

**Coercive Airpower in the  
Global War on Terror:  
Testing Validity of Courses of Action**

**A Monograph  
by  
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## Abstract

COERCIVE AIRPOWER IN GWOT: TESTING VALIDITY OF COURSES OF ACTION.  
A SAMS MONOGRAPH by Lt Col James R. Cody, USAF, 58 pages.

The question this monograph attempts to answer is whether “coercive strategies and their associated defeat mechanisms provide valid courses of action (COAs) for the US against global terrorists networks and nations that harbor terrorists?” The GWOT and the struggle against militant jihad exposed new challenges that air planners must confront in order to deal with this new type of threat. It is hubris to presume that airpower can overwhelmingly coerce al Qaeda or any terrorist organization into changing its attitudes and enmity towards the West, particularly towards America. However, the GWOT involves not only the terrorist organizations with international networks, but also the regimes of those nations that sponsor and harbor terrorists.

This monograph evaluates the validity of airpower as an instrument of coercion against both terrorist organizations and the regimes of nations that harbor or support terrorists. Airpower’s role in this mission is the focus of this study, oriented towards coercion theory application and its *feasibility* and *acceptability* as a valid course of action against global terrorist networks and harboring nations. Evidence from previous airpower coercion attempts, such as Libya, Korea, the Bekka Valley, and the 1998 Afghanistan and Sudanese strikes were used to provide insights into the validity of coercive airpower.

Coercive COA’s analyzed in the study include Robert Pape’s categories set forth in his book *Bombing To Win*, labeled as punishment, risk, denial, and decapitation. Punishment and risk are grouped into a category using countervalue defeat mechanisms as the strategy. In contrast to countervalue strategies, both denial and decapitation are identified as counterforce defeat mechanisms. These strategies have very different defeat mechanisms, they present very different approaches to coercion, and they can be of value to planners when considering the threat and the desired outcome. Both countervalue and counterforce approaches to coercion should be considered in every situation when airpower coercion is the agreed upon strategy.

The issue of validity for coercive COAs requires planners to take into account a vastly changed political landscape since 9/11. Perhaps a toughened military doctrine is required to fight GWOT, where pragmatic considerations sometimes may have to give way to hard-line principles. One of the keys to success for air planners will be to avoid atrophy of thought. A certain rigidity can harden into extreme dogmatism, a condition that could reduce the potential success of airpower in GWOT. Anecdotes abound concerning the proper application of airpower, but unfounded confidence, arrogance that ignores political and military realities, combined with rhetoric that divides rather than unites, can create an ethos that is more detrimental than it is helpful. US airpower enjoys numerically and qualitatively superior advantages over the rest of the world, and continued mastery of basic airpower principles will continue to contribute to that advantage. Nonetheless, we have to remember the basics. Coercion is but one strategy air planners can implement, and the results of this monograph should at least provide a starting point for planning. However, original thought combined with hybrid strategies appears to be the way of the future for airpower application in GWOT.

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## CHAPTER ONE

### INTRODUCTION

On 11 September 2001, a group of terrorists linked to al Qaeda, the Osama bin Laden led terrorist network, ushered in a dimension of warfare never before experienced in America. Regardless of the root causes of this attack, the terrorists hit at the heart and soul of the nation and all the principles that it stands for by murdering thousands of innocent civilians. The intended target was American economic and democratic ideals and institutions. President George W. Bush vowed to respond to these atrocities with all America's might to avenge this horrific act and ensure it never happens again. He described the terrorists as those practicing "a fringe form of Islamic extremism that has been rejected by Muslim scholars and the vast majority of Muslim clerics—a fringe movement that perverts the peaceful teachings of Islam. The terrorists' directive commands them to kill Christians and Jews, to kill all Americans, and make no distinction among military and civilians, including women and children."<sup>1</sup>

The American led effort against terrorism requires all aspects of diplomatic, economic, information and lobbying efforts to be used extensively to be effective. US Government agencies have an important role in the response to the attacks. The military also has a critical mission in this "Global War on Terrorism" (GWOT). Special forces, army troops, and airpower provide valuable capability against terrorists in the war. President Bush clearly stated the nation's resolve and the commitment to defeating terrorism. "I will not forget this wound to our country or those who inflicted it. I will not yield; I will not rest; I will not relent in waging this struggle for freedom and security for the American people. The course of this conflict is not known, yet its

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<sup>1</sup> George W. Bush, President of the United States. *Address to a Joint Session of Congress and the American People*, (United States Capitol, Washington, D.C., 20 Sep 2001, White House News & Speeches Online); available from <http://www.whitehouse.gov/news/releases/2001/09/20010920-8.htm>; Internet; accessed 19 Dec 2002.

outcome is certain. Freedom and fear, justice and cruelty, have always been at war, and we know that God is not neutral between them.”<sup>2</sup>

Airpower arguably has changed the nature of warfare since it emerged in the early 20<sup>th</sup> century as a useful, lethal instrument of military power. Airpower played a dominant role in recent American conflicts in the Gulf War, Bosnia, and Kosovo. However, can airpower be used as a coercive tool to influence terrorist networks? Will the conventional approach of using air as a coercive instrument work in the unique, troubling conflict? Air strategists generally recognize the value of attacking strategic targets with airpower, particularly against those of modern, industrialized nations. Careful center of gravity analysis typically reveals target sets that regimes hold with high regard. Theoretically their destruction, or threat of destruction, may produce successful coercive results, compelling enemies to change their behavior or intentions. Additionally, by attacking certain elements of an adversary’s war making capabilities, such as communications or various leadership targets, airpower generally has produced desirable effects, though the results are usually hotly debated amongst military commentators. Air strategists have also targeted troops directly in the field as part of an over-arching strategy. This approach is highly debated amongst strategists but nonetheless necessary in most situations. In short, airpower provides a myriad of capabilities that can be used to execute the “conventional” approach to warfare.<sup>3</sup>

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<sup>2</sup> Ibid.

<sup>3</sup> "In 2000 bin Laden announced the formation of the World Islamic Front for the Jihad Against Jew and Crusaders, an umbrella group of radical movements across the Muslim world, and issued a fatwa stating this it is the duty of all Muslims to kill U.S. citizens and their allies. Muslims were under siege, their lands occupied in a world dominated by their historic enemies, militant Christianity and Judaism." See John L. Esposito, *Unholy War* (New York: Oxford University Press, 2002), 21. "The causes of the resurgence vary by country and region, but there are common threads: widespread feeling of failure and loss of identity in many Muslim societies, as well as failed political systems and economies. Overcrowded cities, unemployment, government corruption, and breakdown of traditional religious and social values. Israel's crushing victory over combined forces of Egypt, Jordan, and Syria in 1967 Arab-Israeli Six-Day war symbolized the depth of Arab and Muslim impotence and the failure of modern nation-states in the Muslim world," Ibid., 83.

However, 9/11 changed the political landscape, and the US is now dealing with an asymmetric adversary—radical, irrational fundamentalists seeking ‘jihad’ against the West and using terror as a weapon.<sup>4</sup> The obligation or so-called right to wage jihad against political, social, or religious oppression has gained widespread usage in recent decades in order to justify holy and unholy wars. Jihad, or ‘holy war,’ is “not the product of a single authoritative individual or organization’s interpretation. It is rather the product of diverse individuals and authorities interpreting and applying the principles of sacred texts in specific historical and political contexts.”<sup>5</sup> The GWOT and the struggle against militant jihad exposed new challenges that air planners must confront in order to deal with this new type of threat. It is hubris to presume that airpower can overwhelmingly coerce al Qaeda or any terrorist organization into changing its attitudes and enmity towards the West, particularly towards America. However, the GWOT involves not only the terrorist organizations with international networks, but also the regimes of those nations that sponsor and harbor terrorist activities. Nation-states present air planners with tangible targets and flexible strategies to conduct air campaigns, but terrorist networks are fluid, elusive, and mobile. The networks may or may not have the host country’s consent or support while operating or training within their borders. This becomes problematic for air planners when sovereignty issues are raised. Is coercive airpower relevant in this war? Is airpower ironically a 20<sup>th</sup> century instrument of national power whose efficacy lies only in wars amongst post 1648 Westphalian nation-states?

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<sup>4</sup> Osama bin Laden's version of jihad could mean working to overthrow governments in the Muslim world and attacking America. Other forms would be striving to lead a good Muslim life, supporting the struggle of oppressed Muslim peoples in Palestine, Kashmir, Chechnya, or Kosovo, and alternatively jihad may be working hard to spread the message of Islam. Jihad is a defining concept or belief in Islam, a key element in what it means to be a believer and follower of God's Will. 26. Esposito continues "The most glaring difference between Muslim world and the West today is the contrast between authoritarian and democratically elected governments. Authoritarianism has been the norm not the exception in Muslim politics, cutting across the political and ideological spectrum. The track record of governments both non-Islamist (Algeria, Tunisia, and Egypt) and Islamist (Afghanistan, Sudan, and Iran) reveals a culture of authoritarianism that is incapable of tolerating any significant opposition," Ibid, 66 and 142.

<sup>5</sup> Ibid., 64.



This monograph evaluates the validity of airpower as an instrument of coercion against both terrorist organizations and the regimes of nations that harbor or support terrorists. Can either be coerced? Is the US dealing with individuals, legitimate governments, despots and dictators, or is it simply fighting a faction of Islam bent on militant jihad, seeking martyrdom and using murder and terror as a weapon? One week after 9/11, the President stated that GWOT entails war not only on terrorist networks, but also on the regimes of those nations that support or harbor terrorists. This approach is now known appropriately as the Bush Doctrine. Although the war began with al Qaeda, the President insisted it would continue until all terrorist groups with global reach have been defeated. Regimes of harboring nations were also put on notice. "We will pursue nations that provide aid or safe haven to terrorism. Every nation, in every region, now has a decision to make. Either you are with us, or you are with the terrorists. From this day forward, any nation that continues to harbor or support terrorism will be regarded by the United States as a hostile regime."<sup>6</sup> President Bush's National Security Strategy provided the direction for GWOT and clearly mandated where America's campaign against terror would be focused. "We will disrupt and destroy terrorist organizations by direct and continuous action using all the elements of national and international power. Our immediate focus will be those terrorist organizations of global reach and any terrorist or state sponsor of terrorism which attempts to gain or use weapons of mass destruction (WMD) or their precursors."<sup>7</sup>

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<sup>6</sup> Bush, *Address to a Joint Session of Congress and the American People*, 20 Sep 2001. President Bush later reinforced the magnitude of GWOT when he stated "The war against terrorists of global reach is a global enterprise of uncertain duration." George W. Bush, President of the United States, *Full Text: Bush's National Security Strateg.*, (The New York Times Online, Sep 2002) available from [http://www.nytimes.com/2002/09/20/politics/20STEXT\\_FULL.html](http://www.nytimes.com/2002/09/20/politics/20STEXT_FULL.html); Internet; accessed on 22 Jan 03.

