toft's "Strategic Interaction Theory" with assigned Strong Actor, Weak Actor Ordinal Values.

Again, using the previous assumption, these ordinal values can be used as cardinal values for each actor and this enables an analysis with Nash's Theories. The initial analysis of this game shows that there is no pure strategy for either actor to employ that can ensure in that actor winning the game. The

next step in analyzing a total conflict is to determine the Expected Value of the game for each actor. The Expected Value for both actors in a game is known as the Nash Equilibrium. Interestingly, in this game the Nash Equilibrium value is (2.5, 2.5).   The lowest ordinal value assigned to a win by either actor was a 3 and the highest ordinal value assigned to a loss by either actor was a 2. The Nash Equilibrium in this game is then just above a loss and just below a win for either the Strong or Weak, a stalemate.

In order to achieve this outcome the Weak Actor must utilize an optimal mixed strategy of employing a Direct Approach 50% of the time and employing an Indirect Approach 50% of the time. In order for the Strong Actor to achieve this outcome, the Strong Actor's optimal mixed strategy is to employ a Direct Approach only 25% of the time and employ an Indirect Approach 75% of the time. (See Appendix A "Game Theory Calculations")   These optimal mixed strategies are somewhat inconclusive because even if they are employed, neither the Strong Actor nor the Weak Actor, over the long run, is assured of averaging a win, just averaging essentially strategic stalemates.

Up to this point, this game between the Strong and Weak Actor has been considered as a game being played simultaneously without communication between the two players. If the same game is analyzed as a non-simultaneous game with some manner of communication between the two players, even if not in direct communications, the analysis could consider strategic moves each player could make to possibly enhance their Expected Value of the game. An analysis of strategic moves is not typically conducted when analyzing zero-sum games because all possible outcomes are already pareto optimal, that is if there is a change to the outcome it will only benefit one of the two players. However, in this case, an analysis of strategic moves does provide a Course of Action for an actor to employ to exceed the Nash Equilibrium or averaging a strategic stalemate.

There are three possible strategic moves any player in a game can make or a player can use any combination of the three strategic moves. The strategic

moves are a first move, a threat, and/or a promise. In analyzing the strategic moves available to the Strong and Weak Actor: the initial analysis is of an actor's first moves; then if the actor has a threat available and if so whether that threat will work independently; then if the actor has a promise available and if so whether that promise will work independently; and finally if there is a combination of any of these.

Considering the Strong and Weak Actors' situation in this game, there is no first move they can make that will exceed the Nash Equilibrium (2.5, 2.5). For example, if the Strong Actor moves first and employs a Direct Approach, the Weak Actor will counter by employing an Indirect Approach resulting in a Weak Actor win (1, 4). Similarly, neither the Strong Actor nor the Weak Actor has a threat to make or a promise to the other, which will result in an outcome that exceeds the Nash Equilibrium. Thus, the reason strategic moves are not typically employed when analyzing zero-sum games.

However, the evaluation of strategic moves does provide an answer if the analysis of each actor is compared side-by-side, specifically the strategic first moves of each actor. If an actor (Actor A) allows/forces the opposing actor (Actor B) to commit the first move and Actor A possesses the capacity to execute the opposing strategy, Actor A increases its probability of securing a victory. When viewed through Toft's research of historical asymmetric conflict cases, this strategy would mean that a Strong Actor could increase its probability of victory from 36.4% to a theoretically 'guaranteed' 76.8%. This strategy would mean that a Weak Actor could increase its probability of victory from 23.2% to a theoretically 'guaranteed' 63.6%.[20] What does this mean to the manner in which a Strong or Weak Actor should optimally prepare for future conflicts?

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[20] Toft, p 43-45.

D. THE IMPLICATIONS OF AN OPTIMAL MIX OF STRATEGIES: DIRECT AND INDIRECT

Additional assumptions are required in order to apply the analytical outcome back to the political-military situation. The first is to assume that there is a direct correlation between the strategy derived from an application of game theory to Toft's "strategic interaction theory" and the manner in which an actor should be prepared for future conflicts. This assumption understands the resulting probabilities of an application of game theory are taken over the long run, meaning the immediate relevancy in any specific conflict may be limited. Additionally, although he has only published five of his studies in the book, Toft's "strategic interaction theory" is based on his examination of the combined statistical and comparative case study analysis of 173 separate historical case studies of asymmetric conflict. The results of this game theory analysis would then be an extrapolation of Toft's theory but, as every stock investment program warns, "past performance is no guarantee of future returns."

When this assumption is applied to the previous analysis, actors are able to determine the implications of this analysis. The results of a Game Theory analysis shows that the only way any actor, Strong or Weak, can maximize their probability of a victory is to be equally capable of executing a Direct or Indirect strategy in response to the opposing element's strategic first move. This implies both actors possess the capability to execute a 50-50 ratio (Direct-Indirect) of approaches. Yet by definition, the Weak Actor possesses less Direct Approach military capabilities. The Weak Actor is not then able to actually possess the ability to match a Strong Actor in the Direct Approach. This fact essentially factors out the ability of the Weak Actor to determine the outcome of a conflict, meaning any conflict between a Strong and Weak Actor is the Strong Actor's to win or lose.

If a Strong Actor forces or allows the opposing Weak Actor to commit the first move and if that Strong Actor possesses the capability to execute either a Direct or Indirect strategy, the Strong Actor maximizes its probability of winning.

To visualize this concept the bar graph in Figure 3 depicts the optimal mix of Direct and Indirect capability of a Strong Actor's military prepared to theoretically maximize its potential to defeat any foe.
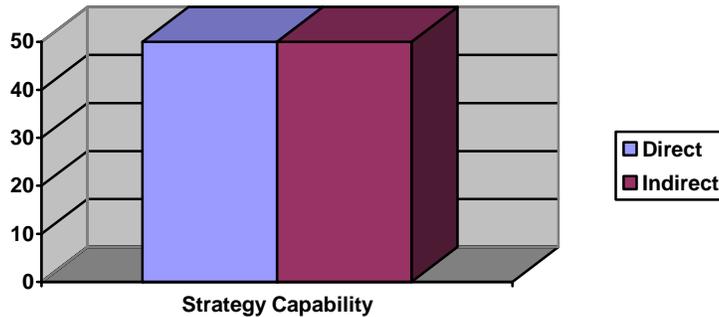
Figure 3.   Theoretical Optimal Mix of Strong Actor Direct and Indirect Approach Capabilities.

A final assumption may clarify these implications. Conflict campaigns can be composed of a combination of Direct and Indirect strategies. Toft employed broad generalizations to define the strategy employed by an actor in one category or the other by the preponderance of the actor's effort. Similarly, there are less than optimal applications for forces optimized to conduct operations in one strategy, Direct or Indirect, in the opposing strategy (i.e. Infantry units optimized for maneuver warfare used in an Indirect strategy, Civil Affairs units optimized for low-intensity conflict used in a Direct strategy, etc.). It is then necessary to assume that there is not a correlation between the outcomes of this analysis and the requisite force structures for the actors to execute the strategies.

This assumption means the Strong Actor 50-50 ratio (Direct-Indirect) does not infer a requirement for a force structure that is 50% optimized for the Direct Approach and a bifurcated 50% optimized for the Indirect Approach. There is an acknowledged historical precedence for the application of forces optimized for

the Direct Approach in an Indirect Approach and vice versa. The result of this analysis corresponds only with the application of those forces as it pertains to the correct strategy, dictated for the Strong Actor by the strategic first move of the Weak Actor. Once the Weak Actor makes the strategic first move by employing either a Direct or Indirect Approach, the Strong Actor must employ a similar strategy. The Strong Actor then would inherently have a requirement for leaders skilled at planning and leading Direct and Indirect Campaigns, which are capable of directing the actions of subordinate elements in those campaigns. It is arguably logical that an Indirect strategy would require more forces optimized for that manner of operations, but the matter actually depends more on the commanders of the strategy being employed against the Weak Actor.

If the leaders of a strategy understand the requirements of that strategy, it is already assumed that given their rank and position as leaders, they can develop and issue orders directing an element that is not optimally organized to accomplish a task that will result in that element's successful attainment of the desired endstate. Additionally, if leaders understood the requirements of an Indirect strategy, it may be assumed they would direct the tailoring of the force structure to meet the requirements of forces optimized in that approach, if the current force structure did not.

E.   THE LIMITS OF THIS ANALYSIS

As previously mentioned, the game theory analysis of Toft's "strategic interaction theory" could not be optimally completed with his published material. The manner utilized, employing logically deduced ordinal values as cardinal values, is illustrative but, lacks empirical support. However, it is questionable whether a large enough data set is available to conduct a more scientific analysis of each type of strategy conflict.

Toft utilized the *Correlates of War* data set and found 202 asymmetric conflicts between 1816 and 2003. He could only use 173 cases in his analysis. Toft only coded 22 of these conflicts as having adversaries employ dissimilar

strategies; either Indirect/Direct or Direct/Indirect (Strong Actor/Weak Actor). It would be hard to believe that there are 11 cases where a Strong Actor has gone Indirect while a Weak Actor goes Direct but, even if these cases are equally distributed between these two types of conflicts, the outcomes could not easily or equally be compared against the outcomes of the 151 cases where the adversaries employed similar strategies.

Nonetheless, Toft's work is a significant study of the history of asymmetric conflict. As the sole remaining super-power, the U.S. military will remain involved in asymmetric conflict for the foreseeable future and as David C. Mccullough, the author of *1776,* observed, "History is a guide to navigation in perilous times."[21]

F.   SUMMARY

Toft's "strategic interaction theory" provides an interesting and historically based model. When analyzed through Nash's game theories, the model becomes illustrative of the preparations a Strong Actor should make prior to future conflicts with Weak Actors. In the end, a Strong Actor is found capable of significantly influencing their destiny in future conflicts with Weak Actors, winning 76.8% of these conflicts. A Strong Actor that fails to prepare equally as well with a Direct or Indirect Approach to meet a Weak Actor, does so at their own peril and at the risk of only winning 36.4% of these conflicts. This is a similar conclusion and principle one could logically assume General Washington knew and applied, if one looked beyond the anecdotal evidence of Washington's predisposition toward a conventionally focused U.S. military.

A Weak Actor, Al Qaeda, employing and Indirect Approach, commercial aircraft as weapons of mass effect, against a Strong Actor, the United States, is exactly the situation that occurred on 9/11. The Weak Actor committed the first strategic move. However, the U.S. military did not present a strategy for defeating the Weak Actor that was similar to the Weak Actor's Indirect Approach,

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[21] "history" Internet; retrieved from http://www.wisdomquotes.com/002391.html accessed on 13 October 2007

at the National Security Council meeting on 9/15, and therefore did not recommend applying the theoretically correct solution. Instead, the U.S. military, represented by the Chairman of the Joint Chiefs of Staff, then General Hugh Shelton, presented a Direct Approach strategy, which in theory is not optimal in such situations. Why?

II.   THE INFLUENCE OF ORGANIZATIONAL HISTORY

In his study of organizational behavior in the decision process, Graham Allison states, "The behavior of [existing] organizations-and consequently of the government-relevant to an issue in any particular instance is, therefore, determined primarily by routines established prior to that instance."[22]   An examination of the history of the existing organization, being the Department of Defense and the Chairman of the Joint Chiefs of Staff, should explain who was responsible for the presentation on 9/15. This responsibility was the result of 'routines established prior to that instance.' Allison also observes, "Operational experiences in the field reinforce certain capacities and routines, even endow the capacities and routines with a ceremonial power that provides legitimation internally or in dealings with the outside world."[23] A larger examination of the operational experiences of the Department of Defense may identify which capacities and routines the organization reinforced. This examination will be of operations directed or authorized by the President and will be conducted through the lens of the strategy employed by the element opposing U.S. military action. The earlier analysis of Toft's work indicates U.S. military strategy, whether Direct or Indirect, should be similar to that employed by its opponents.

A.   THE EVOLUTION OF RESPONSIBILITY FOR MILITARY ADVICE TO THE PRESIDENT

In 1947, the 80th Congress, under the National Security Act, created the Department of Defense from the War Department and the Department of the Navy.[24] The legislation also directed the establishment of the National Security

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[22] Graham Allison and Philip Zelikow, *Essence of Decision: Explaining the Cuban Missile Crisis*, 2nd edition, New York: Addison-Wesley Educational Publishers, Inc., 1999, p 144.

[23] Allison and Zelikow, p 155.

[24] Office of the Secretary of Defense Historical Office, "Public Law 253, The National Security Act of 1947" published in *The Department of Defense: Documents on Establishment and Organization 1944-1978*, edited by Alice C. Cole, Alfred Goldberg, Samuel A. Tucker, Rudolph A. Winnacker, Washington, DC: U.S. Government Print Office, 1978. pp 35-50.

Council, Central Intelligence Agency, and National Security Resources Board.[25] In addition to creating the Department of Defense, this legislation specifically directed the establishment of the office and responsibilities of the Secretary of Defense and the Department of the Air Force.[26] As a result, the uniformed services were each represented to the Secretary of Defense or President by a Chief of Staff equivalent. The Army Chief of Staff, Navy Chief of Naval Operations, and Air Force Chief of Staff combined to form the initial Joint Chiefs of Staff (JCS).[27] The primary JCS strategy responsibilities were, "to prepare strategic plans and to provide for the strategic direction of the military forces" and "act as principal military advisers to the President and the Secretary of Defense."[28] A committee voting system crafted strategic plans and military advice to the President and the Secretary of Defense. Each Chief of Staff and the Chief of Naval Operations had one vote. All plans or advice to the President and the Secretary of Defense required unanimous approval, which often limited such advice to 'lowest common denominators'. This sometimes led to inadequate recommendations.

Minor amendments were passed, over the next 40 years, but the structure of the Department of Defense, created by the National Security Act of 1947, remained essentially unchanged until 1986. In 1986, the 99th U.S. Congress passed the Goldwater-Nichols Department of Defense Reorganization Act, which significantly altered the Department of Defense. The stated purpose, in part, of the bill was:

> To reorganize the Department of Defense and strengthen civilian authority in the Department of Defense, to improve the military advice provided to the President, the National Security Council, and the Secretary of Defense, to place clear responsibility on the

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[25] "National Security Act of 1947", Section 101, 102, 103. pp 36-40.

[26] "National Security Act of 1947", Section 202, 207. pp 40-43.

[27] "National Security Act of 1947", Section 211.a. p 45. NOTE: A non-voting Chairman of the Joint Chiefs of Staff position was created in Public Law 216, 10 August 1949, and the Commandant of the Marine Corps was authorized coequal status with other Chiefs in Public Law 416, 28 June 1952. pp 94 & 114.

[28] "National Security Act of 1947", Section 211.b.1. and c. p 45.

commanders of the unified and specified combatant commands for the accomplishment of missions assigned to those commands and ensure that the authority of those commanders is fully commensurate with that responsibility, to increase attention to the formulation of strategy and to contingency planning…[29]

The Goldwater-Nichols Act empowered the Chairman of the Joint Chiefs of Staff as the principal uniformed military adviser to the President, National Security Council, and Secretary of Defense.[30] Specifically, with respect to advice on strategic direction and planning, the Chairman of the Joint Chiefs of Staff is responsible for, "Assisting the President and Secretary of Defense in providing for the strategic direction of the armed forces" and "Preparing strategic plans."[31] Additionally, the bill created a Vice Chairman of the Joint Chiefs of Staff and empowered the Geographic Combatant Commanders with a direct chain of command to the President and Secretary of Defense, via only the Chairman of the Joint Chiefs of Staff.[32] The Vice Chairman is a non-voting member of the Joint Chiefs of Staff but is prepared to function as the Chairman of the Joint Chiefs of Staff in his absence. The Chairman of the Joint Chiefs of Staff further, "serves as the spokesman for the commanders of the [geographic] combatant commands, especially on the operational requirements of their commands."[33]

Four days after the 9/11 attacks, the National Security Council assembled at Camp David. At the time, President Bush was attempting to develop a strategy for how the United States would respond to the 9/11 attacks. The military advice the President received was inadequate because it was wholly focused on a Direct Approach when admittedly there were limited targets

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[29] Public Law 99-433, 99th Congress, "Goldwater-Nichols Department of Defense Reorganization Act of 1986" Internet; retrieved from http://www.ndu.edu/library/goldnich/99433pt1.pdf; accessed on 5 August 2007.