<sup>7</sup> Bush. *Full Text: Bush's National Security Strategy*. The document goes on to state "Traditional concepts of deterrence will not work against a terrorist enemy whose avowed tactics are wanton destruction and the targeting of innocents; whose so-called soldiers seek martyrdom in death and whose most potent protection is statelessness. The overlap between states that sponsor terror and those that pursue WMD compels us to action." For a full accounting of how President Bush and his National Security Team arrived at the Bush Doctrine after 9/11, see Bob Woodward, *Bush At War*, (Simon & Schuster, Inc.2002).

Clearly any regime that supports terrorism is considered fair game. Therein may lie the key to successful coercion through airpower employment—holding nations that harbor or support terrorism fully accountable, and denying terrorists sanctuary within those borders. The question this monograph attempts to answer is whether “coercive strategies and their associated defeat mechanisms provide valid courses of action (COAs) for the US against global terrorist networks and nations that harbor terrorists?” The mission the President directed is clear: “America is now threatened less by conquering states than we are by failing ones. We are menaced less by fleets and armies than by catastrophic technologies in the hands of the embittered few. We must defeat these threats to our Nation, allies, and friends.”<sup>8</sup> Airpower’s role in this mission is the focus of this study, oriented towards coercion theory application and its *feasibility* and *acceptability* as a valid course of action against global terrorist networks and harboring nations. President Bush’s comments in the National Security Strategy clearly identify coercion as a strategy employed by the US in GWOT: “. . . denying further sponsorship, support, and sanctuary to terrorists by convincing or compelling states to accept their sovereign responsibilities.”<sup>9</sup> The terms ‘convincing’ and ‘compelling’ deal with attempts to change the behavior of the targeted network or regime through any means possible, and are applicable to coercion strategy and this study.

Evidence from previous airpower coercion attempts, such as Libya, Korea, the Bekka Valley, the 1998 Afghanistan and Sudanese strikes, and the Gulf War provide insights into the validity of coercive airpower that air planners can utilize. The intent is not to chronicle the execution of those air plans. The purpose is, however, to determine whether the campaigns reveal evidence that coercion is a valid COA. The previous attempts at coercion illustrate both types of enemy and may produce an overall picture that contemporary airmen can use in modern airpower thought and campaign planning. The resulting hypothesis is that airpower can, with some major

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<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

limitations, be a valid coercive tool in the GWOT, particularly dealing with nation states that sponsor and support terror. Directly coercing the terrorist networks will be more problematic. However, whether the US should use coercion strategies at all remains uncertain.

What is the best way to fight the GWOT? An eclectic approach using all aspects of diplomacy, information, military, and economic (DIME) instruments of national and international power is being debated and thoroughly scrutinized. However, though these elements are all complimentary, this paper deals exclusively with selected portions of the military element—namely airpower. Specifically, exactly how airpower is used in GWOT raises questions concerning the validity of its use for coercion in an asymmetric war.

Robert Pape, University of Chicago professor and former Dartmouth College and US Air Force School of Advanced Airpower Studies professor, offered a comprehensive examination of coercion strategy and its utility for airpower. Pape's analysis in his book *Bombing to Win: Air Power and Coercion in War*, of four types of coercion provides the framework for analysis, with some modifications, for this monograph. His coercive strategies emphasizing airpower as the means of application are labeled punishment, risk, denial, and decapitation. These strategies are considered independently by Pape and thus are treated as separate COAs. An assessment of Pape's theory, however, reveals necessary changes to his approach that are incorporated in this monograph. Karl Mueller, former professor of comparative military studies at the School of Advanced Airpower Studies, rendered a critique of Pape's analysis that is used to modify select portions of Pape's theories and definitions, hopefully making this study more contemporary and useful. More on this later.

This study first introduces an analysis of various aspects of coercion theory as it relates to airpower's role in GWOT. Secondly, it looks at the terrorist networks that have global capability. Al Qaeda is of particular interest since it has a sophisticated global network and is now

considered public enemy number one. Any terrorist network with global reach is high on the priority list, but al Qaeda is the focus. Finally, nation-states that harbor terrorists willingly, unwillingly, or unknowingly, present opportunities for potential coercion. Failed or semi-failed states, those without democracies and subject to dictatorships, despotism and totalitarianism, also present unique challenges to airpower's coercive validity. The four coercive COAs are tested for validity against the networks and identified regimes that sponsor them using criteria from *Joint Publications*. A matrix is developed that predicts the validity of all four COAs against the dual environments of terrorist networks and alternatively nations that harbor them. All four COAs in each case are tested using historical evidence. Additionally, each COA is checked for *feasibility* and *acceptability*, criteria derived from *Joint Publications* to ascertain COA validity. The completed matrix provides COA validity outcomes for each type of coercion in each situation. Finally, conclusions and recommendations are offered that hopefully air enthusiasts will find useful in this difficult task of GWOT execution.

## CHAPTER 2

### COERCIVE STRATEGIES

Robert Pape explored coercion attempts using airpower during conflict in his book *Bombing to Win*. Pape provided an analysis that is relevant and useful for war planners. However, treating coercion COAs independently and in isolation raises questions about the utility of this approach due to the nature of the threat. “Shifting national security policy away from deterring predictable threats toward responding to unpredictable threats after they emerge, making questions about how to compel states to alter their behavior more central in international politics. This trend is also apparent in the growing role of air power in U.S. military strategy.”<sup>1</sup> Pape declared “Air Power, initially a minor instrument, has become a more and more powerful coercive tool as the range and payload of aircraft have increased and weapons have become more accurate and more destructive.”<sup>2</sup> Although this study and Pape’s study both focus on airpower, it is acknowledged that GWOT coercion requires massive coordination and intelligence sharing efforts amongst all military and “other government organizations” for successful execution.

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<sup>1</sup> Robert A. Pape, *Bombing to Win: Air Power and Coercion in War*, Cornell Studies in Security Affairs. (Ithaca and London: Cornell University Press, 1996), 2. “The most important reason to study the determinants of coercive success and failure is to draw lessons for future policy debates. Coercion and strategic bombing will not go away,” Ibid., 314. Pape submits coercion will likely be attempted only over issues so important to the coercer that it would be willing to pay the full costs of military. In this situation coercive failure would be much less catastrophic, since military commitments will not have been based on false hopes of obtaining a cheap solution, and since the nation’s forces will already be constituted to obtain the objective by force if the opponent is not forthcoming. Pape submits that, for their part, military services should re-orient their doctrines and organization to focus more on the problem of destroying armies from the air. Both public and policy makers should stop thinking of coercion as a silver bullet to solve intractable foreign policy dilemmas. Coercion is no easier, only sometimes cheaper, and never much cheaper, than imposing demands by military victory. Ibid., 330-31.

<sup>2</sup> Ibid., 44. Pape employs two kinds of tests: quantitative analysis of all thirty-three strategic air campaigns to determine whether the theory’s predictions correlate with outcomes, together with detailed case studies of 5 most important instances...Japan 1945, Germany 1945, Korea 1953, Vietnam 1965-68 and 1972, and Iraq 1991 to determine whether the causal dynamics in specific cases match those expected by the theory. See page 10.

## Coercion

The US must approach GWOT with a strategy that not only protects against future attacks from the likes of al Qaeda, but it must also attempt to cause terrorists and nations that harbor them to change their behavior. Coercion is one approach that may be successful if attempted under the right circumstances. What is coercion? Typically, coercion models rely on manipulating costs, benefits, and expectations to achieve success. Pape defined coercion as manipulating costs and benefits through efforts to change the behavior of a state in order to force a change of behavior. The conventional wisdom is that successful coercion, whether used in a nuclear or conventional context, rests on the threat to inflict harm on civilians. This model reflects Cold War theories espoused by political strategists and social scientists such as Thomas Schelling. Schelling, University of Maryland Distinguished Professor at the School of Public Affairs, Professor of Economics, Emeritus, at Harvard, and twenty year veteran of the John F. Kennedy School of Government, wrote “coercion depends more on the threat of what is yet to come than on damage already done. The pace of diplomacy, not the pace of battle, would govern the action . . . the military action must communicate a continued threat.”<sup>3</sup>

Alexander George, former Professor, Emeritus, at Stanford University, describes coercion similarly. “The use of threats of punishment if the adversary does not comply with what is demanded. If force is used . . . it takes the form of an exemplary or symbolic use of limited military action to help persuade the opponent to back down.”<sup>4</sup> In short, coercion will occur whenever a state must choose between making concessions or suffering the consequences of

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<sup>3</sup> Jon A. Kimminau, *The Psychology of Coercion: Merging Airpower and Prospect Theor.*, Master's thesis, Air University, Maxwell AFB AL School of Advanced Airpower Studies, (Stinet DTIC. Jun 1998); 7, available online from <http://handle.dtic.mil/100.2/ADA391799>; Internet; accessed 15 Jan 03. Quoting from Thomas C Schelling, *Arms and Influence*, (New Haven: Yale University Press, 1966), 172.

<sup>4</sup> Quoted in Kimminau, 7, from Alexander George and William Simons, eds. *The Limits of Coercive Diplomacy*, 2<sup>nd</sup> ed., (Boulder: Westview Press, 1994), 10.

continuing its present course of action. The coercion is not necessarily defined by the coercer, but by the decisions the target state faces.<sup>5</sup>

Pape identified four types of coercion as punishment, risk, denial, and decapitation. He applied each type to previous conflicts to try to ascertain coercive airpower's success or failure. "[c]oercion, at least in conventional wars, succeeds when force is used to exploit the opponent's military vulnerabilities, thereby making it infeasible for the opponent to achieve its political goals by continued military efforts."<sup>6</sup> But can coercion be used against non-state actors with an ideology that maims and kills without discretion? Pape himself concluded that the productive study of coercion would recognize that a target state's vulnerability to an assailant's coercive attacks varies. For purposes of this study, 'target states' include nation-states that harbor terrorists, and also the terrorist networks and their capabilities that America faces in the GWOT.<sup>7</sup>

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<sup>5</sup> See *BTW* pages 1, 4, and 12. Pape differentiates between how coercion works in conventional and nuclear conflict, stating there is a vast gap in the destructive power of nukes and conventional weapons so coercion here operates differently.