[30] "Goldwater-Nichols Department of Defense Reorganization Act of 1986", Section 151.b.

[31] "Goldwater-Nichols Department of Defense Reorganization Act of 1986", Section 153.a.1 and 2.

[32] "Goldwater-Nichols Department of Defense Reorganization Act of 1986", Section 154 and 211.

[33] "Goldwater-Nichols Department of Defense Reorganization Act of 1986", Section 163

available, making a Direct Approach infeasible.[34]   Although the recommendation was inadequate, this was an example of the Chairman of the Joint Chiefs of Staff, then General Hugh Shelton, fulfilling the responsibilities prescribed in Goldwater-Nichols.   Shelton presented a strategy for military operations in a specific Geographic Combatant Command Area of Responsibility, U.S. Central Command. From the responsibilities prescribed in Goldwater-Nichols, it can then be assumed that the Commander of U.S. Central Command, then General Tommy Franks, and the Vice Chairman of the Joint Chiefs of Staff, then General Richard Myers, endorsed the strategy General Shelton presented to the National Security Council. General Shelton served as the spokesman for General Franks. General Myers would have been responsible for presenting the same information, if General Shelton could not. Additionally, General Shelton's term of office was due to expire 1 October 2001 and President Bush nominated General Meyers as the successor to General Shelton on 24 August 2001. [35]   General Myers' assumption of Chairman of the Joint Chiefs of Staff occurred two weeks after the meeting on 9/15. Certainly, General Shelton would have reviewed the presentation with General Myers, since Myers would be the Chairman of the Joint Chiefs of Staff during execution of the recommendation. Although General Shelton is the only individual associated with the strategy presented at the National Security Council meeting on 9/15 in the *Washington Post* article, it is logical to assume that Shelton was speaking for himself, General Franks, and for General Myers. Responsibility for the inadequacy of the recommendation to the President from his principal military advisor, is shared then by Generals Shelton, Myers, and Franks.

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[34] Woodward, Bob and Dan Balz. *Washington Post,* Thursday, January 31, 2002; "10 DAYS IN SEPTEMBER: Inside the War Cabinet: At Camp David, Advise and Dissent: Bush, Aides Grapple with War Plan

[35] Gerry J. Gilmore, "Bush Nominates Myers as JCS Chief, Pace as Vice", *American Forces Press Service*, Aug. 24, 2001, Internet; retrieved from http://www.defenselink.mil/news /newsarticle.aspx?id=44758 accessed on 5 August 2007.

B.   THE OPERATIONAL EXPERIENCES OF THE DEPARTMENT OF DEFENSE

A potential answer to the question of why Generals Shelton, Myers, and Franks presented only a Direct Approach strategy might be that the Department of Defense had no prior or very limited experience in dealing with opponents that employed Indirect Approach campaign strategies.   However, a look back at the Department of Defense's 54 year history of military operations prior to the attacks on 9/11, reflects near constant operations in activities where the opponent did not employ a Direct Approach strategy against U.S. military forces.   Arguably, in all of the operations the U.S. military conducted between the creation of the Department of Defense and 9/11, the opponents only employed a Direct Approach strategy twice, the Korean War and Operation Desert Storm.[36] Unquestionably, there are a number of incidents when opponents employed Direct Approach tactics.   For example, both Operation Just Cause (Panama) and Operation Urgent Fury (Grenada) would not be considered as Direct because in neither case did the opponent choose to employ a Direct Approach campaign strategy to defeat U.S. military forces.   Each government was executing some manner of Indirect Approach against the U.S. government, until the U.S. military invaded these countries, at which point tactical elements employed Direct Approach tactics, but there is no literature to suggest the defense was part of a directed Direct Approach strategy.[37]   Desert Storm and Korea are the only U.S. military operations, in the time period examined, where the opponents' campaign strategies to attain their desired outcome were to directly engage with and

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[36] T. R. Fehrenbach, *This Kind of War: A Study In Unpreparedness.* New York: Bantam, 1991; Michael R Gordon and Bernard E. Trainor, *The Generals' War: The Inside Story of the Conflict in the Gulf.* New York: Little Brown and Company, 1995

[37] Ronald H. Cole, *Operation Urgent Fury: the planning and execution of joint operations in Grenada, 12 October-2 November 1983*, Washington, DC: Joint History Office, Office of the Chairman of the Joint Chiefs of Staff, 1997; *Operation Just Cause: the incursion into Panama*, Washington, D.C.: The Center of Military History, 2004. NOTE: In *How the Weak Win Wars: A Theory of Asymmetric Conflict*, Toft considers the North Vietnamese response to U.S. Operation Rolling Thunder (FEB 65 – OCT 68) to be a Direct Approach.(pp 144-168) Unlike Toft, this author considers only the tactical and operational-level response as Direct. This author considers the North Vietnamese strategic-level strategy as an Indirect Approach throughout U.S. active participation in the conflict.

destroy U.S. military forces on the battlefield. In all of the other U.S. military deployments or operations during this time period there was either an opponent employing an Indirect Approach strategy or, in some cases, no armed opponent at all. For example, in Vietnam, the opponent employed an Indirect Approach strategy; in Humanitarian Assistance operations, such as Operation Silent Promise in Mozambique, or events like the U.S. military deployment of forces at the outbreak of the Arab-Israeli "Six Day War"; there was no opponent to U.S. military operations.[38]

The game theory analysis of Toft's "strategic interaction theory", presented in Chapter I, showed that in order for the U.S. military to theoretically maximize its probability of winning, it must be equally capable of conducting a Direct or Indirect Approach to strategy. Additionally, the U.S. military's approach should be identical to whichever strategy the opponent employs. To be equally capable essentially means the U.S. military should possess a 50% Direct Approach strategy capability and a 50% Indirect Approach strategy capability.

It could be argued that that the U.S. military's capacity for or the threat of the Direct Approach served as a deterrent, specifically on the German front against the Soviets and the DMZ in Korea. Although there is undoubtedly some validity to this argument, the argument is counterfactual. Writing on strategy in the early 1960s, Beaufre observed of the Cold War, "Its tactics are industrial, technical, and financial. It is a form of indirect attrition; instead of destroying enemy resources, its object is to make them obsolete, thereby forcing upon him enormous expenditure."[39] History shows that Beaufre had it right nearly 30 years prior to the conclusion of the Cold War.

Several sources illustrate the preponderance of Indirect Approach operations that the United States conducted between 1947 and 2001. For

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[38] "Six Day War" Internet; retrieved from http://www.globalsecurity.org/military/ops/6-day.htm and "Operation Silent Promise" Internet; retrieved from http://www.globalsecurity.org/military/ops /silent_promise.htm accessed on 5 August 2007.

[39] Andre' Beaufre, *Introduction to Strategy*, London: Faber and Faber, 1965, p 77.

example, the Congressional Research Service report RL30172 entitled "Instances of Use of United States Armed Forces Abroad, 1798-2004" offers a detailed synopsis of U.S. military international operations.[40] In this report, the Congressional Research Service lists 127 instances of the U.S. military conducting operations abroad, between 1947 and September 2001, the timeframe under investigation in this thesis.

GlobalSecurity.org, a U.S. based non-partisan research center, also maintains a database of publicly documented domestic and international U.S. military operations. [41] This database lists over 200 instances of Presidential directed or authorized domestic and international U.S. military operations, between 1947 and September 2001. Some of the operations listed in this database are not considered significant for the analysis in this thesis. For example, Operation Steel Box was a transfer of chemical munitions and is listed in the GlobalSecurity.org database.[42] Although the operation was conducted under the auspices of a Presidential authorization, it is not considered strategically significant in this analysis.

There are a number of databases available with a listing of U.S. military operations.[43] However, the Congressional Research Service report RL30172 and the GlobalSecurity.org database are both comprehensive and detailed. The Congressional Research Service report RL30172 and the GlobalSecurity.org database have been combined in Appendix B (U.S. Military Deployments and

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[40] "Instances of Use of United States Armed Forces Abroad, 1798-2004", CRS Report RL30172, Internet; retrieved from http://www.au.af.mil/au/awc/awcgate/crs/rl30172.htm accessed on 5 August 2007.

[41] "U.S. Military Operations", Internet; retrieved from http://www.globalsecurity.org/military/ops /index.html accessed on 5 August 2007.

[42] "Operation Steel Box", Internet; retrieved from http://www.globalsecurity.org/military /ops/steel_box.htm accessed on 5 August 2007.

[43] See: "U.S. Military Deployments/Engagements 1975-2001" prepared by the Department of Defense and Military Department Public Affairs Offices, Center for Defense Information, Internet; retrieved from http://www.cdi.org/issues/USForces/deployments.html accessed on 5 August 2007; "From Wounded Knee to Iraq: A Century Of U.S. Military Interventions" by Dr. Zoltan Grossman, Internet; retrieved from http://academic.evergreen.edu/g/grossmaz/interventions.html accessed on 5 August 2007.

Operations, 1947 – 2001). Operations are listed in reverse chronological order by the start date of U.S. military operations in each specified locale. If subsequent authorizations provided for continuous operations in that same locale, these are listed under the start date of the initial authorization. Operations listed in Appendix B are shown as separate instances if there was specific Presidential authorization issued for a different operation. For example, the Vietnam War is annotated as a single Presidential authorized event. All of the various U.S. military operations conducted under specific authorizations from Presidents Kennedy, Johnson, or Nixon in Southeast Asia in support of the Republic of South Vietnam are also each considered single Presidential directed events. Conversely, the Korean War is annotated as a single Presidential authorized event, but there were no other specific Presidential authorizations for other military operations in support of the Republic of Korea.

Appendix B is most likely not all inclusive in its listings of U.S. military operations. Both referenced sources, the CRS report and GlobalSecurity.org, note the absence of covert or other classified U.S. military operations from their listings. However, it is safe to assume that U.S. military operations not listed would have been against opponents that did not employ a Direct Approach strategy. Additionally, this manner of analysis gives equal weighting to each operation. The Korean War or Operation Desert Storm, both operations consisting of the deployment of hundreds of thousands of U.S. military forces, are viewed equally with Operation Greensweep, where a much smaller number of U.S. military forces reportedly assisted Drug Enforcement Agency elements in conducting counter-narcotics operations in California.[44] However, this analysis is not intended to decipher quantitative levels of effort on the part of U.S. military forces. It is only intended to facilitate a trend analysis of the requirement for the deployment of U.S. military forces, between 1947 and 2001.

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[44] "Operation Greensweep" Internet; retrieved from http://www.globalsecurity.org/military /ops/greensweep.htm accessed on 5 August 2007.

The list of operations in Appendix B is further classified by whether the opposing element employed a Direct Approach campaign strategy toward U.S. forces. If this is the case, the event is classified as Direct because this is the approach strategy the analysis of Toft indicates the U.S. military should have employed against the opponent in that event. If the opposing element did not employ a Direct Approach campaign strategy, the operation is considered Indirect because this is the approach strategy the Toft analysis indicates the U.S. military should have employed against the opponent in these events. If there was no opposing element, the operation is also considered Indirect because in order for the U.S. military to employ a Direct Approach strategy, it must have an opponent to destroy.

There are a total of 210 separate Presidential directed or authorized U.S. military operations listed in Appendix B. When these separate events are classified as either Direct or Indirect, in 208 of the 210 operations the opponent did not employ a Direct Approach campaign strategy in attempting to defeat the U.S. military forces. This means 99.1% of the time U.S. forces should not have employed a Direct Approach. A Direct Approach was required to meet an opponent employing their own Direct Approach strategy in only 2 incidents, or .9%of the operations in this database. In other words, the Department of Defense should have employed an indirect action approach to counter the opponents' strategy in nearly every case. The result of this analysis compared to the conclusions drawn from the game theory analysis of Toft's "strategic interaction theory" is shown in Figure 4:
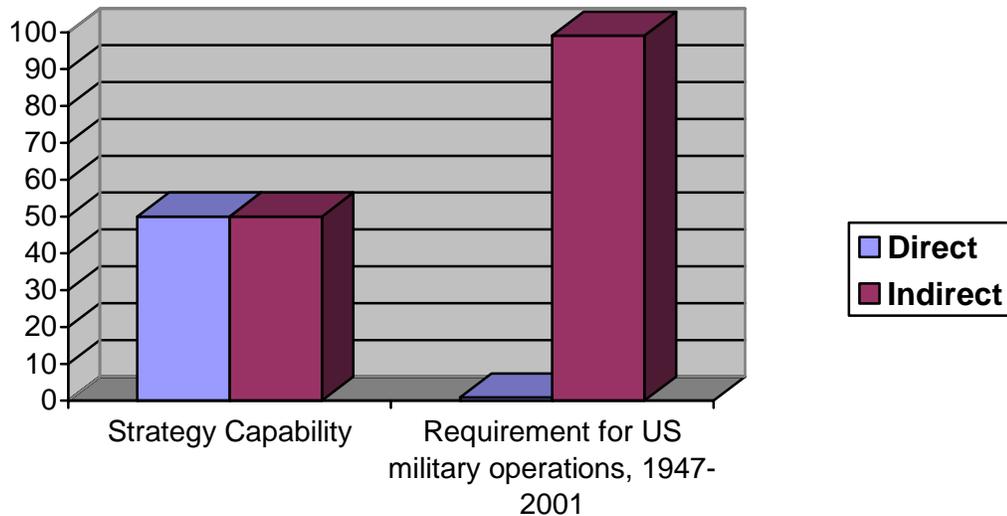
Figure 4.   Theoretical Optimal Mix of Strong Actor Direct and Indirect Approach Capabilities vs. History of the requirement for U.S. military forces to conduct operations, 1947-2001.

The graph in Figure 4 shows that the theoretically optimal strategy of 50% Direct Approach and a 50% Indirect Approach would have been insufficient to address the actual requirements for the deployment or operations by U.S. military forces between 1947 and 2001. To meet the actual requirements that led to U.S. military forces being deployed during this period, the U.S. military should have been much more Indirect Approach strategy capable than the theoretically optimal status of being equally capable with a Direct Approach strategy.

Interestingly, the analysis of the post-Cold War era – 26 December 1991 to 11 September 2001 – shows that in 100% of the operations by U.S. military forces, the opponents did not employ Direct Approach campaign strategies to defeat U.S. forces.   Moreover, 108 operations, or slightly more than 51% of all the operations of U.S. military forces between 1947 and 2001, are listed with start dates after the identified conclusion of the Cold War. In other words, more than half of the U.S. military operations conducted between 1947 and 2001

occurred in the decade preceding the 9/11 attacks. Following the game theory analysis of Toft, not once should U.S. forces have executed a Direct Approach strategy in these operations.

C.   THE LIMITS OF THIS ANALYSIS

The analysis of the history of the operations conducted by the Department of Defense was drawn only from open sources. It is most likely not an all-inclusive listings of U.S. military operations. Also, applying equal weight, regardless of the size and scope of the operation, does not acknowledge many factors. However, it is only intended to facilitate a trend analysis of the requirement for the deployment of U.S. military forces, between 1947 and 2001, and does reflect a significant trend in the history of these operations. Additionally, the coding employed of the adversaries' strategy in each event listed may be arguable, on specific cases. For example, Toft considers the North Vietnamese response to U.S. Operation Rolling Thunder (February 1965 – October 1968) to be a Direct Approach.[45] Unlike Toft, this author considers only the tactical and operational-level response as Direct. This author considers the North Vietnamese strategic-level strategy as an Indirect Approach throughout U.S. active participation in the conflict. Regardless, even if the very few arguable cases were recoded, the fact remains that in the history of the Department of Defense the U.S. military conducted overwhelmingly more operations where an Indirect Approach would have been the optimal strategy.

D.   SUMMARY

General Curtis LeMay served as Chief of Staff of the Air Force from 1961 to 1965. At that time, he held one-quarter of the committee decision on the recommendation from the uniformed leaders, the Joint Chiefs of Staff, to the President and National Security Council. On the issue of how to proceed in Vietnam, General LeMay writes, "My solution to the problem would be to tell [the

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[45] Toft, pp 144-168.