<sup>6</sup> *Ibid.*, 1. Pape suggests that if coercion fails, complete military victory is required to win the war, which implies coercion falls short of complete victory, forcefully enforced. Anything short of complete victory is coercion; "Both coercion by punishment and coercion by denial are logically distinct from the imposition of demands after complete military victory...Coercion seeks to achieve the same goals as war fighting but at less cost to both sides," *Ibid.*, 9. Pape explains "The criteria for failure are simple. Coercion fails when the coercer stops its coercive military actions prior to concessions by the target, when the coercer's attacks continue but do not produce compliance by the target, or when the coercer imposes its demands only after complete defeat of the target. The last is crucial: if a coercive attempt is made but the war ends only when one side is decisively defeated, then coercion has failed, even if the coercer wins the war," *Ibid.*, 15.

<sup>7</sup> *Ibid.*, 8. "Conclusions may help policy makers distinguish between strategies likely to succeed and those likely to fail," *Ibid.*, 9. Pape goes on to state "Coercive success is a function of the interactions among the coercer's strategy, the target state's military strategy, and the target state's domestic politics," *Ibid.*, 19-20. Karl Mueller critiques Pape heavily: "The analytical framework and strategic taxonomy provided by *Bombing to Win* have considerable value to both theorists and practitioners of international politics in general and coercive air strategy in particular. Pape's classification scheme for coercion strategies, however, requires significant modification if it is to live up to its potential for either theory or application." Karl Mueller, "Strategies of Coercion: Denial, Punishment and the Future of Air Power," *Strategic Studies*; vol 7:3, (Spring 1998), 213.

## Punishment

The first coercive strategy Pape identified is called ‘punishment.’ Punishment campaigns target the civilian populace as the mechanism to compel a change in behavior in the targeted state. Pape wrote that “punishment campaigns seek to raise the societal costs of continued resistance to levels that overwhelm the target state’s territorial interests, causing it to concede to the coercer’s demands. The common feature of all punishment campaigns is that they inflict suffering on civilians, either directly or indirectly by damaging the target state’s economy.”<sup>8</sup>

Pape deduced that this type of coercion is reminiscent of Cold War ideology, and thus limited its utility to unlimited war. This type of coercion, according to Pape, will likely only work in nuclear disputes.<sup>9</sup> Additionally, punishment aims to alter the targeted states expectations about the cost of victory or defeat, and therefore punishment strategies never work because the targeted states are fighting for stakes vital to it. However, in terms of coercing the regimes of those nations that harbor terrorists, they normally would be fighting for less than their vital interests, or less than vital to their enemies. This is problematic. Pape’s assertion that punishment does not work because of vital interests “does not prove that punishment does not work, only that it does not always work.”<sup>10</sup> Therefore, punishment as a *defeat mechanism* is considered in this monograph.

Pape’s insistence that only civilians can be regarded as the *defeat mechanism* for punishment is deficient. Mueller critiqued this point by correctly stating that Pape’s definition refers “explicitly both to the strategies’ mechanism increasing the expected costs of resisting coercion, whether successfully or unsuccessfully and their targets, which Pape specifies must be the civilian

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<sup>8</sup> Pape, *Bombing to Win*, 18.

<sup>9</sup> In conventional disputes, coercion is most likely to succeed when directed at military, not civilian, vulnerabilities. Conversely, in nuclear disputes, coercion is likely to be predicated on civilian, not military, vulnerabilities." Ibid., 19.

<sup>10</sup> Mueller, 196.



populace. We need to move beyond the fixation on targeting civilians, which has characterized the writings of the major punishment theorists, and instead focus on the mechanism as the defining feature of a punishment or risk strategy.”<sup>11</sup> For purposes of this monograph, *the defeat mechanism* includes not only civilians, but also the government or leadership entity itself, and the things they may hold dear and can be part of a catalyst to generate a change in behavior. The goal against nations that harbor terrorists is to coerce the targeted government, using pressure from the indigenous population or the government itself to change its behavior and willingness to support terrorism. Terrorists themselves are more problematic using punishment as a tool, with martyrdom and self-righteousness embedded heavily in their psyche. However, punishment for reprisal rather than coercion may be the preferred approach when using punishment strategy as a measure of public appeasement, with the purpose being more for gratification, revenge, and retribution than an attempt to coerce and modify behavior.<sup>12</sup>

## **Risk**

Secondly, there is risk strategy. In contrast to punishment, “risk strategies slowly raise the probability of civilian damage. The crucial element here is timing. The coercer puts at risk essentially the same targets as in punishment strategies, but the key is to inflict civilian costs at a gradually increasing rate rather than destroy the entire target set in one fell swoop.”<sup>13</sup> The strategy is not as severe and sudden as punishment, and according to Pape not as effective in most

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<sup>11</sup> Ibid., 215. He continues his critique in general: “The weaknesses and omissions in Pape’s coercive taxonomy are less a result of using a flawed equation or misusing a good one than of focusing too heavily on classifying the theorists of the past and too little on employing the broader variety of strategies that might be employed in the future,” Ibid., 190.

<sup>12</sup> Targeted states using punishment strategies do, however, “use force in disputes over issues that are important to them but less than vital, or less than vital to their enemies in fact, because air power can be less expensive to employ than ground forces, it is likely to be the military instrument of choice in such confrontations and in such cases this central aspect of Pape’s theory loses much of its predictive and prescriptive value,” Ibid., 193.

<sup>13</sup> Pape, *Bombing to Win*, 18-19.

cases, particularly when using conventional means. Risk is similar to the strategy of graduated response, also known as incrementalism, searching for the level of action necessary to bring about success, but falling short of overwhelming force. Risk, like punishment, uses a countercivilian mechanism to achieve coercion. However, if used in Pape's terms they predictably are problematic for GWOT execution because of the strictly civilian and usually nuclear approach. However, as will be shown later, punishment and risk both employ countercivilian targeting techniques as the desired mechanisms to achieve success. Therefore both are included in this analysis. Further, the definitions of punishment and risk are modified to include not only civilians as the mechanism, but also any government or authority figure. Governments, despots, dictators, and potentially even terrorists have things they hold dear, other than military capabilities, that can be targeted under the guise of punishment or risk. The narrow interpretation Pape puts on punishment and risk categories is unnecessary and too restrictive, which limits potential usefulness.

Karl Mueller also pointed out that Pape's definitions of punishment and risk are deficient, since they refer explicitly both to the strategies' mechanism increasing the expected costs of resisting coercion, whether successfully or unsuccessfully and their targets, which Pape specifies must be the civilian populace. However, once again quoting Mueller, "we need to move beyond the fixation on targeting civilians, which has characterized the writings of the major punishment theorists, and instead focus on the mechanism as the defining feature of a punishment or risk strategy."<sup>14</sup> Thus the mechanism used here includes not only civilians, but also the leadership or government and anything they may hold dear, whether it is economic, religious, cultural, or diplomatic standing in the world. In short, anything that could be targeted, other than military or combat forces, that could potentially bring about a desired change of behavior. Therefore,

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<sup>14</sup> Mueller, 215.

punishment and risk strategies in this monograph are not considered countercivilian strategies, but more appropriately are classified as a countervalue strategy. Military targets, categorized as a counterforce mechanism, are included under denail and decapitation COAs.<sup>15</sup>

## **Denial**

The third coercive COA is denial. "Denial strategies target the opponent's military ability to achieve its territorial or other political objectives, thereby compelling concessions in order to avoid futile expenditure of further resources. Unlike countercivilian strategies, denial strategies make no special effort to cause suffering to the opponent's society, only to deny the opponent hope of achieving the disputed territorial [or political] objectives. Thus, denial campaigns focus on the target state's military strategy."<sup>16</sup> Obviously GWOT actions generally do not include disputed territorial objectives, but denial is still useful against a target state's political or ideological strategy and thus is included in the analysis. Pape contends that only denial will work using conventional means, and military vulnerabilities are the most important variables to test the thesis. As one may surmise, Pape is not an advocate of strategic bombing and advocates only 'theater airpower' against opposing militaries and their capabilities. Pape theorized that strategic bombing for punishment, risk, and decapitation do not coerce, and rarely is strategic bombing the best way to achieve denial. "The coercive strategy that benefits most from the PGM revolution is theater air attack. This is because many of the most important theater interdiction targets, as well

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<sup>15</sup> Department of the Air Force, *Air Force Doctrine Document (AFDD)1-2, Air Force Glossary*, defines countervalue as "The employment of strategic air and missile forces in an effort to destroy, or render impotent, selected industrial and economic capabilities of an enemy force under any of the circumstances by which hostilities may be initiated," 9.

<sup>16</sup> Pape, *Bombing to Win*, 19. "A theory that predicts when military coercion will succeed and when it will fail must focus on the target state's decision-making process, which, in turn, is affected by the relationship between the coercer's military strategies and the target state's vulnerabilities," *Ibid*, 15.

as ground support targets, are point targets requiring direct hits: tanks, APCs, etc.”<sup>17</sup> This is another shortfall in Pape’s theory, and all methods of air attack must be included for a comprehensive analysis of coercive airpower.