North Vietnamese Communists] frankly that they've got to draw in their horns and stop their aggression or we're going to bomb them into the Stone Age."[46] Although a wholly inappropriate solution and exclusively a Direct Approach strategy, General LeMay was largely a prodigy of the strategic bombing campaigns of World War II, leading bomber elements in both Europe and the Pacific. [47]

Appendix B demonstrates that the U.S. military has a preponderance of prior experience in dealing with opponents that have employed an Indirect Approach campaign strategy. In the 54 years preceding the attacks on 9/11, the U.S. military was over 110 times more likely to engage an opponent employing an Indirect Approach. Therefore, the U.S. military should have been 110 times more prepared to employ its own Indirect Approach to defeat that opponent.

Although none of the other requirements for operations by U.S. military forces between 1947 and 2001 were in response to attacks that caused nearly 3,000 fatalities, the U.S. military leadership at the time of 9/11 attacks was familiar with opponents who employed Indirect Approach campaign strategies. However, the uniformed leaders of the U.S. military--specifically Generals Shelton, Franks, and Myers – presented strategy advice that was more reminiscent of General LeMay, than it was of the history of the Department of Defense. Contrary to Allison's observation, "Operational experiences in the field reinforce certain capacities and routines," the strategy advice presented reflected nothing of the Department of Defense's organizational operational experience.[48] Why?

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[46] Curtis E. LeMay with MacKinlay Kantor, *Mission with LeMay*, New York: Doubleday & Co., Inc., 1965, p 565.

[47] LeMay, pp 220-390.

[48] Allison and Zelikow, p 144.

III.   TEACHING STRATEGY

The 18th century French General and strategist, Marshal de Saxe, once observed:

> Few men occupy themselves in the higher problems of war. They pass their lives drilling troops and believe that this is the only branch of the military art. When they arrive at the command of armies, they are totally ignorant, and in default of knowing what should be done. They do what they know.[49]

The conduct of military operations was, in Marshal de Saxe time, and remains considered a profession of arms. The professionalization of militaries and the conduct of military operations has evolved significantly since the 18th century.   In the U.S. military, the professionalization now includes formalized instruction of officers, throughout their careers. The instruction of U.S. military officers was codified under the Goldwater-Nichols Defense Reform Act of 1986 and later amendments to Title 10 of the U.S. Code. Although Generals Shelton, Franks, and Myers completed the strategy-focused component of professional military education prior to the passage of Goldwater-Nichols, an examination of their instruction may provide insights about the strategy advice they collectively gave President Bush on 9/15.

A.   U.S. MILITARY PROFESSIONAL EDUCATION OF OFFICERS

Edward N. Luttwak, a current Senior Fellow with the Washington-based strategic think tank the Center for Strategic and International Studies and consultant to various U.S. government agencies including the Department of Defense, once wrote:

> All armed forces combine elements of attrition [Direct Approach] on the one hand and relational maneuver [Indirect Approach] on the other in their overall approach to war; their position in the

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[49] Marshal de Saxe (1696-1750), cited in "Military Air Power: The Cadre Digest of Air Power Opinions and Thoughts", Compiled by Lt Col Charles M. Westenhoff, USAF, Internet; retrieved from http://www.au.af.mil/au/awc/awcgate/milquote.doc accessed on 26 September 2007.

attrition/maneuver spectrum is manifest in their operational methods, tactics, and organizational arrangements, *but especially in their methods of officer education.*[50]

The professional education of officers within the U.S. military is governed by Congressionally mandated law and consists of entry-level indoctrination and training, junior officer training, mid-career officer training, and senior officer training. Although each military service has a specific program of military officer education that follows this general characterization, Goldwater-Nichols codified military officer professional education requirements under the rubric of "Joint Professional Military Education."[51]

Title 10 of the U.S. Code currently states:

Joint professional military education consists of the rigorous and thorough instruction and examination of officers of the armed forces in an environment designed to promote a theoretical and practical in-depth understanding of joint matters and, specifically, of the subject matter covered. The subject matter to be covered by joint professional military education shall include at least the following:

(1) National Military Strategy.

(2) Joint planning at all levels of war.

(3) Joint doctrine.

(4) Joint command and control.

(5) Joint force and joint requirements development.[52]

The Army's formulation of professional education to meet these requirements is depicted in Figure 5. The operational continuum: strategic,

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[50] Edward N. Luttwak, "Notes on Low-Intensity Warfare", *Parameters*, Vol. XIII, Issue 4, December 1983, pp 11-18. NOTE: emphasis added in italics

[51] "Goldwater-Nichols Department of Defense Reorganization Act of 1986", Section 663.b.

[52] "Title 10, Subtitle A, PART III, CHAPTER 107, Section 2151 (Definitions)" Internet; retrieved from http://www.law.cornell.edu/uscode/html/uscode10/usc_sec_10_00002151----000-.html; accessed on 2 September 2007. NOTE: All Title 10 references are drawn from this Cornell Law School website.

operational, and tactical is depicted in the left column. The area of instruction required to prepare Army leaders to operate at each level of the operational continuum is listed in the middle column. The component of the Army's professional military education system designed to provide the instruction to prepare Army leaders is listed in the right column.
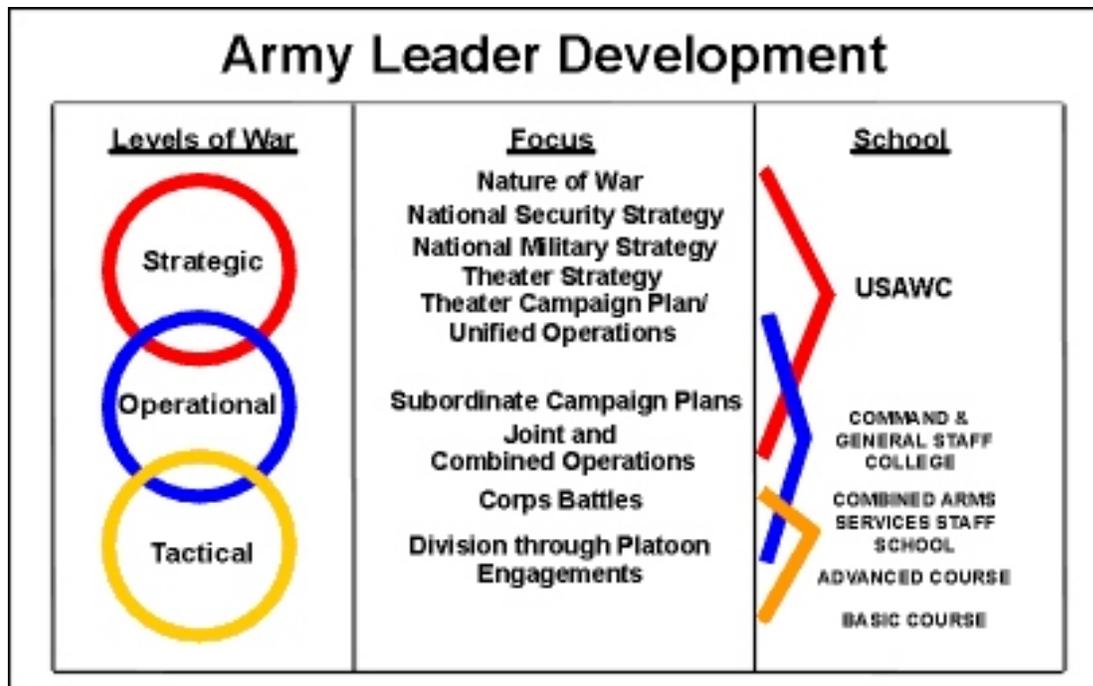
Figure 5.   Army Leader Development[53]

Although each service has designed its own specific program of military officer education, the Chairman of the Joint Chiefs of Staff is responsible for ensuring each service's program meets the requirements of the law. The Chairman of the Joint Chiefs of Staff is responsible for "Formulating policies for coordinating the military education and training of members of the armed

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[53] Jeffrey D. Mccausland and Gregg F. Martin, "Transforming Strategic Leader Education for the 21st-Century Army", Parameters, Vol. XXXI, Issue 3, Autumn 2001, p 22. NOTE: "USAWC" means U.S. Army War College

forces."[54]   Additionally, the Chairman of the Joint Chiefs of Staff "Advises and assists the Secretary of Defense by periodically reviewing and revising the curriculum of each school of the National Defense University and of any other joint professional military education school to enhance the education and training of officers in joint matters."[55]

Senior officer training is conducted at one of the Department of Defense "Senior Level Service Schools" or War Colleges for rising Air Force, Army, and Marine Colonels or Navy Captains.[56] These include the U.S. Army War College, U.S. Naval War College, U.S. Air War College, U.S. Marine Corps War College, and the National War College. Joint Professional Military Education (JPME) is divided into two parts, JPME I and JPME II. JPME I instruction is typically included in all of the services' mid-career officer training programs. A specific JPME II course is conducted at the Joint Forces Staff College and/or JPME II instruction is provided at each of the War Colleges. Completion of a JPME II curriculum was mandated in Goldwater-Nichols as a requirement before a senior officer can be considered for selection as a General or Flag Officer.[57] Title 10 of the U.S. Code states:

> … the curriculum for Phase II joint professional military education shall include the following:
>
> (1) National security strategy.
>
> (2) Theater strategy and campaigning.
>
> (3) Joint planning processes and systems.

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[54] Title 10 of the U.S. Code, Section 153(a)(5)(c)

[55] Title 10 of the U.S. Code, Section 2152(b)

[56] Title 10 of the U.S. Code, Section 2151(b)

[57] "Goldwater-Nichols Department of Defense Reorganization Act of 1986", Section 404; now reflected in "Title 10 of the U.S. Code, Section 619 (a) and 661(c)(1)(a). NOTE: "Senior officer" refers to Army, Air Force and Marine Colonels or Navy Captains; "General or Flag Officer" refers to Army, Air Force and Marine Brigadier General or Navy Rear Admiral

(4) Joint, interagency, and multinational capabilities and the integration of those capabilities. [58]

In 1986, Goldwater-Nichols also directed attendance of a Capstone Course for all newly selected General and Flag Officers.[59]   Currently, the National Defense University's Capstone Course is a six-week seminar program whereas War College programs typically run ten or twenty-four months in a traditional academic or online academic setting. Therefore, War Colleges are typically the last formal military education program, focused on indoctrinating strategy, future General or Flag Officers receive, for the remainder of their careers.

Generals Shelton, Franks and Myers were responsible for the strategy advice presented to the President on 9/15. Although, many of the laws governing military education cited earlier were not created yet when these men attended their War College programs, the purpose for each program fulfilled the requirements codified in later laws. The following sections analyze the course descriptions in the curricula of these Generals, and code them as either Direct or Indirect. This analysis shows the orientation of the last formal strategy-focused military education these men received in their careers was overwhelmingly Direct Approach focused. Therefore, specifically examining the curricula of the War College programs attended by Generals Shelton, Franks, and Myers might indicate why Direct Approach strategy options were the only ones presented to the President on 9/15.

B.   GENERAL SHELTON, NATIONAL WAR COLLEGE (CLASS OF 1983)

After completing a successful junior officer career in command of tactical Special Forces and conventional U.S. Army Infantry elements, then Lieutenant

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[58] Title 10 of the U.S. Code, Section 2155(c)

[59] "Goldwater-Nichols Department of Defense Reorganization Act of 1986", Section 663

Colonel Shelton entered the National War College in the fall of 1982.[60] The National War College is located at Fort McNair in Washington, DC, and is a component of the National Defense University. The fall 1982 National Defense University Catalogue stated:

> The mission of the National War College is to conduct a senior-level course of study promoting excellence in the development of national security policy and strategy, and the application of military power in support thereof, including doctrine for joint and combined operations and consideration of warfighting capabilities.
> Through study and research, enhance the preparation of selected personnel of the Armed Forces, the Department of State, and other U.S. Government departments and agencies to perform high level command and staff policy functions associated with national security strategy formulation and implementation.[61]

The program of instruction for GEN Shelton's National War College Class consisted of a Core Curriculum of eleven seminar-type courses, which were supplemented by three strategic exercises.[62] Additionally, General Shelton took

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[60] "General Henry Hugh Shelton Biography" Internet; retrieved from http://www.ncsu.edu/extension/sheltonleadership/general_bio.htm accessed on 2 September 2007.

[61] National Defense University 1982-1983 Catalogue, Washington, DC: Fort Lesley J. McNair, pp 9-11

[62] The 1983 Curriculum Guide of the National War College (for academic year 82-83)

five seminar-type electives.[63] The courses General Shelton completed with course descriptions from *The 1983 Curriculum Guide of the National War College* are presented in Table 1.

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[63] NOTE: GEN Shelton's elective listing was provided by the National War College Records Office and the information was drawn from the "End of Year [1983] Report". This information was provided to the author in an e-mail entitled "FW: Shelton Effective" on 14 August 2007 and released with the permission of Ms Mollie Murphy, National Defense University General Counsel.

Course name	Course Description published in *The 1983 Curriculum Guide of the National War College* (for academic year 82-83)
Art of War	An examination of periods in military history which signaled changes in the nature of war and its conduct; the American approach to war; and the ideas of classical and modern strategic thinkers to assess their influence and contemporary relevance. (Text include Sun Tzu, Clausewitz, and Weigley)
Human Dimensions in National Security Affairs	An introduction to the role individual behavior factors (e.g. values, perceptions, motivations, lifestyles, etc.) play in ethics, interpersonal relations, group dynamics and decision making. A particular emphasis will be placed on the importance of behavioral factors to creativity and how to think innovatively.
Approaches to Policy Analysis and Decision-making	An introduction to qualitative and quantitative approaches to policy analysis and decision-making with emphasis on developing an understanding of what the various approaches can provide a decision maker and how he can use them to make decisions
International Security Environment	**An appraisal of issues and trends in the international political and economic system. A consideration of the institutions and instruments available to achieve national objectives, alleviate tensions, reduce to eliminate sources of conflict, prevent war, and refine judgments about uses of military power.**
Politics, Policy and Resource Allocation in the American Political System	An analysis of the roles, relationships and influences of the Legislative Branch, other public and private institutions and groups, and Executive Branch legislative liaison and public affairs activities on security policy development and the allocation of resources. This course will also cover guidelines for appearing before congressional committees and relations with the media.
Policy, Planning and National Security Decision-making	An analysis of the national security policy planning and decision-making process within the Executive Branch and the National Security Council system with particular emphasis on the Department of Defense and its major components.
Terrorism and Counterterrorism	This simulation focuses on the decisions involved in developing a strategy and for using the instruments of statecraft in countering and resolving a terrorist incident with international implications.

International Security Studies: U.S. Interests and the Major Powers and Regions	A systematic analysis of security conditions, policies and programs and their impacts on the defense and foreign policies of selected countries. A review of the security factors which influence and shape national policies. An appraisal of security commitments and agreements and their implications for U.S. interests and programs. Practical exercises in security requirement identification will conclude each regional study.
National Security and Policy Decisions	A policy formulation and decision exercise. This exercise focuses on policy options for presidential decisions and builds on the regional security issues exercise in the International Security Studies course.
Strategic Planning for Joint and Combined Operations	An examination of military strategy and strategic planning requirements for the conduct of theater-level joint and combined operations. The course focus is on strategic, tactical and doctrinal concepts and their use in developing force application strategies, contingency and operations plans and in conduct of joint operations.
U.S. Defense Policy, Military Strategy and Force Planning	An analysis of current U.S. defense policies and the translation of those policies into military strategy and force requirements. The course assesses the rationale, logic and implications of defense policies, identifying strategic issues and defense trends, then focuses on the translation of that policy into military strategy and force requirements. The course builds on the issues and trends identified in the International Security Studies course and the principles identified in the Art or War course.
Within the core program various opportunities for active involvement are offered by the following exercises and simulations	
Strategic Nuclear Conflict Management	A conflict management political-military simulation designed to explore the implications of escalation in conflict; the problems and uncertainties escalation poses for decision makers; and the difficulties inherent in de-escalation and war termination.
Strategy and Force Development	The exercise builds on the policy decisions reached in the National Security Policy Decisions exercise. Phase I focuses on the translation of national security policy decisions into military objectives, strategic requirements and the development of a preferred national military strategy, desired force capabilities and characteristics, and required force levels. Phase II focuses on the force levels that can be achieved under constrained fiscal guidance, the changes required in strategy and/or force mix, and a risk assessment in terms of what can and cannot be accomplished.