Regardless of the limitations, Pape’s analysis of denial strategies is his strongest in *BTW*. The assertion that denial must be present for any coercive strategy to succeed is powerful, and he backs this up in his case studies and statistical analysis. Problematic, however, is the assertion that disputes will generally be about controlling territory. This may be true to some degree for traditional conflicts and for GWOT when attacking nations that harbor terrorists. However, terrorists do not necessarily care about controlling land and they have the freedom to move about, as they did in Afghanistan and Pakistan. GWOT is more about an ideological struggle between two very different value systems and divergent political and religious beliefs rather than territorial

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<sup>17</sup> Ibid., 325. Remarkably, Pape is staunchly anti-strategic bombing. "In short, strategic bombing advocates have it exactly backward. PGMs have done nothing to enhance the coercive strength of strategic air power. Punishment, risk, and decapitation strategies had little merit before PGMs, and they have little merit now. Denial remains the most effective coercive air strategy, and PGMs have further increased the superiority of theater air power over strategic bombing." Ibid., 326. "Strategic bombing can matter only in long wars of attrition which are decided by overall material superiority, not in short conflicts fought mainly with existing stocks... Theater air power is a much stronger coercive tool, useful in short wars as well as long and against irregular as well as regular forces. Although, like strategic bombing, theater air attack is effective only when combined with simultaneous pressure from ground forces, it gives the opponent much less scope to minimize consequences because effects are more immediate," Ibid., 317-18. "The only opponents against which strategic bombing can matter are the world's largest military and industrial powers. These countries, however, generally possess strategic nuclear weapons. Thus any argument for conventional strategic bombing in such a conflict requires assuming that one side will permit the other routinely to fly missions throughout its airspace with nuclear capable aircraft that could deliver a nuclear first strike without warning at any time--without resorting to nuclear threats or preventive actions," Ibid., 325.

control. Therefore, to correct this inadequacy, these ideological struggles are included in the analysis of denial in GWOT rather than only those for territorial control.<sup>18</sup>

## **Decapitation**

Finally, an air strategy that attempts to isolate leadership, advocated by retired USAF Colonel John Warden, is another counterforce COA included for consideration—this type of strategy is referred to as decapitation. Warden, the principle architect of the air campaign during the 1991 Persian Gulf War, used this strategy to attempt to bring about “strategic paralysis” of the Iraqi war machine. Pape found this approach to be a problem and asserted that “decapitation does not work—political decapitation is not feasible because individual leaders are hard to kill, governments are harder to overthrow, and even if the target government can be overthrown, the coercer can rarely guarantee that its replacement will be more forthcoming.”<sup>19</sup> Warden adamantly disagreed, distinguishing between the physical and functional attributes of conflict. When the targeted entity stops functioning, we are successful. “Succinctly summarized, it seems highly unlikely that pure execution of Pape’s denial strategy, focused against Saddam’s forces in the field, would have led to realization of any goal other than pushing Saddam out of Kuwait

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<sup>18</sup> Pape's argument that conventional air strategies using denial is the only one that can work is a problem. Mueller critiques this point: "Pape bases this argument on three parallel components: deductive reasoning about the behavior of rational actors; a brief correlative survey of the relationship between military denial, civilian vulnerability, and coercive outcomes in cases involving strategic bombing; and detailed analyses of five major conflicts in which the coercive application of air power loomed large," Mueller, 183. Mueller correctly states, however, that "Pape's case for denial as a coercive strategy is strong. Denial can coerce, as it did in a number of the case studies, the theoretical argument that it is necessary in order for coercion to succeed over vital interests is powerful, and it at least appears to be present in all the cases of successful coercion in the statistical analysis," Ibid., 203.

<sup>19</sup> Ibid., 316. Pape identifies two areas of military strategy that can be targeted. He posits that the most effective denial strategy in any dispute depends on the strategy of the opponent. Mechanized, disrupting logistical or communications likely to be effective. Guerrilla warfare one must separate the guerrillas from the population that forms the basis of their support. Pape, *Bombing to Win*, 31.

(which would have really suffered in the process); conversely, we know the results of a war that had as its central element a strategic attack as imperfectly executed as it might have been.”<sup>20</sup>

It must be noted that Warden claimed his approach was not decapitation in isolation, but rather a comprehensive approach using all available tools. The Gulf War is the only instance analyzed by Pape where decapitation was used as a strategy.<sup>21</sup> Nevertheless, despite the limited evidence, it is important to include this option in the analysis of coercion since it gives planners another tool that could be successful in certain situations. Warden adamantly defended his theories and is passionate about the prospects of strategic airpower and its ability to produce strategic paralysis, with decapitation being part of an all-encompassing strategy. The GWOT presents a unique problem to the planner, whether the target is a nation that harbors terrorists or the actual terrorist networks. The important issue is the mechanism for successful coercion can come from other than purely conventional combat against fielded forces, as Pape suggested in his analysis.<sup>22</sup>

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<sup>20</sup> John A Warden, "Success in modern war: A response to Robert Pape's Bombing To Win," *Strategic Studies*, vol 7:2, (Winter 1997/98), 187. Warden continued "Today, war efforts aim at function and we are successful when function stops, regardless of physical damage. Failure to understand the shift from the physical to the function has significantly obfuscated analysis of the Gulf War and has led writers such as Pape to erroneous conclusions," Ibid., 179 "Contrary to Pape, our strategy was not a decapitation strategy by any means, but rather was a comprehensive strategy to use the tools available to us to do things which could have been done in any war prior to the Gulf War. Our plan was to impose strategic paralysis on Iraq on the way to forcing Iraq to be in consonance with our postwar peace objectives," Ibid, 185.

<sup>21</sup> Currently the war against Iraq, Operation Iraqi Freedom (OIF), is being waged with strategies such as "Shock and Awe" and Decapitation being touted by the press. It is unknown to what extent and purpose Decapitation is the strategy CENTOCM is using in OIF as a COA. However, it is clear it is not being used in isolation as a stand-alone strategy, and the defeat mechanism is complete regime removal, hardly a coercive COA.

<sup>22</sup> Warden stated "As Pape suggested, it is very important that those associated with national security understand what modern airpower can and cannot do to achieve political objectives. How to arrive at an increased level of understanding is the problem. Pape chose to do it by assuming that mid cold war nuclear war theories accurately describe war, concluding that only one of the major theories denial was valid, and then showing how airpower could play a role in achieving denial, while very carefully repeating the conventional wisdom that airpower alone cannot win wars and that strategic attack did not work," Ibid, 172-173.

Pape's theories can be summarized as follows. Punishment strategies will rarely succeed because civilians as catalysts for change seldom work. Risk strategies will fail for the same reasons. Denial strategies work best, because historically this approach has been successful and military forces provide the best choice for coercion. Surrender terms that incorporate heavy additional punishment will not be accepted. Finally, coercive success almost always takes longer than the logic of either punishment or denial alone would suggest.<sup>23</sup> Obviously, as Mueller and Warden have accurately critiqued, the theory is not without problems. Warden pulled no punches when he stated "in policy, military, and academic circles, we easily get lost in a Clausewitzian world in which defeat of the enemy military forces becomes an end in itself rather than merely one of a number of possible means to a higher end. In this sense, Pape's war categorizations of punishment, risk, denial, and decapitation merely put labels (and misleading labels at that) on tactical employment of war tools."<sup>24</sup> Obviously Warden is defending his theory of avoiding military forces if possible and using decapitation as part of a comprehensive strategy to achieve strategic paralysis as a counterforce mechanism for coercion. Regardless, all four of the coercion strategies are included for consideration.

In contrast to countervalue strategies, such as punishment and risk, both denial and decapitation fall into the counterforce category. These strategies have very different defeat mechanisms, they present very different approaches to coercion, and they can be of value to planners when considering the threat and the desired outcome. Both countervalue and

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<sup>23</sup> Pape, *Bombing to Win*, 20.

<sup>24</sup> Warden, 173. Warden didn't stop there: "No one would suggest that only experts in air operations can analyze the value of air power in a variety of roles, or understand the technical aspects of it. The nontechnical analyst who bases his conclusions on technical aspects he does not understand, however, runs the risk of discrediting his work," *Ibid.*, 190.

counterforce approaches to coercion should be considered in every situation when airpower coercion is the agreed upon strategy.<sup>25</sup>

## Criteria and Methodology

To test coercion theory in this analysis of airpower and GWOT, a menu of independent variables provides structure and discernible, verifiable conclusions. The variables include the following: coercive courses of action, identified earlier as punishment, risk, denial, and decapitation; criteria for analysis, identified as *feasibility* and *acceptability*, taken from Joint Publications to test validity of the COAs; and the environment, consisting of terrorist networks, such as al Qaeda, and failed or totalitarian nation states that support terror, such as Afghanistan and Iraq. The analysis includes evidence from previous coercive attempts using airpower in conflict.<sup>26</sup>

To effectively evaluate COAs using the methodology mentioned above, one first must identify the desired *defeat mechanism* used to coerce the adversary. The *defeat mechanism* is simply the desired method used to defeat the enemy. For example, if punishment or risk is attempted, then countervalue targeting would be the desired *defeat mechanism* for successful coercion; denial targets the opponents military strategy; and decapitation isolates leadership to prevent effective command and control and to create operational shock or strategic paralysis, both using counterforce targeting. *Publication 5-00.1* correctly puts the responsibility at the strategic level on the combatant commander to determine what set of political-military conditions will

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<sup>25</sup> AFDD 1-2, *Air Force Glossary*, defines counterforce as "The employment of strategic air and missile forces in an effort to destroy, or render impotent, selected military capabilities of an enemy force under any of the circumstances by which hostilities may be initiated," 8.

<sup>26</sup> Pape used different criteria in his analysis. Pape introduced a formula that supposedly can be used to predict coercion's success in various situations. Pape's "Logic of coercion" formula follows: Logic of coercion:  $R = B p(B) - C p(C)$  where R = value of resistance; B = potential benefits of resistance (not coercible); p(B) = probability of attaining benefits by continued resistance (Denial); C = potential costs of resistance (Punishment); and p(C) = probability of suffering costs (Risk), 16. As complicated as this formula looks, it boils down to "coercion can succeed only when the costs of surrender are lower than the costs of resistance." Pape, *Bombing to Win*, 16.



achieve the required strategic aims. This will influence tremendously what *defeat mechanism* and COA is chosen in each unique campaign. Also, in most situations, all the complementary instruments of national and international power—diplomatic, economic, military, and information—will come into play. But in reality, military action may end up being the main effort at the operational or tactical level. This is true particularly when attacking the regimes of nations that harbor terrorists. Terrorist networks, however, present the unique problem of very different, asymmetric threats, operating in largely unidentifiable operating environments, and creating difficulty in identifying whom or what one is really attempting to coerce. In this case, using instruments of national power other than military, such as controlling money flows, will probably have at least as much, if not more, of the lion's share of the strategy. In the military case, the theater design should be focused on the adversary's critical vulnerabilities that lead to the destruction or neutralization of the adversary's strategic and operational centers of gravity. Those could be very different when contrasting terrorist networks and harboring nations, and therefore those entities may or may not be vulnerable to the effects of military attack. Additionally, as will be demonstrated leadership entities may be non-coercible.<sup>27</sup>

In order to effectively explore the aforementioned coercive courses of action airmen can take to execute the GWOT, criteria to establish COA validity must be applied. *Joint Publication 5-00.1, Joint Doctrine for Campaign Planning*, identifies required criteria for valid COAs as *suitable, feasible, acceptable, distinguishable, and complete*. The most applicable in this study, in relation to airpower and the GWOT, are *feasibility* and *acceptability*. A suitable COA entails

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<sup>27</sup> Department of Defense, *Joint Pub 5-00.1, Joint Doctrine for Campaign Planning*, 25 January 2002, II-2. Pape theorized that the benefits of resistance are not manipulable by the coercer, strategy is limited to three options, each of which aims at one of the manipulable components of the target's decision calculus. Punishment strategies attempt to raise the costs of continued resistance; risk strategies, to raise the probability of suffering costs; denial strategies, to reduce the probability that resistance will yield benefits. Pape, *Bombing to Win* 18. "A theory that predicts when military coercion will succeed and when it will fail must focus on the target state's decision-making process, which, in turn, is affected by the relationship between the coercer's military strategies and the target state's vulnerabilities," *Ibid*, 15.

accomplishing the mission within the commander's guidance. This is assumed since commander's approve COAs that fall within their guidance and the objectives set forth by the National Command Authority. *Distinguishable* COAs must be significantly different from each other, and the coercive strategies provide distinguishable alternatives with different *defeat mechanisms*. A *complete* COA is one that takes all operations into account including forces required, time estimates and desired end states. These three criteria are omitted from the evaluation due to the nature of the research question and the underlying premise of the issue—whether coercive strategies against terrorist networks or harboring nation states are *feasible* and *acceptable* courses of action.<sup>28</sup>

*Feasible*: According to *Joint Publication 5-00.1*, one criterion for a valid COA is *feasibility*. This means that established resource constraints, timing, and space would not prevent successful COA execution. *Feasibility* is particularly important when evaluating coercive airpower COAs against terrorist networks and harboring nations due to the on-going operations tempo for US military forces and the nature of the threat. As will be shown later, planners that use coercion as the strategy to both fight terrorist networks and regimes that harbor them will find coercive COAs *feasible* most of the time. *Joint Publication 5-00.1* states a feasible COA “must be able to accomplish the mission within the established time, space, and resource constraints.”<sup>29</sup>

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<sup>28</sup> Joint Pub 5-00.1, III-9. Add to bibliography. Pape uses an entirely different set of criteria in *BTW*. The weighted variables to influence military vulnerability (combined effects of B and p(B) in the coercion calculus) are defined as: Medium—control over the disputed territory [or political objective] is definitely in jeopardy but the threat can be reduced by added military measures, such as further mobilization of society; High—successful defense of conquest of the territory [or political objective] cannot be assured even with added military measures, but it may be possible to inflict enough attrition to reduce the opponent's commitment to control the territory; and Very High—the likelihood of loss of control over the territory [or other governmental aims] approaches certainty because both defense and heavy attrition of enemy forces are impossible," Pape, *Bombing to Win*, 31-32.

<sup>29</sup> Joint Publication 5-00.1, III-9.

*Acceptable: Joint Publication 5-00.1* identifies a valid, acceptable COA as one that balances the cost with advantage gained when executing a particular COA.<sup>30</sup> This criterion is critical when using coercion as the strategy in GWOT. Coercive strategies, according to Pape, require impacting variables in what he termed a ‘coercion calculus’ formula to be successful. Pape’s logic is that variables exist that potentially can be targeted for change. Each type of coercion is intended to impact different variables in the calculus. For coercive success, one must alter one of these variables by increasing the cost of resistance to the targeted entity, raising certainty that these costs will be suffered, lowering the benefits of continued behavior, or reducing the probability of success. The *acceptability* criterion comes into play because the US must look to balance the cost of a COA against the advantage gained or the desired outcome. Planners must weigh the potential success of a coercive COA, identify the *defeat mechanism*, and meet *acceptability* criteria not only militarily, but the COA must be politically and publicly acceptable as well.

To summarize, the four coercive COAs and their associated *defeat mechanisms* are analyzed against two identified enemies—terrorist networks and the regimes of nations that harbor or support terrorists. They are tested using historical evidence to predict their *feasibility* and *acceptability* as useful tools and valid COAs using airpower in the GWOT. Predictions are made in both environments that hopefully planners will find useful when selecting COAs with coercive

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<sup>30</sup> Joint Publication 5-00.1, III-9. Pape breaks down civilian vulnerability (combined effects of C and p(C) in the coercion calculus) into other criteria, putting the population at varying degrees of risk. Pape’s civilian vulnerability criteria is listed here for information purposes: Coded Low: although some risk to individuals, no major part of population must make adjustments or compromises; Medium: risks to individuals has risen to the point that major parts of the population must make compromises or adjustment in their daily life, such as evacuation or substitution. High: 1% or more of the population may die despite the best countermeasures; Very High: 5% or more of population is at risk. The Denial theory expects that coercion should frail in conventional even if civilian vulnerability is high or very high, *BTW* 0-51. This type of civilian targeting is not part of a legitimate, democratic nations contemporary planning for conflict, and Pape uses it to illustrate it is a Cold War nuclear strategy. Therefore this criteria is omitted here. However, Pape’s repeated use of territorial control and conquest in the military vulnerability variable is problematic—he fails to consider regimes or leaders that may have more than just military capability that can be attacked to alter the variables in the calculus.

*defeat mechanisms* in the GWOT campaign. Finally, conclusions and recommendations predict whether coercion as a COA is valid in GWOT, or alternatively whether complete military victory will be required to defeat this unique, emerging threat.<sup>31</sup>

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<sup>31</sup> Pape's analysis is somewhat more technical. "The key question in assessing the significance of correlations between independent and dependent measures is how they compare to chance. Two possible outcomes—success or failure defined as meeting or failing to meet the coercer's demands prior to final defeat." Using the above methodology, "the denial theory predicts thirty-seven of forty cases successfully, a result that could be achieved by chance less than once in a thousand times," 51. Pape "combines the features of focused-comparison and statistical-correlative analysis using the universe of coercive air campaigns. Correlative analysis of this universe enhances confidence that my theory can predict future events by showing that the patterns predicted by the theory actually occur over a broad class of cases." 48. "Accordingly, we can easily determine whether the success rate for each theory is the same or higher than would be obtained by simply flipping a coin. The denial theory predicts thirty-seven of forty cases successfully, a result that could be achieved by chance less than once in a thousand times. This is an extremely robust result for denial theory to fail the .05 standard benchmark significant level it would have to be wrong in more than ten additional cases," 51.

## CHAPTER 3

### TERRORIST NETWORKS

Terrorist networks present military planners with a unique threat embodying characteristics different from those of classical, nation state wars prominent since Westphalia in 1648. The terrorist network threat has no sanctioned governing body, no rule of law, and no identifiable process for international engagement through a sanctioned body such as the United Nations— basically terrorist networks are entities without borders and without legitimate, sovereign territory. These networks can be classified as asymmetric, transnational, and extremist. The threat is elusive, violent, and not afraid to die for the cause of jihad or militant Islam. For these reasons, identifying COA's using coercive airpower that are both *feasible* and *acceptable* is a challenge not likely to be successful when attacking terrorist networks. Previous attacks on the networks support this proposition. The attacks on the 1983 Bekka Valley against Hizballah (a Syrian backed Shiite extremist group), al Qaeda in Afghanistan and Sudan in 1998, and Operation Enduring Freedom in Afghanistan that is on-going since 2001, all fell short in at least one of the criteria. These coercion attempts using airpower provide insight into whether or not coercion is an acceptable strategy against a supranational entity!<sup>1</sup>

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<sup>1</sup> General Gregory S. Martin, then COMUSAFE, summed up the unique nature of the threat in a speech to the Air Force Association Symposium, stating "Who is this new enemy that we are facing? I would say this is a pretty good description. It is an extremist group. They don't really agree with the institutions as we know them. They are pursuing their own beliefs and they don't care about the norms of normal social, legal and moral behavior. They are organized terrorists. That is who we are facing - it is a supranational entity. They are outside the borders. They are all over. There are nodes. They are getting financial support. They are getting host nation support. They are getting administrative support. Training, recruiting, just as I mentioned. They are sort of all over and right now we don't know how many there are. It is an enemy without borders. It has got global reach and, as I said in an earlier slide, it can take that simmering peace and turn it into a hot war in just minutes and it comes from 360 degrees." Gregory S. Martin, General, USAF, Speech to AFA National Symposium; (Orlando FL. 14 Feb 2002; Aerospace Education Foundation); available from <http://www.aef.org/pub/martin202.asp>; Internet; accessed 3 Feb 03. Esposito adds "Al-Qaeda (modern in terms of educational profiles, knowledge and use of modern technology from computers, faxes, the Internet, and cell phones to weapons) represents a new form of terrorism, born of transnationalism and globalization. It is transnational in its identity and recruitment and global in its ideology, strategy, targets, network of organizations, and economic transactions," Esposito, 151.

President Bush clearly laid out the road ahead and identified the US objectives in the 2002 State of the Union address. "Our nation will continue to be steadfast and patient and persistent in the pursuit of two great objectives. First, we will shut down terrorist camps, disrupt terrorist plans, and bring terrorists to justice. And, second, we must prevent the terrorists and regimes who seek chemical, biological or nuclear weapons from threatening the United States and the world."<sup>2</sup> The first part of the strategy deals with actions that do not fit neatly into the countervalue category, but rather counterforce. Even though past successes in places like Afghanistan bring momentary elation and feelings of success to Americans, the fact remains that al Qaeda still has a vast, underworld terrorist network. This network is globalized to the extent that dispersion and reappearance practically anywhere create problems for planners trying to identify targets and pursue a well thought out coercive strategy.<sup>3</sup>

The nature of the terrorist threat that resided in Afghanistan revealed a systemic problem arising from failed nation states and their willingness or inability to stop terrorists from taking refuge within their borders. These problems result in seemingly insurmountable issues for the US in GWOT. Osama bin Laden seems to embody jihad, but his total disappearance would not eliminate the dangers of global Islamic terrorism. The Quran states "If you are killed in the cause of God or you die, the forgiveness and mercy of God are better than all that you amass. And if

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<sup>2</sup> Bush, *The President's State of the Union Address*. The hawkish Undersecretary of Defense, Paul Wolfowitz, amplified this principle in Munich: The only defense against terrorism is to "take the war to the enemy; the best defense is a good offense. The terrorists' great advantage is their ability to hide, not merely in the mountains of Afghanistan, but in the towns and cities of Europe and the United States. We need to hunt them down relentlessly, but we also need to deny them the sanctuaries in which they can safely plan and organize and to deprive them of the financial and material resources they need to operate— as Secretary Rumsfeld has said, "to drain the swamp" in which they live." Paul D Wolfowitz, *Remarks at the 38th Munich Conference*; (2 Feb 02. Expand Nato); available from <http://www.expandnato.org/munwolf.html>; Internet; accessed 6 Nov 02.