Contingency Planning and Force Employment	A crisis management political-military simulation and current forces capability exercise in contingency planning and force application to provide the opportunity to apply knowledge developed through the year. Phase I focuses on the diplomacy of crisis management and development of contingency plans to meet regional crisis with worldwide implications. Phase II focuses on contingency plan execution with forces being deployed and employed.
Electives (National War College Course # and Name)	Course Description published in *The 1983 Curriculum Guide of the National War College* (for academic year 82-83)
NOTE: GEN Shelton's elective listing was provided by the National War College Records Office and the information was drawn from the "End of Year [1983] Report".	
346: Contemporary Middle East and North Africa: Conflict and Competition	An examination of patterns of conflict and competition in the Middle East and North Africa. The focus of the course will be on intra-state and intra-regional conflict and competition, their extra-regional implications, and the influence of extra-regional conflict and competition in the region.
337: Why Human Warfare - the Causes of War	The objective of this course is to develop an understanding of the various approaches to the problem of human conflict, to become familiar with the latest research into the causes of war, and to develop an understanding of how the causes of war might affect crisis management in international affairs and strategic thinking. (The syllabus for the course lists the texts for the course as Waltz's *Man, the State and War*; and Wright's *A Study of War*)
325: Ethics, the Public Servant and War	An examination of public service and war from the moral and ethical perspective. The focus of the course will be on the application of principles and lessons learned to current public service moral challenges and ethical issues. The course will also focus on the use of force, its control and expansion from a moral and ethical perspective.

125: Introduction to Computers	This course focuses on computer fundamentals and major computer/user related management problems. It begins with a description of hardware (mainframe and peripherals equipment) and machine architecture (computer arithematic, memory, central processors, input/output, internal operations and basic design features) and progresses to software (operating systems, utility progress, database management systems and applications programming). The software portion of the course culminates with each student writing a basic language program, the purpose of which is to insure that students feel comfortable using computer terminals and programs to solve management problems. The remainder of the course will be directed to computer management concerns such as ADP procurement and economic analysis procedures, data processing installation performance indicators, centralization vs. decentralization of computer power, privacy legislation, and computer security. Finally the course will examine the future of computer hardware and software technology.
155: Executive Health and Fitness	This course examines the role of health and fitness in a typical executive lifestyle. The primary objective of the course is to provide sufficient information to enable each student to develop a personalized exercise and dietary fitness program under professional supervision. In addition, attention is given to developing sound exercise programs for one's subordinates and peers in the military services and civilian agencies.

Table 1.   General Hugh Shelton's National War College Course Listing

Only one of Shelton's fourteen courses is coded as focusing on an Indirect Approach, given the descriptions provided in the National War College records. The "International Security Environment" titled course focused on methods of employing elements of national power, other than solely military, to address national security. Although the "Terrorism and Counterterrorism" titled simulation might suggest an Indirect Approach orientation, examination of the records for this simulation showed the orientation was specifically toward applying Direct Approach strategies to these situations (i.e. deployment and use of counter-terrorism forces, deployment of fighter escort aircraft to force high jacked airliners to land, etc.). Although, some Indirect Approach oriented courses were offered in the Curriculum Guide during the 1982-1983 Academic Year, General Shelton selected none of them as electives. Instead, of the five electives he chose, two would not be considered to have a strategic orientation, "Introduction to Computers" and "Executive Health and Fitness", while the other three were all focused toward a Direct Approach. This means that only one of the seventeen courses or 5% of all the strategic instruction General Shelton received in his last formal military education program prior to becoming the Chairman of the Joint Chiefs of Staff focused on the Indirect Approach. The result of this analysis compared to the conclusions drawn from the game theory analysis of Toft's "strategic interaction theory" and the actual requirements for the deployment or operations by U.S. military forces between 1947 and 2001 is shown in Figure 6:
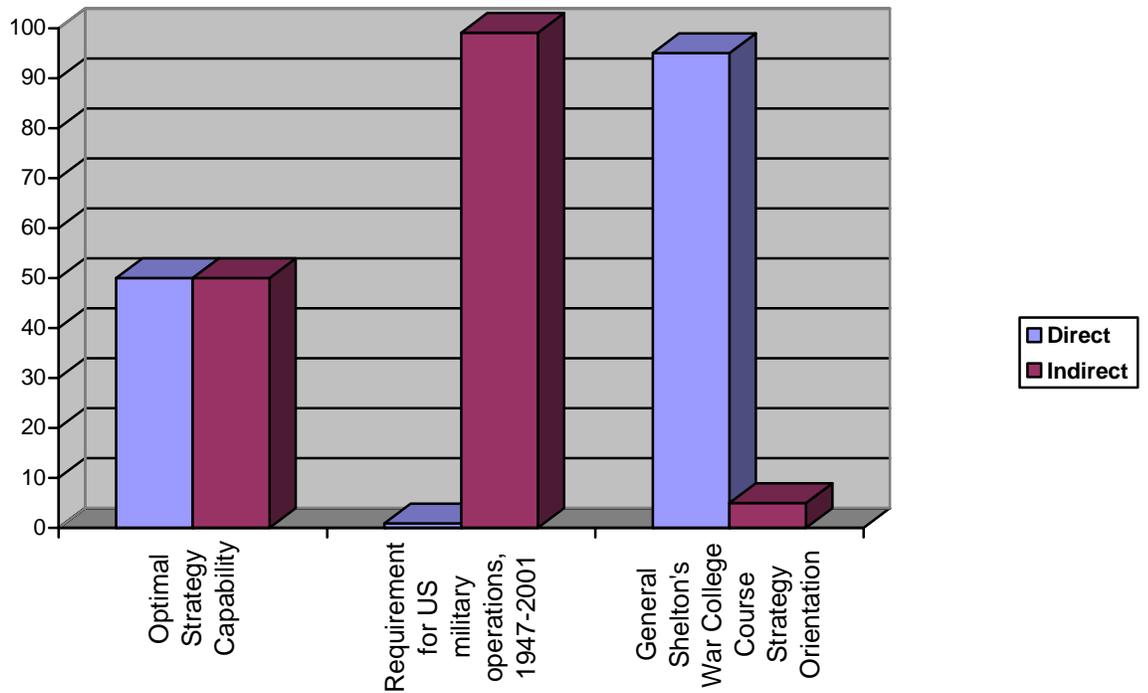
Figure 6.   Theoretical Optimal Mix of Strong Actor Direct and Indirect Approach Capabilities vs. History of the requirement for U.S. military forces to conduct operations, 1947-2001 vs. General Shelton's War College Course Strategy Orientation.

The graphs in Figure 6 shows that General Shelton's War College Course Strategy Orientation did not meet the theoretically optimal strategy focus of 50% Direct Approach and a 50% Indirect Approach.   More importantly, General Shelton's War College Course Strategy Orientation is nearly a polar opposite of the actual requirements for the deployment or operations by U.S. military forces between 1947 and 2001. Lastly, General Shelton became Chairman of the Joint Chiefs of Staff on 1 October 1997.[64] This graph shows that only 5% of the strategy oriented focus of General Shelton's War College instruction prepared him to deal with the eighteen U.S. military operations, listed in Appendix B,

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[64] "General Henry Hugh Shelton Biography" Internet; retrieved from http://www.ncsu.edu /extension/sheltonleadership/general_bio.htm accessed on 2 September 2007.

initiated after his assumption of Chairmanship. The Direct Approach strategy focus of the remaining 95% of his instruction was not specifically applicable to any of the ongoing operations or those initiated while fulfilling his Goldwater-Nichols prescribed role as the principal military adviser to the President.

C. GENERAL MYERS, U.S. ARMY WAR COLLEGE (CLASS OF 1981)

After completing a successful junior officer career as an Air Force fighter pilot, then Lieutenant Colonel Myers entered the U.S. Army War College in the fall of 1980, located at Carlisle Barracks, Pennsylvania. The *U.S. Army War College Curriculum Pamphlet, Academic Year 1981*, stated its mission as:

> To provide a course of study which will prepare graduates for senior leadership positions in the Army, Defense and related department and agencies by professional military education in national security affairs with emphasis on the development and employment of military forces in land warfare.
> Conduct strategic studies on the nature and use of the U.S. Army during peace and war; address issues with respect to Army participation in joint arenas; address major concerns for which an independent, internal study capability is needed; and contribute independent studies and analyses on issues of current and future import to the Army.
> In accomplishing this mission the U.S. Army War College conducts resident and corresponding study courses for selected officers of the Active and Reserve components and federal civilian employees.[65]

The program of instruction for Myers' U.S. Army War College Class consisted of a Common Overview or Core Requirements which contained four general segments of strategy study; The National Environment and the Evolution of Military Strategy, The International Environment, U.S. Strategy and Supporting Programs, Command and Management, Military Plans, Operations and Wargames.[66] Additionally, General Myers took four seminar-type electives.[67]

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[65] "U.S. Army War College, The Curriculum Pamphlet, Academic Year 1981" Carlisle Barracks, 1980. p 1.

[66] "U.S. Army War College, The Curriculum Pamphlet, Academic Year 1981" Carlisle Barracks, 1980.

The courses General Myers completed, including course descriptions from *The U.S. Army War College Curriculum Pamphlet, Academic Year 1981*, are presented in Table 2.

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67 NOTE: General Myers' elective listing was provided the Army War College Registrar's Office and the information was drawn from General Myers' official transcripts. This information was provided to the author in an e-mail entitled "RE: Automated Ask Form (UNCLASSIFIED)" on 18 July 2007.

Part I: The National Environment and the Evolution of Military Strategy	The National Environment: 1) Examine America's heritage of values and principles which determine her national purpose and influence the conduct of her affairs. 2) Study the concept of "National Power" as applied to the United States. 3) Identify U.S. domestic issues, trends and forces which influence the formulation of national priorities, national strategy and the application of national power.
	The Evolution of Military Strategy studies:1) The evolution of strategic thought. 2) The principles of war. 3) The strategic concepts of land, maritime and air power. 4) The military strategies of World War I and II. 5) The strategies of containment and deterrence. 6) The strategies of massive retaliation and flexible response. 7) The military strategies of the Vietnam War. 8) Current U.S. military strategy.
Part II: The International Environment, U.S. Strategy and Supporting Programs	The International Environment: Identify the impact of issues, trends and forces, in the following selected regions of the world, on U.S. national security interests: the Western Hemisphere; Western and Eastern Europe; Sub-Saharan Africa; Middle East/North Africa; Asia. Assess political, economic and social issues, trends and forces worldwide.
	U.S. Strategy and Supporting Programs:1) Review current U.S. national and military strategy. 2) Review Soviet policy. 3) Assess the strategic nuclear balance. 4) Assess the ability of the U.S. and the USSR to project power. 5) Assess the military force balance and influence in the selected regions above. 6) Plan an employment of military forces for contingencies in selected regions. 7) Formulate a U.S. national and military strategy for the midrange period. 8) Design minimum risk forces to support global military strategy.
Part III: Command and Management	Study the art of command in peace and war. Study the human dimensions of leadership, command and management, to include selected aspects of motivation, interpersonal relationships, communications, and group dynamics-in the context of a full range of potential future assignments: high level staff; project management; and tactical, logistical and administrative command. Study management principles and their relationship and application to the management of defense resources, including identifying those major defense management problems facing government executives and military commanders and managers in the near-term future. Examine contemporary management tools, techniques and systems, which facilitate

	decisionmaking. Study the Department of Defense Planning, Programming and Budgeting System (PPBS), related issues and the Army application of PPBS. Study current issues relative to the full range of Army subsystems including personnel, logistics, research, development and acquisition, financial management, training and readiness.
Part IV: Military Plans, Operations and Wargames	Study an analysis of defense plans and operations of Allied Command Europe (ACE) to include northern, central and southern Europe, Central Army Group and Northern Army Group, and the ability of the United States to reinforce and sustain forces in Europe. Examine the impact of technology on the modern battlefield. Applying gaming procedures to a NATO theater level environment. Review deployment and contingency concepts for critical areas of the world. Apply gaming procedures to a Joint Task Force environment. Analyze defense concepts and operations of the United Nations Command, the Eighth U.S. Army and the Combined Command in South Korea. Study crisis management at the JCS level. Review techniques of politico-military simulation. Participate in a politico-military simulation.

Electives (Army War College Course Name) Course Description published in the U.S. Army War College, The Curriculum Pamphlet, Academic Year 1981 NOTE: General Myers' elective listing was provided by the Army War College Registrar's Office and the information was drawn from General Myers' official transcripts.

Strategic Issues of World War II	Considers a number of controversial and vital strategic decisions of World War II, both by the Allies and Axis powers. By analyzing and evaluating the decisionmaking process, with the benefit of a clear historical perspective, students will gain insights into the problems faced by decisionmakers at the highest military and national levels during wartime.
Air Power: The Past, Present and Future Contrasts in Command	This course is primarily designed for Air Force students to better preparing for staff and command assignments in the field. However, it would benefit any student who anticipates a joint tour after graduation. The course includes: A short historical development phase featuring lectures given by guest speakers. Case studies of the impact of airpower in selected conflicts. Presentations dealing with current/future

	issues by MAJCOM briefing teams. (Course description drawn from course syllabus. This course was not listed in the Curriculum Pamphlet which, was published prior to the beginning of the Academic Year.)
Planning and Operations Management of the Intelligence Community	Examines the role and interrelationships of the various agencies of the intelligence community.
Warsaw Pact Strategy, Planning, and Operations	The course will be developed through an examination of: Review of Soviet strategies (1917-1967); Objectives and current strategy; Organization and equipment of forces; Political and military warning; Mobilization and reinforcement; Logistical support; Tactics and Operations; Appraisal of Warsaw Pact capabilities. (Course description drawn from course syllabus. This course was not listed in the Curriculum Pamphlet which, was published prior to the beginning of the Academic Year.)

Table 2.   General Richard Myers' U.S. Army War College Course Listing

Given the descriptions provided in the U.S. Army War College records, none of the Common Overview or Core Requirements can be coded as focusing on an Indirect Approach. Although, some Indirect Approach oriented courses were offered in the Curriculum Guide during the 1980-1981 Academic Year, General Myers selected none of them as electives. Instead, of the four electives he chose, all focused on a Direct Approach. This means that none of the strategic instruction General Myers received in his last formal military education program and prior to becoming the Vice Chairman and the Chairman of the Joint Chiefs of Staff, focused on the Indirect Approach. The result of this analysis compared to the conclusions drawn from the game theory analysis of Toft's "strategic interaction theory" and the actual requirements for the deployment or operations by U.S. military forces between 1947 and 2001 is shown in Figure 7:
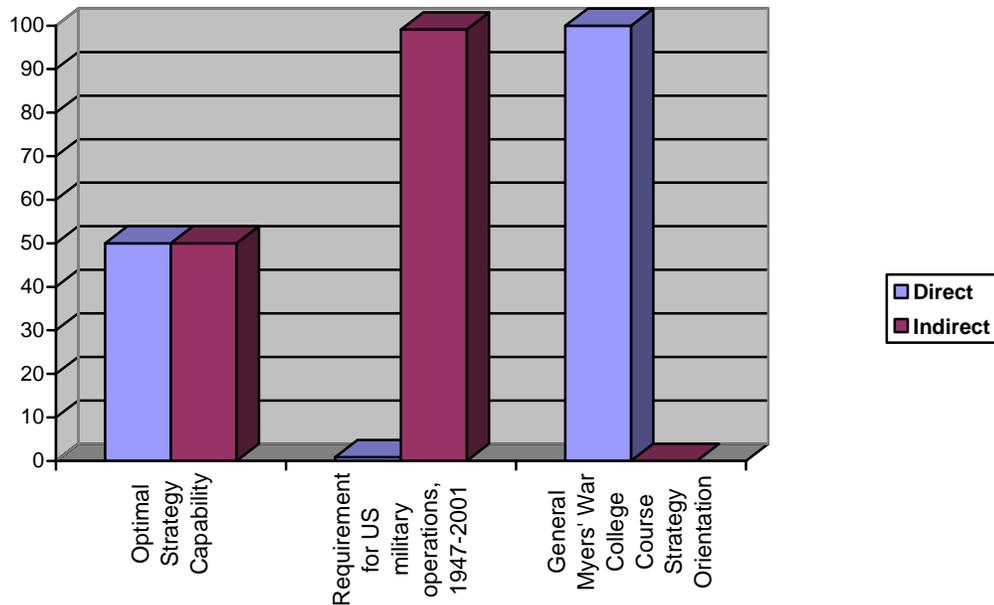

Figure 7. Theoretical Optimal Mix of Strong Actor Direct and Indirect Approach Capabilities vs. History of the requirement for U.S. military forces to conduct operations, 1947-2001 vs. General Myers' War College Course Strategy Orientation.

The graphs in Figure 7 shows that General Myers' War College Course Strategy Orientation did not meet the theoretically optimal strategy focus of 50% Direct Approach and a 50% Indirect Approach. More importantly, General Myers' War College Course Strategy Orientation is the polar opposite of the actual requirements for the deployment or operations by U.S. military forces between 1947 and 2001.

Reportedly, in his very first conversation with then Secretary of Defense Rumsfeld after the 9/11 attacks, President Bush stated, "… the ball will be in your court and Dick Myers' court."[68] Certainly unbeknownst to President Bush, who was depending on General Myers to fulfill his Goldwater-Nichols dictated role as principal military advisor, Myers' last formal professional military education consisted of no focused instruction on the strategy required to optimally meet the Indirect Approach employing adversary.

D.   GENERAL FRANKS, U.S. ARMY WAR COLLEGE (CLASS OF 1985)

After completing a successful junior officer career commanding U.S. Army artillery elements and holding various staff billets, then Lieutenant Colonel Franks entered the U.S. Army War College in the Fall of 1984. General Franks attended the same school as General Meyers; however, it is interesting to note that the program of instruction for the U.S. Army War College was modified from that used for General Myers' Class of 1981 for the Class of 1985. The Class of 1985 program of instruction consisted of a Common Overview or Core Requirements of ten seminar-type courses.[69] Additionally, General Franks took three seminar-type electives.[70]   The U.S. Army War College Resident Student Manual, Academic Year 1985, stated:

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[68] Bob Woodward, *Bush at War*, New York: Simon & Schuster, 2002, p 19.

[69] "U.S. Army War College, The Curriculum Pamphlet, Academic Year 1985" Carlisle Barracks, 1984.

[70] NOTE: GEN Franks' elective listing was provided by the Army War College Registrar's Office and the information was drawn from GEN Franks' official transcripts. This information was provided to the author in an e-mail entitled "RE: Automated Ask Form (UNCLASSIFIED)" on 18 July 2007.

The mission of the U.S. Army War College (USAWC) is to:

a. Prepare officers for senior leadership positions in the Army, Defense, and related Departments and Agencies by professional military education in national security affairs with emphasis on the development and employment of military forces in land warfare.

b. Conduct strategic studies on the nature and use of the U.S. Army during peace and war; address issues with respect to Army participation in joint arenas; address major concerns for which an independent, internal study capability is needed; contribute independent studies and analyses on issues of current and future import to the Army; and examine strategic concepts, theories, and philosophies.

c. Operate a Worldwide Military Command and Control System automatic data processing facility in support of the academic program, strategic studies, and other requests as directed through the Deputy Chief of Staff for Operations and Plans, Department of the Army (DSCOPS, DA).

d. Conduct programs which bear directly on the Army in the field to include providing assistance in contingency and mobilization planning, in war gaming defense plans, in developing concepts and doctrine at corps and echelons above corps, and in conducting applied research in physical fitness.[71]

The courses General Franks completed with course descriptions from *The U.S. Army War College Curriculum Pamphlet, Academic Year 1985* are presented in Table 3.

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[71] "U.S. Army War College Resident Student Manual, Academic Year 1985, Administrative and Curricular Activities" Carlisle Barracks, 1984. p 1-1.

Course name	Course Description published in the U.S. Army War College, The Curriculum Pamphlet, Academic Year 1985
Course 1: The Requirements of the Professional Leader	This course will examine the requisites of the military professional on an individual, interpersonal and organizational level. It focuses on the following: Self-Assessment; Communication and Group Skills; Senior Command Leadership and Management; Ethics and Professionalism; Personal and Family Wellness; and the Human Dimensions in combat.... Course 1 sets the framework for the remainder of the curriculum.
Course 2: Politics, War and Strategy	Course 2 begins with an introduction to national security policy and an examination of the domestic and international factors that shape U.S. policies…. The focus of the course then shifts to theoretical and historical analyses of the military strategies that evolved to implement policies. This phase of the course allows an opportunity to explore the spectrum of conflict, with special attention being devoted to terrorism and the problem of nuclear weapons. The course also opens the study of Soviet perceptions, policies and capabilities that continues throughout the core curriculum, providing enough information by the end of Course 2 so that you can examine U.S. national security priorities for the coming decade and discuss the features of an optimum military strategy.
Course 3: Planning and Decisionmaking	This course addresses the resource allocation (PPBS) and operational planning (JOPS) processes that are used at the highest levels of the armed forces of the United States in order to insure that these forces can be responsive to threats to worldwide vital interests of the United States.... Incidental to this study is the necessity to examine the functions and relationships of the highest level organizations within the armed forces of the United States.
Course 4: Military Forces and Doctrine	Course 4 will examine the U.S. Army's land warfare doctrine which distinguishes the operational level of war - the conduct of campaigns and large unit action - from the tactical level of war. The course will focus on U.S. Army, joint operations and combined operations. During the course, you will develop operational concepts using current

	doctrine and capability for employing U.S. and allied forces in a theater of war. The course will also provide you the opportunity to examine the nature of the interdependence between strategy, forces and doctrine.
Course 5: Leadership of the Army and Management of Army Systems	This course addresses the subjects of command, leadership and management of the U.S. Army. During the course you will examine the theoretical and practical aspects of command, management and organizational leadership; analyze the Army's major supporting systems; and discuss the major issues involved in leading the Army and managing these systems.
Course 6:Regional Appraisals	This course will examine U.S. interests, policies and strategies in the international environment. It focuses on the five major regions, Europe and North America, Asia and the Pacific, the Middle East, including North Africa and South-Southwest Asia, Latin America and sub-Saharan Africa. You will examine the regional factors and trends (economic, political, sociological and military) as well as the relationship of the region to the larger global arena. You will identify U.S. interests in the region, how the factors and trends impact on those interests - both favorably and unfavorably - and develop specific strategies to protect and promote U.S. interests.
Course 7: Application of Power: Strategic Nuclear	This course addresses general nuclear war. It emphasizes the evolutionary development of U.S. strategic nuclear policy. A review of U.S. nuclear weapons employment policy is conducted along with a look at the intricacies of strategic target planning. A portion of the course is devoted to the ballistic missile threat to our country.
Course 8: Application of Power: Contingency Operations	This course addresses contingency planning for limited war in an immature theater and for operations against an insurgency in a revolutionary war environment. During two contingency planning exercises you will develop objectives and formulate strategies and operational concepts after analyzing the nature of contingency. Additionally, you also will develop and analyze strategic deployment concepts and gain an in-depth understanding of the military dynamics of selected countries.

Course 9: Application of Power: Theater Operations	Course 9 provides the military professional an opportunity to study and implement political guidance for the conduct of operations within a theater and the transformation of that guidance into operational plans. The emphasis will be on joint and combined theater level strategy, planning and operations and the employment of Army forces in a ground campaign.... Course 9 is designed to use and build upon all previous courses...
Course 10: U.S. Global Military Strategy	Course 10 is the capstone of the Common Overview. It provides a framework in which you can bring together many of the incremental elements of instruction you have received, and apply the knowledge derived in an exercise designed to surface the most critical military strategy issues with which this country may have to deal.
Electives (Army War College Course Name) Course description drawn from each course's syllabus. These courses were not listed in the Curriculum Pamphlet which, was published prior to the beginning of the Academic Year).	
NOTE: GEN Franks' elective listing was provided by the Army War College Registrar's Office and the information was drawn from GEN Franks' official transcripts.	
SOF Planning in support of the CINCs	This course provides a detailed understanding of Special Operating Forces of the Army, Navy, and Air Force, their organization, missions, capabilities and their ability to support the CINCs. The course includes: Integration of Joint SOF in support of the CINC; a detailed look at SOF capabilities; consideration of employment and missions for SOF; planning SOF missions and support considerations; commo lash-up of Joint SOF operations; PSYOP and Civil Affairs in support of SOF; and a detailed study of OPLAN 4304 (Text included Luttwak, Canby, and Thomas' *A Systematic Review of "Commando" (Special) Operations, 1939-1980*; Geraghty's *Who Dares Win: The Story of the Special Air Service, 1950-1980*; Garrett's *The Raiders: The Elite Strike Forces that Altered the Course of War and History*, as well as a number of then classified documents.) "Course Requirement: Each student is expected to: ... Plan and prepare short study concerning utilization of SOF in a specific mission (FID, Deep Recce, Raid)..."
Professional Ethics for Senior Leaders	This course will examine ethical reasoning and practice, concentrating on the needs of the individuals in positions of senior leadership for: an understanding of the bases for moral thought and the ability to lead organizations in moral action.

| The Challenge of Terrorism | This course is designed to provide practical insights into the political, military and command relationships involved in an unconventional political-military crisis environment--one in which Army field grade officers assigned to field units might be forced to communicate directly to the highest levels of government, including the President of the United States. This course will provide participants with an appreciation of the leverage on national policy and operations a terrorist organization can exert. It will expose participants to the personal and organization dilemmas which will confront policy officials and field officers in responding to terrorist acts. Through participation in a policy and simulation game, each participant will be confronted with the necessity of interpreting the security, operational, and doctrinal problems with which the Army could be confronted. |

Table 3.   General Tommy Franks' U.S. Army War College Course Listing

Even though the program of instruction at the U.S. Army War College changed between the 1981 and 1985 Academic Years, none of the Common Overview or Core Requirements is coded as focusing on an Indirect Approach. Some Indirect Approach oriented courses were offered in the Curriculum Guide during the 1984-1985 Academic Year and General Franks selected one as an elective, "The Challenge of Terrorism." Although the "SOF Planning in support of the CINCs" titled course might suggest an Indirect Approach orientation, examination of the course description and syllabus showed the orientation was specifically oriented to the SOF role in Direct Approach strategies.

This means that only one of the thirteen courses or 7% of all the strategic instruction General Franks received in his last formal strategy-focused military education program prior to becoming the Commander of U.S. Central Command was focused on the Indirect Approach. The result of this analysis compared to the conclusions drawn from the game theory analysis of Toft's "strategic interaction theory" and the actual requirements for the deployment or operations by U.S. military forces between 1947 and 2001 is shown in Figure 8:
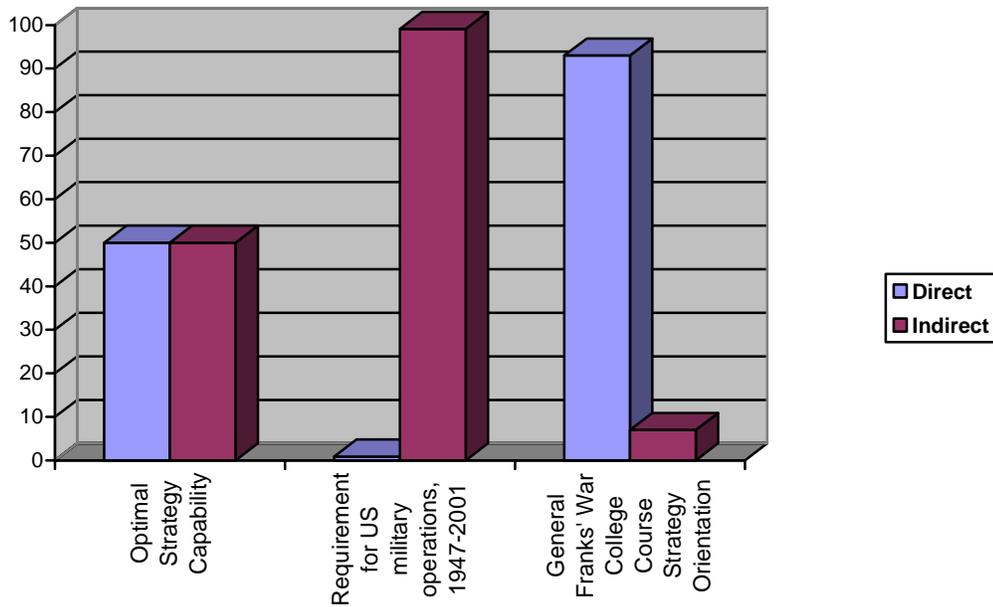
Figure 8.   Theoretical Optimal Mix of Strong Actor Direct and Indirect Approach Capabilities vs. History of the requirement for U.S. military forces to conduct operations, 1947-2001 vs. General Franks' War College Course Strategy Orientation.

The graphs in Figure 8 shows that General Franks' War College Course Strategy Orientation did not meet the theoretically optimal strategy focus of 50% Direct Approach and a 50% Indirect Approach.   More importantly, General Franks' War College Course Strategy Orientation is also nearly a polar opposite of the actual requirements for the deployment or operations by U.S. military forces between 1947 and 2001.

E.   THE LIMITS OF THIS ANALYSIS

The coding of the strategy-focused instruction for Generals Shelton, Myers, and Franks was made through the data available at the respective War College institutions attended by each.   Course descriptions listed were copied verbatim from available records.   None of the institutions maintained class or lecture notes and it is probable some of the content of the actual classroom

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lecture addressed Indirect Approach strategy topics. In the absence of these notes, the analysis is made only on the available records. Finally, the data set, of only 3 classes, is exceptionally small. Further detailed analysis of the strategy focused content of all the War Colleges' programs would be required to determine the validity of the conclusions drawn from this analysis. However, this analysis is only intended to facilitate a trend analysis of the strategy-focused instruction provided each of these officers.

F.   SUMMARY

As unfortunate as it is, General Franks' meager 7% of the strategy oriented focus of his War College instruction toward the Indirect Approach was the most of any of the three key uniformed military leaders who advised the President on a response strategy to the 9/11 attacks. It is therefore little wonder why the strategy presented from the uniformed key leaders of the military to the President and National Security Council, at Camp David on 9/15, was entirely a Direct Approach solution to an Indirect Approach problem. The men responsible for preparing this solution were all products of an educational system that focused on a Direct Approach. As previously cited, "[a military's] position in the attrition [Direct Approach] / maneuver [Indirect Approach] spectrum is manifest in their operational methods, tactics, and organizational arrangements, *but especially in their methods of officer education.*"[72] This analysis shows that the U.S. military position on Luttwak's spectrum is firmly, if not wholly, grounded in the Direct Approach and the uniformed leaders' solution on 9/15 is evidence to the same conclusion. As Marshal de Saxe observed, since their professional military education left these leaders "in default of knowing what should be done. They [did] what they kn[e]w."[73]

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[72] Luttwak, pp 11-18. NOTE: emphasis added in italics

[73] Marshal de Saxe (1696-1750), cited in "Military Air Power: The Cadre Digest of Air Power Opinions and Thoughts", Compiled by Lt Col Charles M. Westenhoff, USAF, Internet; retrieved from http://www.au.af.mil/au/awc/awcgate/milquote.doc accessed on 26 September 2007.

IV. A WAY AHEAD IN ASYMMETRIC CONFLICT

The purpose of this thesis is captured in the title, "How can the U.S. military avoid another 9/15." In order to answer this question, the research and analysis has pursued three general aspects:

1. Is there an optimal strategy solution for the U.S. military in asymmetric conflicts?

2. Is the optimal strategy solution a foreign concept in the organizational history of the U.S. military?

3. Were the key players, responsible for the recommendation on 9/15, taught the optimal strategy solution in their professional military education strategy instruction?

The research and analysis shows tangible evidence to support the following conclusions addressing each of these aspects:

1. Yes, there is an optimal strategy solution for the U.S. military in asymmetric conflicts.

2. No, situations requiring application of the optimal strategy solution are widespread throughout the U.S. military's organizational operational history.

3. No, the key players, responsible for the recommendation on 9/15, were not taught the optimal strategy solution in their professional military education strategy instruction.

The conclusions combine to suggest that the essential requirement of the U.S. military, to ensure it avoids another 9/15, is to correct the strategy focus of the military education of its officers. The U.S. military needs an officer corps educated in the strategy of both a Direct and Indirect Approach; only then will its officers be capable of employing strategies best suited for the type of threat the nation faces.