<sup>3</sup> President Bush's *National Security Strategy* states "Our military has put the terror training camps of Afghanistan out of business, yet camps still exist in at least a dozen countries. A terrorist underworld -- including groups like Hamas, Hezbollah, Islamic Jihad, Jaish-i-Mohammed -- operates in remote jungles and deserts, and hides in the centers of large cities."

you die or are killed, even so it is to God that you will return (3:157-158).”<sup>4</sup> Obviously bin Laden types use this as a call for martyrdom and thus apply this zealotry to attacks against Western ideology and symbols, namely the US. Killing bin Laden would undoubtedly bring feelings of retribution and relief to most Americans. This approach of killing or isolating bin Laden can easily be classified as decapitation, separating the brain of the al Qaeda network from its militant killers. However, is decapitation a *feasible, acceptable* COA that can be successful in meeting US objectives using coercive airpower?<sup>5</sup>

The answer to the decapitation COA question has to be a resounding no. The declaration of war thrust upon the US by bin Laden and al Qaeda bring together many elements from Muslim history, such as militant jihad and Wahabbi Islam. The dimension of globalization greatly enhance a terrorist group’s ability to harness modern technology to religion and strike anywhere, anytime or anyplace. This lends strength to the threat of Islamic radicalism to our security and

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<sup>4</sup> Quran quoted in Esposito, 69. Esposito provides an interesting perspective on Egypt, terrorism, and Islam: "As Osama bin Laden and al Qaeda have reminded us, what happens "over there" does in fact have an impact on the United States and elsewhere in the West. Countries such as Afghanistan, Egypt, Israel/Palestine, and Algeria have proven fertile ground in which the seeds of violence and terrorism have thrived. Egypt best illustrates all faces of Islam, violent or nonviolent, domestic or international. Egypt's Islamic movements have spanned the spectrum from the modernists in the late nineteenth and twentieth centuries to recent extremist groups such as Takfir wal Hijra, Islamic Jihad, and Gamma Islamiyya who have terrorized Egyptian society, inspired Osama bin Laden, and became part of the al Qaeda network. The Egyptian experience offers a full-blown example of political Islam from its pioneers to mainstream and terrorist fringes today and reflects the ironic fact that some of the most developed countries. In the Middle East have experienced and been victims of significant violence and terrorism," Ibid, 85-86.

<sup>5</sup> "Wherever one turns, the image and words of Osama bin Laden seem to embody jihad. He stands before us with a Quran in one hand and a Kalashnikov in the other, surrounded by his band of religious zealots. However, bin Laden is symptomatic of a broader phenomenon. His disappearance from the scene will not eliminate the danger of global Islamic terrorism." Esposito, 70. Esposito continues "The United States led coalition has brought an end to Taliban rule, the first major step in the war against global terrorism. Whether Osama bin Laden is captured and however successful are attempts to contain al-Qaeda, religious terrorism in the Muslim world and beyond will continue to be a threat to nations and to the international community," Ibid., 160.

forces the US to recognize that the threat of terrorism in the name of Islam is a much bigger picture than bin Laden or any other individual.<sup>6</sup>

The core decapitation targets of the networks—bin Laden, his lieutenants, and other second order leaders—are not easily identifiable nor are they static. Suppress one and others will show up elsewhere. Their locations can be temporary, and thus are very unlike state actors. The leaders constitute “a dynamic network of individuals, small groups, and non-state actors (supportive businesses and international financial networks) for whom bin Laden may, realistically, be more a symbol or facilitator than a “command and control” leader.”<sup>7</sup> It is true bin Laden provides much solidarity, financial support, and impetus for religious fervor, and he is capable of stirring up militants into a suicidal frenzy. But the US “should resist temptation to focus on killing one individual like bin Laden. As experience from Central America and Somalia has shown, such manhunts are notoriously difficult and, even if successful, may fall short of the US strategic objective—in this case, putting terrorist organizations out of business.”<sup>8</sup> However, the reemergence of smaller networks worldwide, such as in Indonesia and the Philippines,

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<sup>6</sup> See Esposito, 73. Operationally, General Martin adds “And it is not just Osama that you had earlier. It is a whole group of them and right now the question is: where are all of them and who trained them and how can we get at their strategic centers? Their operational centers? And ultimately their tactical execution units? How can we do that? Last, let me just say in parting thoughts that clearly the nature of this enemy has changed. The principles of war have not. It is a global war. It is going to require a global perspective and last, as airmen, we must think offensively. We have to get out of the foxhole. We have to go get them because they are out there and they are right now 360 degrees around and they pick the time and place of attack. We have to go get them first.”

<sup>7</sup> Joe W. Pitts, III; “Limits of the Military Metaphor” The American Prospect Online; (Web Exclusive 20 Sep 01); available from <http://www.prospect.org/webfeatures/2001/09/pitts-j-09-20.html>; Internet; accessed 30 Jan 03. Pitts adds “There are aspects to this new foe of what experts have called an “asymmetrical threat,” involving asymmetries not only of size and types of forces, but of unrestrained methods used by the terrorists. But here the asymmetries are even greater than previously contemplated, given such aspects as the multinational nature of this foe and its willingness to strive for ruthless impact on a truly unprecedented scale.” Additionally, in a study at CSIS, this conclusion is supported: “Effective decapitation of the network—the removal of the top layer or two of leaders—would undoubtedly disrupt operations for some period of time. But because so much of the network in the form of cells outside of Afghanistan might survive, al Qaeda or a successor group could be in op again in a matter of months.” See Kurt M. Campbell, and Michele A Flourney; *To Prevail: An American Strategy for the Campaign Against Terrorism*; (Washington, D.C. The Center for Strategic and International Studies Press, 2001), 42.

<sup>8</sup> Campbell and Flourney, 69.



provide evidence that suggests the terrorists will be able to continue their exploits without centralized leadership, granted though it may be on a smaller scale. The defeat of the Taliban was one thing, but severing al Qaeda from bin Laden in hopes of paralyzing the terrorist network (decapitation) is another issue. The fact that al Qaeda is active in other areas of the world, and is still active in Afghanistan and Pakistan as well, illustrates the difficult nature of separating leaders from a mobile, elusive group of terrorists. It is clear the decapitation COA against terrorist networks is neither *feasible* nor *acceptable* due to constraints and limitations on limited air resources due to the on-going operations tempo for US military forces, but particularly due to the nature of the threat. Additionally, because the US must look to balance the cost of a COA against the advantage gained or the desired outcome, the *acceptability* criterion also does not provide validity to the decapitation COA. Other than localized victories seemingly meeting the denial objectives, costs incurred weighed against small advantages gained do not meet the *acceptability* criteria.<sup>9</sup>

The other COA using counterforce as a *defeat mechanism* is denial. As illustrated earlier Pape concluded that denial is the only coercive air strategy that will work when it denies the opponent the use of its military capabilities. Pape's conclusions are based on historical evidence and used in his coercion calculus. Denial is a strategy that entails the destruction of key military targets, including command and control centers, headquarters, and logistics and staging areas. However, in the case of terrorist networks, denial is difficult to achieve based on evidence from

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<sup>9</sup> "The Taliban and al Qaeda provided refuge and training for militants, many of whom have had to flee their home counties, from Egypt, Algeria, Yemen, Saudi Arabia, Malaysia, Thailand, the Philippines, Uzbekistan, Tajikistan, Kyrgyzstan, Chechnya, as well as Uighurs from the Xinjiang province in China. Little noted part of the world spawned Taliban and al Qaeda alliance base for network of organizations and cells from across the Muslim world that hijacked Islam, indiscriminately slaughtering non-Muslims and Muslims alike," Esposito, 117.

previous denial attempts, namely the 1983 Bekka Valley strikes against Hizballah and the 1998 cruise missile strikes against bin Laden and al Qaeda.<sup>10</sup>

In 1983, President Reagan ordered retaliatory strikes against Hizballah in response to numerous terrorist attacks, particularly the Marine barracks bombing in Beirut and a US F-14 flying reconnaissance over the Shouf Mountains being fired upon by a terrorist controlled surface to air missile. The targets the US selected were terrorist related, but the mission was a disaster. The US lost two aircraft and had one airman captured, and most targets were of little consequence. Terrorist leader Hussein Musawi soon developed a reputation of being a mastermind terrorist, much like bin Laden today, and did more to increase the popularity and, in terrorist eyes, the legitimacy of their actions. The difficulty of coercing terrorists became evident, in this case using denial strategy. The similarities of this 1983 operation to contemporary issues allows one to deduce that 1983 provides evidence that coercive denial using airpower will not work against terrorist networks. Coercion requires the target to change its behavior based on either anticipated gains or losses. Terrorists, in this sense, will not concede anything until their ultimate aims are met, which in turn requires the US to employ military power for destruction rather than the limited aims of coercion. Another episode of denial that failed against the networks occurred in 1998 under President Clinton, called Operation Infinite Reach, and ironically was executed against bin Laden and al Qaeda.<sup>11</sup>

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<sup>10</sup> See Rob de Wijk; "The Limits of Military Power;" (The Center for Strategic and International Studies and Massachusetts Institute of Technology; *The Washington Quarterly*, 25:1, pp 75-92. Winter 2002); available from <http://www.twq.com/02winter/dewijk.pdf>; Internet; accessed 30 Jan 03. Wijk adds that "In the case of unconventional warfare, however, the number of high-value targets is extremely limited; therefore, there is little to bomb. Consequently, the only strategy that can be successful is a military strategy of control, which requires search-and-destroy missions using land forces such as SOF reinforced by specialized forces and airpower, but as argued earlier, the United States and its allies have very limited capabilities in these areas."

<sup>11</sup> For a brief discussion of the Bekka Valley operation, see Mark T. Damiano, *Employing Aerial Coercion to Combat Terrorism: Recommendations for the Theater CIN*; Appendix A; Research Paper; Naval War College, Newport, RI; Joint Military Operations Dept. (Stinet DTIC, 04 Feb 2002); available from <http://handle.dtic.mil/100.2/ADA400937>; Internet; accessed 3 Feb 03. For a discussion on coercion in relation to complete military defeat, see Schelling, 15.