A.   WHERE DID THE *COUP D'OEIL* GO?

In his research, Toft found 202 asymmetric conflicts between 1816 and 2003, in the more than 4,000 events listed in the Correlates of War dataset. As the sole remaining superpower, the U.S. military should expect to find an asymmetric adversary to its operations, for the foreseeable future.   Toft's "strategic interaction theory" orients the strategy of the actors in asymmetric conflicts.   The game theory analysis, of Toft's theory, shows that the optimal strategy in asymmetric conflicts is:

1. To possess an equal capacity to conduct either a Direct Approach strategy or Indirect Approach strategy

2. To compel or allow the adversary to commit the first strategic move and respond with the same approach strategy being employed by the adversary.

Four days after the 9/11 attacks, the National Security Council assembled at Camp David to develop a strategy for how the United States should respond to the 9/11 attacks.   The Chairman of the Joint Chiefs of Staff, General Hugh Shelton, presented his recommendation, which was completely focused on a Direct Approach.[74]

The U.S. military leadership did not recommend the optimal strategy for the asymmetric conflict presented by Al Qaeda. Al Qaeda committed the first strategic move, an Indirect Approach strategy, but the response recommended was not an Indirect Approach. General Shelton had operational experience in the Indirect Approach means, yet he still called for a Direct Approach focused strategy. His decision is most attributable to the fact that he did not receive equal strategy instruction in the Direct and Indirect Approach.   Instead, just as the recommendation, he and the other generals with responsibility for the recommendation were educated almost exclusively on the Direct Approach. This

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[74] Woodward, Bob and Dan Balz. *Washington Post,* Thursday, January 31, 2002; "10 DAYS IN SEPTEMBER: Inside the War Cabinet: At Camp David, Advise and Dissent: Bush, Aides

is in spite of the fact that forty years earlier President Kennedy called for, "proper recognition throughout the U.S. government that subversive insurgency ('wars of liberation') [Indirect Approach] is a major form of politico-military conflict equal in importance to conventional warfare."[75]   The U.S military did not prepare its leaders to lead an Indirect Approach fight and, therefore, is not equally capable of a Direct or Indirect Approach strategy.

In his treatise, *On War*, Carl von Clausewitz utilizes the French phrase *coup d'oeil*, which translates as "a rapid glance."[76]   He defines the phrase, in terms of strategy, as a military commander's "quick recognition of a truth which for the mind would ordinarily miss or would perceive only after long study and reflection."[77]   For Clausewitz, *coup d'oeil* is a significant component of a commander's capacity to develop successful strategy.

General George Patton is a commander considered to possess an impressive *coup d'oeil* capacity. Duggan writes, "Patton was famous for his 'sixth sense' –flashes of insight that showed him his strategy."[78]   Patton explained his 'sixth sense' capacity: "For years I have been accused of indulging in snap judgments. Honestly this is not the case because… I am a profound military student and the thoughts I express… are the result of years of thought and study."[79]

The Patton example implies *coup d'oeil* is a capacity, which is gained or enhanced through the study of military history. Generals Shelton, Myers, and

Grapple with War Plan".

[75] National Security Memorandum 124, "Establishment of the Special Group (Counter-Insurgency)," 18 January 1962; cited from *The Pentagon Papers,* Gravel Edition, Volume 2, pp. 660-661; Internet; retrieved from http://www.mtholyoke.edu/acad/intrel/pentagon2/doc107.htm accessed on 5 August 2007

[76] "coup d'oeil" Internet; retrieved from http://www.yourdictionary.com/coup-d-oeil accessed on 13 October 2007

[77] Carl von Clausewitz, *On War*, Edited and Translated by Michael Howard and Peter Paret. Princeton: Princeton University Press, 1984, p 102.

[78] William Duggan, *Coup D'oeil: Strategic Intuition in Army Planning*, November 2005 Internet; retrieved from http://www.strategicstudiesinstitute.army.mil/pdffiles/PUB631.pdf accessed on 13 October 2007, p 5.

Franks appear to lack Patton-like *coup d'oeil* for the modern asymmetric battlefield. Unfortunately, the men responsible for preparing the 9/11 response recommendation were all products of an educational system that focused on a Direct Approach.

In his work, *Learning to Eat Soup with a Knife*, John Nagl writes:

As Westmoreland notes in his memoirs, "If an officer progresses through the United States Army's demanding promotion system to reach the rank of general, he is, except under most unusual circumstances, clearly competent, even if he may not be the best man for every assignment, and bad assignments inevitably occur." Vietnam presented Westmoreland and his fellow senior officers with just such "most unusual circumstances" – conditions their training and experience left them completely unprepared to handle.[80]

Generals Shelton, Myers, and Franks certainly met or exceeded all of Westmoreland's observations of a U.S. military general. Unfortunately, just as the case of Westmoreland in Vietnam, the 9/11 attacks presented Generals Shelton, Myers, and Franks with "conditions their training … left them completely unprepared to handle."

B.   INSTRUCTING TOMMOROW'S U.S. MILITARY LEADERS

If changing the officer strategy education is the solution, the Core Curriculum program of instruction for the 2007 National War College Class appears to reflect a construct approaching an equal balance between Direct and Indirect Approach strategy focus.   The courses with course descriptions from *The* 2007 *National War College Student Handbook* are presented in Table 4.

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[79] Duggan, p 169.

[80] John Nagl, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya and Vietnam*, Chicago: University of Chicago Press, 2002, p 201; citing William Westmoreland, *A Soldier Reports*, New York: Da Capo, 1989, 275.

Course name	Course Description published in *The 2007 National War College Student Handbook*
6100 - Introduction to Strategy	This course introduces the elements of strategy, critical thinking and strategic analysis to develop and provide the foundational strategic thinking skills required for the balance of the curriculum. Using selected frameworks and examples of strategy, students will begin their year-long examination of the components of national security strategy, the assumptions behind strategic choices, relationships among the instruments of national power, the orchestration of the instruments of power in pursuit of national security objectives and the roles of leadership and ethics in national security strategy.
6200 - War and Statecraft	This course analyzes the distinctive, and multi-faceted, phenomenon of war, to include: its character, conduct, nature, and scope; its military and non-military dimensions; and the ramifications of its use and potential use to achieve political objectives. The course explores key concepts regarding war and how those theoretical underpinnings have affected the design of military strategy. In so doing, the course provides students with a solid theoretical foundation for developing military strategy. Students will study a framework for critiquing—and designing—military strategy that will benefit them in subsequent examinations of military issues in other courses, in the end-of-year strategy practicum, and in their efforts to develop strategy after graduation. The course further examines the elements comprising the military instrument of power and how that instrument can be employed in combination with other instruments of statecraft in peace and crisis, as well as in war.
6300 - The Non-Military Elements of Strategy	This course analyzes the non-military tools available to strategists and how those tools flow from the broader elements of national power. Specifically, the course analyzes the nature, purposes, capabilities and limitations of the non-military instruments of power, and investigates and critiques a variety of ways that strategists use these instruments. The course explores how instruments of power differ from but is dependent upon underlying national power, particularly in the areas of economics and information. Discussions reference peace, crisis and war to provide a comprehensive review of the non-military instruments' role in national security strategy. The course provides detailed information on the non-military tools available to national security strategists, the various uses of those tools, both singly and in conjunction with one another, and helps set the stage for the end-of-year practicum course.

6400 - The Domestic Context and U.S. National Security Decision-Making	This course provides the students with an understanding of the complex reality of the domestic context in which American strategists must make decisions. It considers the domestic context from multiple perspectives. It evaluates how broad domestic political and cultural factors, as well as resource and economic constraints, affect policy formulation and execution. The course further examines the structure and process of U.S. national security decisions. Here the course considers both the historical, philosophical and Constitutional foundations of inter-agency and inter-branch processes, and their subsequent evolution and current form. One element of this investigation will be a study of American civil military relations. Finally, the course will focus on individual and group level decision-making, to include a discussion of individual leadership and legitimate dissent within the U.S. national security policy process.
6500 - The Global Context	The purpose of this course is to help students understand the world and emerging strategic challenges from a perspective that is not U.S.-centric. Students will study selected nation-states and international regions, developing a familiarity with the role played by culture and history, as well as the key emerging trends in that region. They will analyze international trends and developments, compare and contrast regional contexts and national perspectives, and recommend how best to prioritize U.S. interests within and across regions. The course will also examine how non-state actors, transnational actors and global trends shape the strategic environment. Students will develop a working knowledge of the international security context that is essential for creating, analyzing and carrying out national security strategy and policy.
6600 - Field Studies in National Security	The National War College curriculum focuses on strategy at the national level, to include the integration of all elements of national power. It addresses national security policy, the theory and practice of war, the domestic and international context of national security strategy, contemporary military strategy, and joint and combined warfare. In turn, the policy and strategy process takes place in specific political, military, economic, social, geographical, and governmental contexts. It is a process that has bilateral, regional, and global dimensions. Understanding the formulation and implementation of policy and strategy requires in-depth knowledge of the current and prospective foreign policy situation in nations and regions affected by U.S. policies, and even more importantly, an understanding of how such strategic judgments are formulated. The Field Studies program is designed to integrate all the themes of the core courses and meet NWC/JPME objectives

	by providing a "test bed" for the synthesis of the entire year's curriculum. These studies provide opportunities for NWC students and faculty to discuss policy issues with political, military, business, media, and academic leaders of other nations that affect the security of their nations and regions as well as the security of the United States. This interaction moves NWC strategic education from the theoretical world to the world of reality. There is no classroom substitute for the intensive learning that comes from face-to-face exchanges and personal experiences gained through discussions and activities overseas.
6700 - Practicum in National Security Strategy	This capstone course integrates and synthesizes the fundamental themes from the entire curriculum. The course will examine a series of strategic national security and homeland security challenges confronting the nation today. Students will work in small groups to assess select transnational security issues, determine U.S. objectives, identify key assumptions, and develop a range of policy options that include evaluations of the risks and benefits of each option. Students will practice the critical thinking skills introduced in course 6100 and select the military instruments (6200) and non military instruments (6300) best suited to these security challenges. Each exercise will also require an assessment of key domestic and national decision making enablers and constraints (6400) as well as a keen appreciation for the global context (6500) in which the U.S. must develop and implement its strategy. Students' experiences from their field studies (6600) will be integrated into a program that develops specific regional strategies. In addition, students will have researched specific questions during their field studies that will have direct applicability in at least two of the challenges considered in this course. In keeping with the goal of "putting theory into practice," students will give oral presentations, field questions from "real world" officials, and produce written options memorandum designed for senior decision makers.

Table 4.   2007 National War College Course Listing

The course descriptions are certainly a positive indicator of a greater balance between Direct and Indirect Approach strategy foci. However, there are some areas of concern with the curriculum.

First, General Shelton was a member of the National War College Class of 1983. He became the Chairman of the Joint Chiefs of Staff in 1997, 14 years later. General Myers was a member of the U.S. Army War College Class of 1981 and didn't become the Chairman of the Joint Chiefs of Staff until 2001, 20 years later. If the National War College, and the other War Colleges, curriculum is producing students with an optimal 50-50 Direct/Indirect Approach strategy orientation in the Class of 2007, it will potentially be 2021 to 2027 by the time one of these graduates becomes a future Chairman of the Joint Chiefs of Staff. Until a member of the Class of 2007 becomes a future Chairman, how will a future President know if the recommended strategy is the optimal approach?

Hy Rothstein, the author of *Afghanistan and the Troubled Future of Unconventional Warfare*, has developed a simple but effective methodology to assist in orienting strategy requirements toward either a Direct Approach or Indirect Approach. He bases his methodology on Beaufre's five example patterns of strategy.[81] Rothstein has inferred from these examples, and the remainder of Beaufre's text, that determining the appropriate strategy orientation, Direct or Indirect, requires answers to only three questions:

1. What is the importance of the objective? (Low, Moderate or High)

2. Are adequate resources available? (Adequate or Inadequate)

3. What freedom of action is available to conduct the campaign or operation? (Restricted, Limited or Unlimited)

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[81] Andre' Beaufre, *An Introduction to Strategy*, translated by Major General R.H. Barry, London: Faber & Faber, 1965, pp 26-30.

Rothstein contends that if the *real* answers to these questions are: High, Adequate, and Unlimited; a Direct Approach strategy is appropriate. However, if any one of the answers is different, an Indirect Approach strategy of some manner or a hybrid Direct and Indirect Approach strategy is required to obtain the objective.[82] Rothstein does caveat the political capital requirement for an Indirect Approach. He observes that "the more indirect a strategy is the more protracted the effort [will be]."[83] The genius of this simple methodology is that the answers are typically both apparent with a general assessment of a given situation and equally indicative of the adversary's strategy position.

The next concern about the current National War College curriculum is whether this is a temporary correction or is this an actual paradigm shift within the military. The last time the U.S. military engaged in a large-scale Indirect Approach environment, the Vietnam War, the organization made sweeping changes to its education system. Counterinsurgency (COIN) was the preeminent doctrine and Nagl notes, "many army schools added COIN instruction. The Army Cooks and Bakers' School even added classes on counterinsurgency to its pie-making classes."[84] The changes, away from a concentration on conventional warfare or the Direct Approach, did not last. Nagl later writes, "The 1976 edition of [U.S. Army Field Manual] FM 100-5 *Operations*… did not mention counterinsurgency."[85] Only four years removed from the conflict, the U.S. Army did not even consider the formerly preeminent doctrine worthy of noting in its primary manual for operations.

Once again, COIN is the preeminent doctrine and the Indirect Approach is receiving a good deal of attention within military circles. Unfortunately, some recent comments from current senior uniformed military officers indicate once

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[82] Hy Rothstein, author's lecture notes from presentations at the Naval Post Graduate School, August 2007.

[83] Hy Rothstein, correspondence with the author in an e-mail entitled "RE: A Question" on 31 October 2007.

[84] Nagl, p 125.

[85] Nagl, p 206.

again the interest may wane, as soon as possible. Recently, the Commander, General Lance Smith, of U.S. Joint Forces Command, the U.S. military organization responsible for among other things preparing joint military doctrine, was quoted as saying:

> And the danger now, of course, is we get so focused on counterinsurgency and irregular warfare that we are not prepared for a different kind of war, … Whether that is major conventional war or . . . a hybrid of large conventional war and irregular war.[86]

The historical probability, from this analysis, is that it is 110 times more likely the U.S. military's optimal strategy will be an Indirect Approach. Additionally, is there a better way to be prepared for "a hybrid of large conventional war and irregular war" than to have a balanced Direct/Indirect Approach strategy focus?

George Santayana once observed, "In a moving world, readaptation is the price of longevity."[87] President Kennedy accurately informed the West Point graduating Class of 1962 of the requirements for readaptation in the U.S. military:

> This is another type of war, new in its intensity, ancient in its origins – war by guerrillas, subversives, insurgents, assassins; war by ambush instead of combat; by infiltration, instead of aggression, seeking victory by eroding and exhausting the enemy instead of engaging him. It requires in those situations where we must counter it… a whole new kind of strategy…[88]

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[86] "AF Gen yearns for conventional warfare" *Inside the Pentagon*, October 18, 2007; Internet; retrieved from http://uscavonpoint.com/blogs/reconstructing_iraq/archive/2007/10/19/7073.aspx accessed on 31 October 2007.

[87] George Santayana (1863-1952, American Philosopher, Poet), Internet; retrieved from http://www.cybernation.com/quotationcenter/quoteshow.php?id=19567 accessed on 31 October 2007.

[88] John F. Kennedy, Remarks at West Point to the Graduating Class of the U.S. Military Academy, *6 June 1962,* Internet; retrieved from http://www.presidency.ucsb.edu /ws/index.php?pid=8695 accessed on 31 October 2007.

Until the U.S. military accepts the requirement for readaptation, future Presidents will be forced to seek strategy advice from people other than their principal military advisor, just as President Bush did on 9/15/2001.