Operation Infinite Reach was conducted in retribution for US Embassy bombings in Kenya and Tanzania using airpower in the form of cruise missiles. The targets were al Qaeda training camps south of Kabul, Afghanistan, and a suspected chemical weapons plant in Khartoum, Sudan. Although the missile strikes destroyed numerous terrorist camps and did much to damage the operational capability of al Qaeda, there is no reason to believe bin Laden and the terrorist network was coerced in any way into changing their behavior, the obvious evidence being the USS Cole and 9/11, among others. Operation Infinite Reach did little for coercion, and similar to the 1983 attacks, provides evidence that denial will not work against networks.<sup>12</sup>

Even though denial in these situations may be *feasible*, they are not *acceptable* for several reasons. First, the US had to violate sovereign airspace to execute these missions, for example Pakistan in 1998. This is one area that will continue to be a problem if the US sticks to international norms and honors the sovereign airspace of nations. Failing to do so creates questions of legitimacy to US operations. Second, collateral damage also creates problems for the US, since there is no guarantee innocent civilians will not become casualties. Severe unintended consequences can arise if an errant bomb destroys targets that either were not intended or planners failed to account for second and third order effects. Third, many US operations are unilateral, and without international support legitimacy, in the eyes of the world, becomes suspect. For these reasons, and the fact that it did not work in the past, denial does not meet the *acceptability* criteria for a COA employing airpower for coercion.

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<sup>12</sup> See Damino, Appendix C. Campbell and Flourney assert also that the Cruise missile attacks on training camps in Afghanistan and the assault on the drug manufacturing factory in Sudan were high profile gambles that did not have the desired effect once the rubble cleared. This attack was President Clinton's response to the first bin Laden attack on the World Trade Center, 15-16. See also Wijk: "In response to the bombings of the U.S. embassies in Kenya and Tanzania, the United States intervened unilaterally—and without a UN Security Council mandate—in Sudan and Afghanistan in August 1998. The U.S. goal was to strike a blow against bin Laden's alleged terrorist network."

The countervalue strategies, punishment and risk, are problematic, whether one considers them countercivilian strategies or countervalue strategies. In this monograph they are treated as countervalue and include not only civilians, but also anything the leadership or government may hold dear, whether it is economic, religious, cultural, or diplomatic standing in the world. In short, anything that could be targeted, other than military or combat forces, that could potentially bring about a desired change of behavior. However, with no regard for themselves and the religious zealotry demonstrated by members of al Qaeda, there is no reason to believe the terrorists could be coerced using airpower against countervalue targets. In fact, attacks against these types of targets could potentially have the opposite effect.

Terrorists such as bin Laden go beyond classical Islam's criteria for a just jihad, they recognize no limits but their own, and they employ any weapons or means available. "Terrorists reject Islamic law's regulations regarding the goals and means of a valid jihad (that violence must be proportional and that only the necessary amount of force should be used to repel the enemy), that innocent civilians should not be targeted, and that jihad must be declared by the ruler or head of state."<sup>13</sup> Though countervalue targets could *feasibly* be taken out by the US in an operation practically anywhere, depending on forces available, it is a nonsensical approach if these targets provide value to innocents as well as terrorists. With proportionality disregarded and civilians fair game for attack by al Qaeda, the cost of countervalue targeting becomes prohibitive for *acceptability* as a valid COA. It is not *acceptable* for the US to target innocent civilians, and many targets terrorists would hold with high value, such as mosques or any other religious site, are not legal, legitimate, acceptable targets. Terrorists cannot be coerced using countervalue *defeat mechanisms*.

In summary, terrorist networks present planners with unique problems, particularly attempting to coerce using invalid COAs that will not work. These COA's are not valid when

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<sup>13</sup> Esposito, 157.

tested against *Joint Publication* criteria of *feasibility* and *acceptability*. Decapitation will not work, denial is not *acceptable* partly due to issues of sovereignty, collateral damage, and legitimacy, and the countervalue strategies of punishment and risk offer no *acceptable* alternatives. However, the nations that harbor terrorists are a different story.

## CHAPTER 4

### REGIMES OF NATIONS THAT HARBOR TERRORISTS

Nation states that support or harbor terrorists present air planners with a more familiar problem dealing with COAs to fight terror than do terrorist networks. In contrast to terrorist networks, these entities provide identifiable, tangible borders governed by individuals or groups generally recognized by the international community. There are identifiable government entities to deal with, to coerce, and tangible targets to attack. Many are considered failed states, such as Afghanistan, but others that either harbor or support terrorists, such as Iraq or North Korea, are rogue regimes controlled through dictatorships. The nation states that support terrorism are identified as targets by the Bush administration because state sponsorship remains a serious problem. Additionally, these states are referenced as targets because they are easier to identify and attack than the more elusive terrorist groups, and they provide an indirect approach to targeting to the terrorist networks. For these reasons finding coercive COA's that are both *feasible* and *acceptable* will potentially be less difficult than is the case with terrorist networks. Previous attempts at coercion against nation states using airpower provide historical support for planners who choose counterforce or countervalue *defeat mechanisms* as their strategy.<sup>1</sup>

The Bush administration has made it abundantly clear that rogue nations that harbor terrorists will be held accountable. The rhetoric is precise and direct, but may create a somewhat problematical situation for planners differentiating strategies against failed or semi-failed states or dictatorial regimes that sponsor terrorism. Secretary of Defense Donald Rumsfeld echoed

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<sup>1</sup> See Pitts, *Limits of the Military Metaphor*. Experts disagree sharply about Iraq's role in terrorism, and the debate continues throughout the international community today. "The best evidence is that Iraq routinely uses violence against its opposition overseas, but such activity has been limited in recent years—probably both out of fear of US action and the fact that most Iraqi opposition groups in the West and Middle East are heavily penetrated by Iraqi intelligence." Campbell and Flourney, 203. Campbell and Flourney also assert that another key to the organizational success of the jihadist network is the ability to exploit the sanctuary offered by failed nation states. There is no real government that can be called part of the international community. As a result, it is difficult or impossible to exert pressure to expel the terrorists 42.

President Bush's sentiments that the US must "deny our enemies sanctuary, making sure they know that no corner of the world is remote enough, no mountain high enough, no cave or bunker deep enough, no SUV fast enough to protect them from our reach."<sup>2</sup> The intent is admirable and there should be no doubt that the US will fight this war to the fullest. However, the problems of *feasibility* and *acceptability* come into play in certain areas of COA selection regarding coercion.

Obviously not all situations will allow isolated attacks that coerce such as the Libyan raid in 1986. An extended air campaign could be required and thus *feasibility* would become directly tied to time, operations tempo, and the competitive nature of requests for air assets. However, although *feasibility* normally will not be an issue, *acceptability* issues still create problems. To be successful, the COA that the US chooses must attempt to coerce through attacks that the targeted regime determines are prohibitively costly, either through countervalue or counterforce *defeat mechanisms*. Successful coercion requires that the targeted regime must realize that the increase in the cost of resistance is too high, raising certainty that these costs will be suffered, and lowering the benefits of continued resistance, or reducing the probability of success. To achieve *acceptability*, the US must look to balance the cost of a particular COA against the advantage gained or the desired outcome. Regardless, the resolve of the administration to hold nations that harbor terrorists accountable for their actions is clear. The President stated in the 2002 State of the Union Address that North Korea, Iraq, and Iran constitute an "axis of evil" and that the price of indifference towards these nations would be catastrophic. Their continued quest to acquire

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<sup>2</sup> Donald H. Rumsfeld; *Remarks to The National Defense University*, (31 Jan 2002. EmediaMillWorks); available from <http://www.shadowproblems.com/openduringfreedom/rumsfeldfightingmodernwar.htm> Internet; accessed 6 Nov 02. Wolfowitz continued the rhetoric during his remarks at the Munich Conference: "Facing that danger, countries must make a choice. Those that stand for peace, security and the rule of law—the great majority of countries in the world—stand united with us in this struggle between good and evil. Those countries that choose to tolerate terrorism and refuse to take action—or worse, those that continue to support it—will face consequences. As President Bush said last Tuesday, "Make no mistake about it: If they do not act, America will." Nations cannot afford to act like those neutral nations 60 years ago, of whom Winston Churchill so acidly observed: "Each one hopes that if he feeds the crocodile enough, the crocodile will eat him last."

weapons of mass destruction present a grave and growing danger, particularly since they could provide terrorists with weapons that could match their hatred. This could potentially be far more catastrophic than 9/11. The President emphasized that our second goal "is to prevent regimes that sponsor terror from threatening America or our friends and allies with weapons of mass destruction. Some of these regimes have been pretty quiet since September the 11<sup>th</sup>. But we know their true nature."<sup>3</sup>

However, many of these nations throughout the Third World have become ungovernable, with transnational entities playing international politics, and a breakdown of community and legitimacy assaulting the state centric model, with loyalties coming from psycho-social borders rather than traditional geographic borders. However, the Bush doctrine probably needs to be narrowly and carefully interpreted. There is little desire to open up a broad scale war with simultaneous attacks against all the other states on the State Department's list of states sponsoring

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<sup>3</sup> Bush, *The President's State of the Union Address*. The President went on to identify the infamous "axis of evil" and stated: "North Korea is a regime arming with missiles and weapons of mass destruction, while starving its citizens. Iran aggressively pursues these weapons and exports terror, while an unelected few repress the Iranian people's hope for freedom. Iraq continues to flaunt its hostility toward America and to support terror. The Iraqi regime has plotted to develop anthrax, and nerve gas, and nuclear weapons for over a decade. This is a regime that has already used poison gas to murder thousands of its own citizens -- leaving the bodies of mothers huddled over their dead children. This is a regime that agreed to international inspections -- then kicked out the inspectors. This is a regime that has something to hide from the civilized world. States like these, and their terrorist allies, constitute an axis of evil, arming to threaten the peace of the world. By seeking weapons of mass destruction, these regimes pose a grave and growing danger. They could provide these arms to terrorists, giving them the means to match their hatred. They could attack our allies or attempt to blackmail the United States. In any of these cases, the price of indifference would be catastrophic."



terrorism, including North Korea, Cuba, Syria, Sudan, Iran, and Libya.<sup>4</sup> Attacks on some countries that support terrorists could escalate into World War III making the *acceptability* criteria of a coercive COA somewhat tenuous. Targeting the states may be aimed at achieving symbolic public relations benefits and assuaging America's desires for revenge, to fulfill the need to "do something." However, actions against the states harboring terrorists may have adverse international relations and consequences on any emerging alliance, miss the real enemies, provoke escalated terrorist responses, and potentially undermine the primary objective of combating terrorism. These are risks the administration may have to take to execute this part of the Global War on Terror, otherwise *acceptability* criterion cannot be met. These are the decisions that politicians will have to make, and the military planners *acceptability* concerns will have to remain focused on executing the GWOT according to administration decisions. The cost to benefit ratio must be determined by political, civilian authority. The bombing raid against

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<sup>4</sup> See Sloan, *The Changing Nature of Terrorism*. Sloan offers important realities about Third World nations and the increasingly important impact failed nation states are having on our approach to GWOT: "In conjunction with the assertion of traditional loyalties is the increased breakdown of the nation-state as the major entity in international affairs. The state-centric model is now under assault as the superficial loyalty to idealized nation-states, particularly in the Third World, has been replaced either by transnational movements or subnational movements that are rejecting the legitimacy of the arbitrary constructs of states that were largely the result of the imposition of legalistic or physical boundaries of nation-states that ignored the more profound psycho-social boundaries that can bring people together or apart. With this breakdown of community, legitimacy, and order, we are now confronted with the reality that large areas of the world are for all intents and purposes ungovernable and are in effect part of the "...the world's 'gray area' where control has shifted from legitimate governments to new half-political, half criminal powers. The mythic body politic that defined and institutionalized terms of the relations among nations and the politics within states is now being transformed as new players now seek to alter the course of international politics."