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		Weak				Max in Row	MinMax
		Direct		Indirect			
	Direct	4	=>	1	q	1	2
Strong		^ II		II V			
	Indirect	2	<=	3	1-q	2	
		p		1-p			
	Min in Column	4		3			
	MaxiMin	3					

Game Does Not Have a Saddle Point

Strong Maximize

Weak Minimize

Legend: Strong Pure Direct — Strong Pure Indirect — Weak Pure Direct — Weak Pure Indirect — Value of the Game

Solution in the Mixed Strategy

Expected Value Method

Solution for Strong

Expected Value for Strong when Weak plays Direct

$EV(Direct) = 4*q + 2*(1-q)$

Expected Value for Strong when Weak plays Indirect

$EV(Indirect) = 1*q + 3*(1-q)$

$EV(Direct) = EV(Indirect)$

$4*q + 2*(1-q) = 1*q + 3*(1-q)$

$4q + 2 - 2q = 1q + 3 - 3q$

$2 + 2q = 3 - 2q$

$4q = 1$

$q = 0.25$

$1-q = 0.75$

Value of the Game = 2.5

Solution for Weak

Expected Value for Weak when Strong plays Direct

$EV(Direct) = 4*p + 1*(1-p)$

Expected Value for Weak when Strong plays Indirect

$EV(Indirect) = 2*p + 3*(1-p)$

$EV(Direct) = EV(Indirect)$

$4*p + 1*(1-p) = 2*p + 3*(1-p)$

$4p + 1 - 1p = 2p + 3 - 3p$

$1 + 3p = 3 - 1p$

$4p = 2$

$p = 0.5$

$1-p = 0.5$

Value of the Game = 2.5

Wiliam's Method of oddments

		Weak		
		Direct	Indirect	
Strong	Direct	4	1	
	Indirect	2	3	

		Probabilities	
$\|4 - 1\| =$	3	1	1 / 4	0.25
$\|2 - 3\| =$	1	3	3 / 4	0.75

	$\|4 - 2\| =$	$\|1 - 3\| =$
	2	2
	2	2
Probabilities	2 / 4	2 / 4
	0.5	0.5
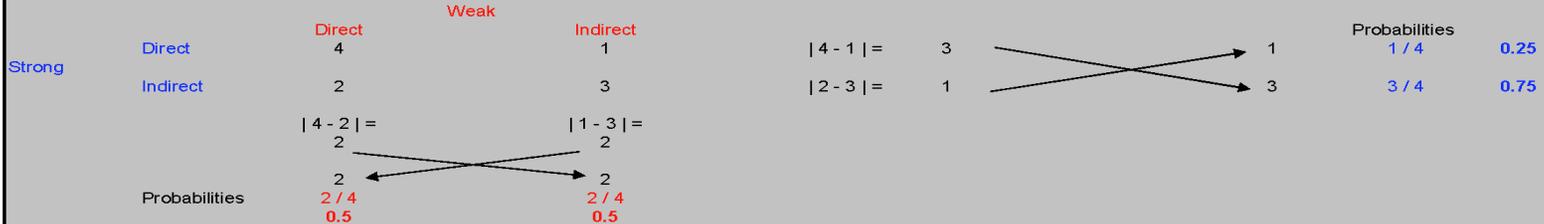
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APPENDIX B: U.S. MILITARY DEPLOYMENTS AND OPERATIONS, 1947 – 2001

	Operation	Description	Locale	Dates		Opponent Strategy Direct / Indirect
1	New Horizons	Military civic action and Humanitarian Assistance missions abroad	Central America	2001	Present	I
2	Essential Harvest	Support to NATO collection of arms and ammunition in the former Yugoslav Republic of Macedonia	Macedonia	27-Aug-01	1-Oct-01	I
3	Focus Relief	Provide military training and equipment to prepare the African battalions for peacekeeping operations in Sierra Leone	Ghana & Senegal	May-01	Aug-01	I
4	Desert Shift	Force protection initiative for U.S. forces based in the Kingdom of Saudi Arabia	Saudi Arabia	Nov-00	Dec-03	I
5	Determined Response	U.S. response to the terrorist attack on the destroyer USS Cole	Anti-terror Operations	12-Oct-00	Present	I
6	Sierra Leone NEO	Military support for the evacuation of U.S. citizens	Sierra Leone	May-00	May-00	I
7	Silent Promise / Atlas Response	Military humanitarian relief effort following torrential rains and flooding in southern Mozambique and South Africa	Mozambique / South Africa	Feb-00	Apr-00	I
8	Fundamental Response	Military humanitarian relief effort following flash flooding in northern Venezuela	Venezuela	20-Dec-99	early 2000	I
9	Stabilize	Military support to the International Force in East Timor, or INTERFET	Timor	11-Sep-99	Nov-99	I
10	Joint Guardian	U.S. military support to NATO peacekeeping mission	Kosovo	11-Jun-99	Present	I
11	Shining Presence	Military show of force to augment Israeli air and theater missile defense capabilities	Israel	Dec-98	Dec-98	I

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	Operation	Description	Locale	Dates		Opponent Strategy Direct / Indirect
12	Eagle Eye	U.S. support to NATO-Kosovo Verification Mission Agreement; non-combatant aerial reconnaissance	Kosovo	16-Oct-98	24-Mar-99	I
13	Determined Force	U.S./NATO air strikes against Serbian military targets in the Former Yugoslavia		8-Oct-98	23-Mar-99	I
14	Allied Force / Noble Anvil			23-Mar-99	10-Jun-99	I
15	Strong Support [Fuerte Apoyo]	Military humanitarian relief effort in Central America in response to the disaster caused by Hurricane Mitch	Central America	Oct-98	10-Feb-99	I
16	Infinite Reach	Military strikes against terrorist facilities in Afghanistan and Sudan; U.S. response to the terrorist attack on embassies in Kenya and Tanzania	Sudan / Afghanistan	20-Aug-98	20-Aug-98	I
17	Resolute Response	Military recovery, rescue, support, and security efforts in response to the terrorists attack on embassies in Kenya and Tanzania	Africa	7-Aug-98	31-Aug-99	I
18	Avid Response	Military humanitarian relief effort following the earthquake that hit Western Turkey	Turkey	18-Aug-99	Sep-99	I
19	Albania	Military security operations	Tirana, Albania	16-Aug-98	Sep-98	
20	Shining Hope	Military foreign humanitarian assistance operations in support of Kosovar refugees	Kosovo	5-Apr-99	Fall 1999	I
21	Sustain Hope / Allied Harbour	Military humanitarian relief effort to bring in food, water, medicine and relief supplies for the refugees fleeing from the Former Republic of Yugoslavia into Albania and Macedonia				I
22	Provide Refuge / Open Arms	Military airlift as many as 20,000 Kosovo refugees to safety in the United States until they can return to their homes				I
23	Determined Falcon	U.S./NATO air show of force over Former Yugoslavia	Kosovo & Albania	15-Jun-98	16-Jun-98	I

	Operation	Description	Locale	Dates		Opponent Strategy Direct / Indirect
24	Shepherd Venture	Military support for the evacuation of U.S. citizens	Guinea-Bissau	10-Jun-98	17-Jun-98	I
25	Safe Departure	Military support for the evacuation of U.S. citizens	Asmara, Eritrea NEO	5-Jun-98	6-Jun-98	I
26	Bevel Incline	Military deployment in preparation to support the evacuation of U.S. citizens; evacuation was never ordered	Indonesia	May-98	May-98	I
27	Noble Response	Military humanitarian relief effort following rains and flooding in the northeastern part of Kenya	Kenya	21-Jan-98	25-Mar-98	I
28	Plan Colombia	U.S. support to the Colombian military and the National Police	Colombia	1998	Present	I
29	Silent Assurance	Military operations to enhance security for U.S. citizens and facilities during the Middle East/North Africa (MENA) Economic Conference	Saudi Arabia	Nov-97	Nov-97	I
30	Phoenix Scorpion I	Military show of force in response to Iraq's defiance to United Nations weapons inspections	Iraq	Nov-97	Nov-97	I
31	Phoenix Scorpion II			Feb-98	Feb-98	I
32	Phoenix Scorpion III			Nov-98	Nov-98	I
33	Phoenix Scorpion IV			Dec-98	Dec-98	I
34	Bevel Edge	Military deployment in preparation to support the evacuation of U.S. citizens; evacuation was never ordered	Cambodia	Jul-97	Jul-97	I
35	Noble Obelisk	Military support for the evacuation of U.S. citizens	Sierra Leone	May-97	Jun-97	I
36	Guardian Retrieval	Military humanitarian assistance operations in support of Rwandan refugees	Congo (formerly Zaire)	Mar-97	Jun-97	I
37	Silver Wake	Military support for the evacuation of U.S. citizens	Albania	14-Mar-97	26-Mar-97	I

	Operation	Description	Locale	Dates		Opponent Strategy Direct / Indirect
38	Assured Lift	Military airlift and other logistical support to Economic Community Military Observation Group (ECOMOG) peacekeeping mission in Liberia	Liberia	18-Feb-97	7-Mar-97	I
39	Present Haven	Military support for Guyanese refugees	Guantanamo Bay	Feb-97	Feb-97	I
40	Relief Focus	Provide military training and equipment to prepare the African battalions for peacekeeping operations	Africa	1997	Present	I
41	Guardian Assistance	U.S. non-combatant aerial reconnaissance of situation in Rwanda	Zaire/Rwanda/Uganda	15-Nov-96	27-Dec-96	I
42	Assurance / Phoenix Tusk	Military humanitarian assistance operations in support of Rwandan refugees				I
43	Desert Focus	Military restructuring of forces on Arabian Peninsula in response terrorist bombing at Khobar Towers	Saudi Arabia	Nov-96	Nov-00	I
44	Pacific Haven / Quick Transit	Military support to evacuation of pro-U.S. Kurds from northern Iraq to Guam	Iraq > Guam	15-Sep-96	16-Dec-96	I
45	DESERT STRIKE	Military strikes on military targets posing a threat to coalition aircraft in the Northern Iraq no-fly-zone	Iraq	3-Sep-96	4-Sep-96	I
46	DESERT THUNDER	U.S. effort to provide military presence and capability during negotiations between the UN and Iraq over weapons of mass destruction		Feb-98	16-Dec-98	I
47	DESERT FOX	Military strikes in response to Iraq's continued failure to comply with United Nations Security Council resolutions as well as their interference with United Nations Special Commission (UNSCOM) inspectors	Iraq	16-Dec-98	20-Dec-98	I
48	Quick Response	Military support for the evacuation of U.S. citizens	Central African Republic	May-96	Aug-96	I

	Operation	Description	Locale	Dates		Opponent Strategy Direct / Indirect
49	Assured Response	Military support for the evacuation of U.S. citizens	Liberia	Apr-96	Aug-96	I
50	Laser Strike	Military support to multiple counterdrug operations involving all 19 Latin American countries; supersedes Operation Green Clover	South America	Apr-96	Present	I
51	Nomad Endeavor / Nomad Vigil	U.S. non-combatant aerial reconnaissance support to NATO	Taszar, Hungary	Mar-96	5-Nov-96	I
52	Marathon	Military support to the Immigration and Naturalization Services (INS) to stop illegal smuggling of migrants by ship into the United States	Atlantic Ocean	1996	1996	I
53	Full Accounting	Military operations to recover remains of personnel lost in previous conflicts in Southeast Asia	Southeast Asia	Oct-95	Present	I
54	DELIBERATE FORCE	U.S./NATO air strikes against Bosnian Serb military targets in the Former Yugoslavia	Bosnian Serbs	29-Aug-95	21-Sep-95	I
55	Third Taiwan Straits Crisis	U.S. show of force in response to China missile firing	Taiwan Strait	21-Jul-95	23-Mar-96	I
56	Operation Marathon Pacific / Operation Prompt Return	Military support in the repatriation of Chinese migrants	Wake Island	3-Jul-95	10-Aug-95	I
57	Quick Lift	Military support to the United Nations mission and allies in the former Republic of Yugoslavia	Croatia	3-Jul-95	11-Aug-95	I
58	Joint Endeavor	Military ground forces deployment to implement the military elements of the Dayton Peace Accords; forces were the Implementation Force (IFOR)	Bosnia-Herzegovina	Dec-95	Dec-96	I
59	Zorro II	Military operations in support of the Drug Enforcement Agency (DEA) and other law enforcement elements	U.S. Southwest Border	Dec-95	2-May-96	I

	Operation	Description	Locale	Dates		Opponent Strategy Direct / Indirect
60	Joint Guard	Military ground forces deployment to implement the military elements of the Dayton Peace Accords; forces were the Stabilization Force (SFOR); superseded Operation Joint Endeavor	Bosnia-Herzegovina	Dec-96	20-Jun-98	I
61	Joint Forge	Reduced military ground forces deployment to implement the military elements of the Dayton Peace Accords; superseded Operation Joint Guard		20-Jun-98	24-Nov-04	I
62	UNMIH, USFORHAITI; USSPTGP-HAITI	Military Humanitarian Assistance and security operations	Haiti	1-Apr-95	31-Jan-00	I
63	United Shield	Military support in the final withdrawal of United Nations peacekeeping troops from Somalia	Somalia	3-Jan-95	25-Mar-95	I
64	Safe Border	Military support in the peaceful settlement of the border dispute between Peru and Ecuador	Peru / Ecuador	1995	30-Jun-99	I
65	Gatekeeper	Military support to the INS and other law enforcement elements with border control operations designed to prevent illegal border crossings	California	1995	Present	I
66	Hold-the-Line		Texas	1995	Present	I
67	Safeguard		Arizona	1995	Present	I
68	Selva Verde	Military support to DEA operations with Columbian counter-narcotics operations	Colombia	1995	Present	I
69	Vigilant Warrior	U.S. show of force in response Iraqi force movements	Kuwait	Oct-94	Nov-94	I
70	Vigilant Sentinel			Aug-95	15-Feb-97	I
71	Intrinsic Action	Military nearly continuous presence of a U.S. battalion task force in Kuwait to deter further aggression by Iraq		1-Dec-95	1-Oct-99	I
72	Desert Spring	Military maintenance of a forward presence to provide control and force protection over Army forces in Kuwait		1-Oct-99	Present	I

	Operation	Description	Locale	Dates		Opponent Strategy Direct / Indirect
73	Uphold/Restore Democracy	Military movement of forces to Haiti to support the return of Haitian democracy	Haiti	19-Sep-94	31-Mar-95	I
74	Quiet Resolve / Support Hope	Military humanitarian relief operations in Rwanda	Rwanda	22-Jul-94	30-Sep-94	I
75	Able Sentry	U.S. support for the United Nations Preventive Deployment Force (UNPREDEP), tasked to monitor and report activity along the Macedonia/Serbia border area	Serbia-Macedonia	5-Jul-94	28-Feb-99	I
76	Safe Haven / Safe Passage	Military support in the repatriation of Cuban migrants	Cuba > Panama	6-Sep-94	1-Mar-95	I
77	Sea Signal / JTF-160	Military support for 50,000 Haitian and Cuban migrants seeking asylum in the United States	Haiti > Guantanamo, Cuba	18-May-94	Feb-96	I
78	Able Vigil Able Manner	Military response to two mass migrations at the same time -- first from Haiti, then from Cuba, off the coast of Florida; Coast Guard operation (then a component of DoD)	Cuba	19-Aug-94	23-Sep-94	I
79	Quick Draw	Military support for the evacuation of U.S. citizens	Somalia	Jun-94	Sep-94	I
80	Distant Runner	Military support for the evacuation of U.S. citizens	Rwanda NEO	9-Apr-94	15-Apr-94	I
81	Steady State	Military support to multiple counterdrug operations	South America	1994	Apr-96	I
82	Green Clover	Military support to multiple counterdrug operations involving Peru and Colombia; superseded by Operation Laser Strike	South America	1994	Apr-96	I

	Operation	Description	Locale	Dates		Opponent Strategy Direct / Indirect
83	Deny Flight	U.S./NATO air elements enforced the no-fly zone, provided close air support to UN troops, and conducted approved air strikes	Bosnia-Herzegovina	12-Apr-93	20-Dec-95	I
84	Decisive Endeavor / Decisive Edge	U.S./NATO air elements transitioned from Operation Deny Flight in support of the IFOR Operation Joint Endeavor		Jan-96	Dec-96	I
85	Decisive Guard / Deliberate Guard	U.S./NATO air elements transitioned from Operation Decisive Edge in support of the SFOR Operation Joint Guard		Dec-96	20-Jun-98	I
86	Deliberate Forge	U.S./NATO air elements transitioned from Operation Deliberate Guard in support of the reduced forces conducting Operation Joint Forge		20-Jun-98	24-Nov-04	I
87	Korean Nuclear Crisis	U.S. show of force in response to North Korean defiance of UN nuclear reactor talks	North Korea	10-Feb-93	Jun-94	I
88	Iris Gold	Military security assistance to train and assist Kuwaiti military units	SW Asia	1993	Present	I
89	Liberian NEO	Military support for the evacuation of U.S. citizens	Liberian NEO	22-Oct-92	25-Oct-92	I
90	Sky Monitor	U.S./NATO enforcement of UN directed ban on military flights in the airspace of Bosnia-Herzegovina	Bosnia-Herzegovina	16-Oct-92	24-Nov-04	I

	Operation	Description	Locale	Dates		Opponent Strategy Direct / Indirect
91	Provide Relief	Military humanitarian assistance operations in Somalia	Somalia	14-Aug-92	8-Dec-92	I
92	Restore Hope	U.S. military led coalition with mandate of protecting humanitarian operations and creating a secure environment for eventual political reconciliation		4-Dec-92	4-May-93	I
93	Continue Hope	U.S. military support of UNOSOM II to establish a secure environment for humanitarian relief operations by providing personnel, logistical, communications, intelligence support, a quick reaction force, and other elements as required		4-May-93	Mar-94	I
94	Provide Transition	U.S. military support for multinational United Nations effort to support democratic elections following 16 years of civil war in Angola	Angola	3-Aug-92	9-Oct-92	I
95	Maritime Monitor	U.S./NATO support for the monitoring of sanctions mandated by the UNSCR 713 and 757 in international waters off the Montenegro coast	Adriatic Sea	16-Jul-92	22-Nov-92	I
96	Maritime Guard	U.S./NATO support for enforcing the UN embargoes in the former Yugoslavia		22-Nov-92	15-Jun-93	I
97	Sharp Guard			15-Jun-93	Dec-95	I
98	Decisive Enhancement			Dec-95	19-Jun-96	I
99	Determined Guard			Dec-96	Dec-98	I
100	Provide Promise	U.S./NATO support for the UN mandated deployment of peacekeeping forces and humanitarian relief operations	Bosnia	3-Jul-92	Mar-96	I
101	Garden Plot	Military support related to domestic civil disturbances	Los Angeles, CA	May-92	May-92	I
102	Silver Anvil	Military support for the evacuation of U.S. citizens	Sierra Leone NEO	2-May-92	5-May-92	I

	Operation	Description	Locale	Dates		Opponent Strategy Direct / Indirect
103	Provide Hope I	Military humanitarian assistance operation to provide excess supplies and medical equipment to the former Soviet republics during their transition to democratic and free market states	Former Soviet Union	10-Feb-92	26-Feb-92	I
104	Provide Hope II			15-Apr-92	29-Jul-92	I
105	Provide Hope III			1993	1993	I
106	Provide Hope IV			10-Jan-94	19-Dec-94	I
107	Provide Hope V			6-Nov-98	10-May-99	I
108	GTMO / Safe Harbor	Military humanitarian assistance to receive, transport, detain, control and process Haitian migrants	Haiti > Guantanamo, Cuba	23-Nov-91	Jun-93	I
109	Quick Lift	Military support for the deployment of French and Belgian troops to Zaire and evacuation of 716 people	Zaire	24-Sep-91	7-Oct-91	I
110	Victor Squared	Military support for the evacuation of U.S. citizens	Haiti NEO	Sep-91		I
111	Fiery Vigil	Military support for the evacuation of U.S. citizens following the eruption of Mount Pinatubo	Philippines NEO	Jun-91		I
112	Productive Effort / Sea Angel	Military humanitarian relief effort in the wake of the destruction of the tropical cyclone Marian	Bangladesh	May-91	Jun-91	I
113	Provide Comfort	Military humanitarian assistance in the delivery of supplies to Kurds in N. Iraq	Kurdistan	5-Apr-91	Dec-94	I
114	Provide Comfort II			24-Jul-91	31-Dec-96	I
115	Northern Watch	U.S. military support to coalition establishment of a no-fly zone over N. Iraq		31-Dec-96	17-Mar-03	I
116	Eastern Exit	Military support for the evacuation of U.S. citizens	Somalia	2-Jan-91	11-Jan-91	I
117	Desert Falcon	Military show of force to augment Saudi air and theater missile defense capabilities	Saudi Arabia	1991	Dec-03	I
118	Maritime Interception Operations	Military support for the enforcement of the UN mandated arms and then smuggling embargo	Persian Gulf	1991	1-May-03	I

	Operation	Description	Locale	Dates		Opponent Strategy Direct / Indirect
119	Southern Watch	U.S. military support to coalition establishment of a no-fly zone over S. Iraq	Southwest Asia / Iraq	1991	17-Mar-03	I
120	Support Justice	Military support for counter-narcotics operations	South America	1991	1994	I
121	Desert Shield	Military deployment in response to Iraqi invasion of Kuwait	Southwest Asia	2-Aug-90	17-Jan-91	I
122	DESERT STORM	Military operations to remove Iraqi forces from Kuwait	Southwest Asia	17-Jan-91	28-Feb-91	D
123	Positive Force	Military show of force operation in Kuwait to deter further Iraqi aggression		Summer 91	Summer 91	I
124	Desert Calm / Desert Farewell	Military redeployment of forces from Operation Desert Storm	Southwest Asia	1-Mar-91	1-Jan-92	I
125	Coronet Nighthawk	Military counter-narcotics air interdiction operations	Central/South America	1991	present	I
126	Sharp Edge	Military support for the evacuation of U.S. citizens and Humanitarian Assistance	Liberia	May-90	8-Jan-91	I
127	JUST CAUSE	U.S. invasion to remove President Manuel Noreiga	Panama	20-Dec-89	31-Jan-90	I
128	Promote Liberty	Military security assistance to the PDF following Operation Just Cause		31-Jan-90	??	I
129	Classic Resolve	U.S. show of force operations to deter rebel coup attempt	Philippines	Nov-89	Dec-89	I
130	Hawkeye	Military humanitarian relief effort following Hurricane Hugo	St. Croix, U.S. Virgin Islands	20-Sep-89	17-Nov-89	I
131	Constant Vigil	Military support for counter-narcotics operations	Bolivia	15-Sep-89	??	I
132	Furtive Bear	Military aerial reconnaissance support for counter-narcotics operations	Peru	15-Sep-89	??	I
133	Nimrod Dancer	Military show of force operations to insure U.S. guaranteed rights under the Panama Canal Treaty	Panama	May-89	20-Dec-89	I

	Operation	Description	Locale	Dates		Opponent Strategy Direct / Indirect
134	Green Merchant	Military support for counter-narcotics operations	CONUS	1989	1989	I
135	Agate Path / Enhanced Ops		CONUS	1989	Present	I
136	ERNEST WILL	Military escort of escorting re-flagged Kuwaiti tankers to deter Iranian aggression	Persian Gulf	24-Jul-87	2-Aug-90	I
137	PRAYING MANTIS	Military attacks on Iranian targets in response to the USS Samuel B. Roberts striking an Iranian mine		17-Apr-88	19-Apr-88	I
138	Golden Pheasant	Military show of force operations to counter Nicaraguan incursions into Honduras	Honduras	Mar-88	Present	I
139	Blast Furnace	Military support for counter-narcotics operations	Bolivia	Jul-86	Nov-86	I
140	EL DORADO CANYON	Military air strikes in response to Libyan state sponsorship of terrorism	Libya	12-Apr-86	17-Apr-86	I
141	Attain Document	Military Freedom of Navigation operations into the Gulf of Sidra	Libya	26-Jan-86	29-Mar-86	I
142	Alliance	Military support for counter-narcotics operations	U.S. Southern border	1986	Present	I
143	Ghost Dancer		Oregon	1990	Present?	I
144	Grizzly		California	1990	Present?	I
145	Wipeout		Hawaii	1990	Present	I
146	Greensweep	200 active-duty military troops conducted a massive marijuana eradication operation	California	Jul-90	Aug-90	I
147	Achille Lauro	Military operations to detain Palestine Liberation Organization terrorists who had high jacked the passenger liner	Mediterranean	7-Oct-85	11-Oct-85	I
148	Intense Look	Military Freedom of Navigation and mine countermeasure operations	Red Sea / Gulf of Suez	Jul-84	Jul-84	I
149	URGENT FURY	U.S. invasion to oust the People's Revolutionary Government, to protect U.S. citizens and restore the lawful government	Grenada	23-Oct-83	21-Nov-83	I

	Operation	Description	Locale	Dates		Opponent Strategy Direct / Indirect
150	Arid Farmer	Military aerial reconnaissance of the conflict on the region between Libya and Sudan	Chad / Sudan	Aug-83	Aug-83	I
151	Early Call	Military aerial reconnaissance of the conflict on the region between Libya and Sudan	Egypt / Sudan	18-Mar-83	Aug-83	I
152	U.S. Multinational Force [USMNF]	Military peacekeeping operations	Lebanon	25-Aug-82	1-Dec-87	I
153	Multinational Force and Observers	Military peacekeeping operations	Sinai	1982	ongoing	I
154	Bright Star	Military aerial reconnaissance of the conflict on the region between Libya and Sudan; in response to the assignation of Egyptian President Sadat	Egypt	6-Oct-81	Nov-81	I
155	Gulf of Sidra	Military Freedom of Navigation operations into the Gulf of Sidra	Libya / Mediterranean	18-Aug-81	18-Aug-81	I
156	Central America	Military show of force operations to deter Nicaraguan aggression toward El Salvador	El Salvador / Nicaragua	1-Jan-81	1-Feb-92	I
157	Creek Sentry	Military aerial reconnaissance of tensions on the Poland Russia border	Poland	Dec-80	1981	I
158	EAGLE CLAW / Evening Light / Desert One	Military attempted rescue of hostages in the U.S. Embassy in Tehran	Iran	25-Apr-80		I
159	Mariel Boatlift	Military interdiction of illegal Cuban migrants; primarily a Coast Guard operation (then a component of DoD)	Cuba	15-Apr-80	31-Oct-80	I
160	ROK Park Succession Crisis	Military show of force operations to deter N. Korean aggression; in response to the assignation of S. Korean President Park	Korea	26-Oct-79	28-Jun-80	I
161	Elf One	Military aerial reconnaissance of the conflict on the region between N. and S. Yemen and then the Iran/Iraq War	Saudi Arabia	Mar-79	15-Apr-89	I
162	Yemen	Military show of force operation to deter escalation of the N. and S. Yemen conflict	Iran/Yemen/Indian Ocean	6-Dec-78	6-Jan-79	I

	Operation	Description	Locale	Dates		Opponent Strategy Direct / Indirect
163	Red Bean	Military humanitarian assistance and allied and non-combatant evacuation	Zaire	May-78	Jun-78	I
164	Ogaden Crisis	Military show of force operation to deter further Soviet involvement in the conflict between Somalia and Ethiopia	Somalia / Ethiopia	Feb-78	23-Mar-78	I
165	Coronet Oak	Military aerial counter-narcotics support operations	Central/South America	Oct-77	17-Feb-99	I
166	Paul Bunyan / Tree Incident	Military show of force operation to deter N. Korean aggression	Korea	18-Aug-76	21-Aug-76	I
167	Mayaguez Operation	Military attempted rescue of hostages from the Mayaguez, a U.S. flagged merchant vessel	Cambodia	15-May-75		I
168	New Life	Military non-combatant evacuation	Vietnam NEO	Apr-75		I
169	Frequent Wind	Military support for the evacuation of U.S. citizens and non-combatants	Evacuation of Saigon	29-Apr-75	30-Apr-75	I
170	Eagle Pull	Military support for the evacuation of U.S. citizens and non-combatants	Cambodia	11-Apr-75	13-Apr-75	I
171	Nimbus Stream	Military counter-mine operations in Mediterranean	Egypt	Jul-75	Oct-75	I
172	Nimbus Star / Nimbus Moon	Military counter-mine operations in the Suez Canal	Suez Canal	May-74	Dec-74	I
173	Lebanon NEO	Military non-combatant evacuation	Lebanon	22-Jul-74	23-Jul-74	
174	Cyprus NEO	Military non-combatant evacuation	Cyprus	1974		
175	Nickel Grass	Military logistical support for Israel in the Yom Kippur War	Mideast	6-Oct-73	17-Nov-73	I
176	Cambodia Incursion	Military invasion to destroy Communist sanctuaries	Cambodia	30-Apr-70	30-Jun-70	
177	Garden Plot	Military response to civil disturbances; civil reaction to the U.S. invasion of Cambodia	USA Domestic	30-Apr-70	4-May-70	I
178	Graphic Hand	Military support to the U.S. Postal Service; in response to a postal carrier strike	U.S. Domestic	1970	1970	I

	Operation	Description	Locale	Dates		Opponent Strategy Direct / Indirect
179	Red Fox [Pueblo incident]	Military show of force operations to deter N. Korean aggression; in response to the seizure of the USS Pueblo by N. Korea	Korea theater	23-Jan-68	5-Feb-69	I
180	Six Day War	Military show of force operations to deter further Egyptian and Syrian aggression toward Israel	Mideast	13-May-67	10-Jun-67	I
181	Congo	Military logistical support for embattled government	Congo	1967		
182	Powerpack	Military show of force operation in civil war	Dominican Republic	28-Apr-65	21-Sep-66	I
183	Red Dragon	U.S. transport support for Belgian hostage rescue operation	Congo	23-Nov-64	27-Nov-64	I
184	Panama Canal Riots	Military security operations	Panama	1964	1964	I
185	Cuban Missile Crisis	Military show of force operations to deter Soviet support for Cuba	Cuba, Worldwide	24-Oct-62	1-Jun-63	I
186	Thailand	Military show of force operations to deter Communist pressure	Thailand	17-May-62	30-Jul-62	
187	Vietnam War	Military security assistance and combat operations to deter N. Vietnam aggression	Vietnam	15-Mar-62	28-Jan-73	I
188	Operation Ranch Hand	Military support for defoliation operations		Jan-62	1971	I
189	Operation Rolling Thunder	U.S. bombing campaign		24-Feb-65	Oct-68	I
190	Operation Arc Light	U.S. bombing operations	Southeast Asia	18-Jun-65	Feb-72	I
191	Operation Tailwind	Military reconnaissance operations	Laos	1970	1970	I
192	Operation Ivory Coast / Kingpin	Military attempted rescue of American POWs in N Vietnam	North Vietnam (Son Tay Raid)	21-Nov-70	21-Nov-70	I
193	Operation Bullet Shot	U.S. bombing campaign	Southeast Asia	Feb-72	Dec-72	I
194	Operation Freedom Train / Linbacker I	U.S. bombing campaign	North Vietnam	6-Apr-72	23-Oct-72	I
195	Operation Pocket Money	Military aerial mining of Haiphong harbor		9-May-72	23-Oct-72	I
196	Operation Linebacker II	U.S. bombing campaign		18-Dec-72	29-Dec-72	I

	Operation	Description	Locale	Dates		Opponent Strategy Direct / Indirect
197	Operation Endsweep	Military counter-mine measure to remove mines dropped during Operation Pocket Money	North Vietnam	27-Jan-72	27-Jul-73	I
198	Berlin	Military show of force and humanitarian assistance operations	Berlin	14-Aug-61	1-Jun-63	I
199	Laos	Military security assistance operations	Laos	19-Apr-61	7-Oct-62	I
200	New Tape	Military humanitarian assistance operations	Congo	14-Jul-60	Jan-64	I
201	Caribbean	Military security operations during the Cuban crisis	Caribbean	1959	1960	
202	Taiwan Straits	Military shoe of force operations to deter China aggression	Taiwan Straits / Quemoy and Matsu Islands	23-Aug-58	1-Jan-59	I
203	Blue Bat	Military show of force operations	Lebanon	15-Jul-58	20-Oct-58	I
204	Suez Crisis	Military show of force operations	Egypt	26-Jul-56	15-Nov-56	I
205	Taiwan Straits	Military shoe of force operations to deter China aggression	Taiwan Straits	11-Aug-54	1-Jun-63	I
206	Korean War	Military operations to remove N. Korean forces from S Korea	Korea	27-Jun-50	27-Jul-53	D
207	Berlin Airlift	Military Humanitarian Assistance operations	Allied Sector, Berlin	24-Jun-48	May-49	I
208	China	Military support for the evacuation of U.S. citizens and non-combatants	China	1948	1949	I
209	Palestine	Military security operations	Palestine	1948		I
210	Cold War	Military show of force operations to deter Soviet aggression	Worldwide	2-Sep-45	26-Dec-91	I

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