Libya in 1986, called Operation El Dorado Canyon, and the 1950 Korean War offer insights into two very different approaches to coercion using airpower as the instrument for success.<sup>5</sup>

Despite the conditions mentioned earlier, the US has not backed down from attacking rogue nation states with dictatorial and despotic leadership in the past. In 1986, the US accused Libya of providing training bases and training for international terrorists. Attacks carried out by these terrorists included the 1972 Olympic Games massacre, embassy bombings, airline hijackings, and the assassination of Egyptian President Anwar Sadat and a failed attempt on President Reagan. The US finally acted after a nightclub in West Germany was bombed killing two US military personnel and wounding 79 other Americans. In retribution, the US attacked Libyan targets in April 1986 to attempt to coerce the regime. The targets planners selected included terrorist training camps and military barracks in Benghazi and Tripoli. The Azizyah military barracks in Tripoli served as a terrorist command and control center as well as Libyan leader Muammar Qadhafi's principle residence. These targets were attacked to "do visible and felt harm" and "send a message" to the Qadhafi regime. The mission was a success as far as destroying targets goes, but did coercion work and compel Libya to change its policies towards supporting terror?<sup>6</sup>

The actual targets selected reflect a desire to deny terrorists future capabilities, and the COA falls into the denial category. Specifically, the goal of this counterforce approach was to destroy

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<sup>5</sup> See Pitts, *Limits of the Military Metaphor*. Pitts presents an interesting argument that the doctrine must be carefully and narrowly applied. "The new doctrine against "states that harbor terrorists" is understandable and advisable in these times, but is only likely to increase security if it is carefully and narrowly interpreted and implemented (construed, for example, to require significant active support). Many states "harbor terrorists," not only including states like Iraq, Iran, Syria, Yemen, and Sudan, but also announced or unannounced nuclear powers like Pakistan and India. This is not to mention the terrorists (including those affiliated with bin Laden) active in the U.S. or in allies like the U.K., or Germany. The new doctrine would presumably not open up a state to attack from the world based on the mere presence of terrorists in the state. Attacking some of these states, or several of them at once, would truly risk World War III and perhaps biological or chemical attacks (since according to the CIA a number of the "rogue" nations have chemical and biological weapons), or even a global nuclear conflagration. Anything other than a narrow interpretation of this new doctrine would thus be counterproductive. It would also be eerily reminiscent of the statement of bin Laden himself in 1998, warning that he does "not differentiate between the military and civilians."

<sup>6</sup> Damiano, Appendix B.

some terrorist capability by attacking targets intended to deny them the means to continue terrorist activities on Libyan soil. However, perhaps an unintended consequence of the raid was that Qadhafi's immediate family suffered casualties during the attack. Although planners were aware of this possibility, this unintended result produced the illusion that the attacks were planned more in the countervalue categories of punishment or risk, even though this was not the intended *defeat mechanism*. This persuasively suggests that Pape's all or nothing approach of categorizing coercion into four distinct categories is an incomplete methodology, and the Libyan episode hints that a hybrid approach to coercion can potentially be valuable.

The planned denial strategy against Libya sufficiently met the *feasibility* criterion. The US used forces from the US Air Force and the US Navy to accomplish the raid, and there were no operations tempo obstacles at the time to prohibit attacking Libya. Available forces were in the region and provided the desired amount of firepower, and established resource constraints, timing, and space did not prevent successful COA execution. However, the *feasibility* criterion was directly challenged by French refusal to allow bomber overflight of their airspace. Planners overcame the obstacles caused by the restriction, but the mission would have to be somewhat longer and would require more planning. Despite France's denial of overflight for the raid, the mission was accomplished with one American F-111 lost.

The *acceptability* criterion also made this a valid coercive COA. World reaction to the raid, though mixed, definitely was favorable towards the US. Although the United Nations General Assembly initially condemned the strike, the Security Council vetoed a further attempt at condemnation, and a galvanized world community finally implemented diplomatic and economic sanctions against Libya. The US attacks had justified the cost of the COA when measured against the advantage gained and the desired outcome. The terrorist groups that had been operating in Libya were substantially less active the next two years after the raid, and Qadhafi at

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the time appeared to sever his links to terrorists and abandon his policy of using them as an instrument of policy. However, some evidence suggests Qadhafi did not totally abandon his involvement in terrorist activities, evidenced by the 1989 Pan-Am Flight 103 bombing over Scotland. In spite of this, this instance of a *feasible, acceptable* COA based on coercive airpower provides strong evidence that airpower can have at least some success against regimes of nation states that harbor terrorists in the GWOT. Accordingly, countervalue and counterforce *defeat mechanisms* should be pursued as a hybrid or complimentary approach to be most effective. A lone countervalue approach could directly threaten the validity of the *acceptability* criterion, leading to a more problematic issue.<sup>7</sup>

The 1950-53 Korean War provides additional insight into using airpower for coercion against rogue, dictatorial regimes. North Korea provides a good case study particularly since it is currently in the spotlight and is part of the President's "axis of evil."<sup>8</sup> The US attempted various coercive strategies throughout the Korean war, including punishment, atomic risk, and denial. However, the country being coerced rapidly evolved to the Communist Chinese rather than North Korea. The early strategy used in 1950 was punishment, as the US bombed North Korean cities and economic nodes, but this was abandoned soon after China entered the war. There was also an attempt to use risk to compel an armistice. The US increasingly signaled that nuclear strikes could occur against Manchurian and North Korean counterforce and countervalue targets, but this approach was given up after moving bombers close to the war failed to persuade the Chinese. Last, a long interdiction campaign, known as Operation Strangle, was intended to deny

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<sup>7</sup> See Damiano, Appendix B. Also see Pape's predictions and commentary, *BTW* 52, 355.

<sup>8</sup> Conrad Crane points out that the Korean conflict has been called the "Forgotten War," but it has relevance today beyond the fact that North Korea is still a potential enemy. The airpower strategy produced by a combination of political, military, and resource constraints between 1950 and 1953 deserves study by leaders today struggling with similar dilemmas about the best use of the Air Force's destructive power in an uncertain world. Crane, 184.

Communist forces the ability to hold their positions and force them to negotiate. All three COAs were unsuccessful when considered in isolation.<sup>9</sup>

The attempted punishment campaign, though considered *acceptable* at the time, would be unacceptable today if nothing but civilians were targeted. However, targeting things of value to the population as well as the targeted regime could perhaps be of more utility. Pape declared the punishment strategy a failure because damage inflicted was light and only industrial areas of Pyongyang were gutted by fire bombing and civilian neighborhoods suffered almost no damage. Additionally, both China and North Korea were willing to countenance large civilian costs. Finally, and most importantly, North Korea was not in danger of losing the war after the Chinese intervened.<sup>10</sup> However, later in the war, the US bombed numerous cities and dams in an attempt to compel the communists to accept the armistice, and punishment in this case appeared to contribute to success, despite contemporary concerns about the *acceptability* of this approach.

Conrad Crane, author of *American Airpower Strategy in Korea 1950-1953*, pointed out that airpower had achieved much for General Douglas MacArthur in Korea. Airpower had slowed the initial Communist advance, stiffened UN defense of the Pusan perimeter, helped smash the enemy in the counteroffensive, and wiped out the majority of North Korea's industry. Additionally, unleashing massive air attacks in November 1950 appeared to have crippled or deterred further Chinese intervention. "In fact, the threat of UN air attacks against Chinese troops

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<sup>9</sup> See Pape, *Bombing to Win*, 137-173. There are indications that the successes in Japan in WW II had a direct bearing on the strategy the US employed in Korea. "Airpower played a key role in Japan's surrender. LeMay's incendiary campaign, the dropping of the atomic bombs, and even mines laid by B-29s in harbors and waterways were important components of the series of shocks that finally motivated Japanese leaders to end the war. LeMay himself believed that his bombers alone could have ended the war without the atomic bomb and without an invasion, a position generally echoed by the findings of the United States Strategic Bombing Survey (USSBS), a supposedly objective study of the accomplishments of strategic airpower during World War II." See Conrad C. Crane, *American Airpower Strategy in Korea 1950-1953*; (Lawrence: University of Kansas Press, 2000), 14.

<sup>10</sup> Pape, *Bombing to Win*, 151-52. Ridgway informed FEAF and naval air units on 13 July, "Desire action during this period of negotiations to exploit full capabilities of air power to reap maximum benefit of our ability to punish enemy where ever he may be in Korea." Crane, 76.

and cities had given Mao Zedong and his subordinates pause, and it appears that they did not commit to entering the war until the Soviets promised to provide many planes for the Communist Chinese Air Force and to participate extensively in air defense of the Chinese homeland.”<sup>11</sup> Additional correspondence from General Mark Clark, Supreme Commander of United Nations Forces, transmitted through an intelligence report to the Joint Chiefs of Staff supported the contention that punishment was working. The report stated that “bombing was breaking down civilian morale in North Korea. Cities and towns that had been subjected to UN air attacks were “bordering on panic.” The report also noted that the North Korean government was afraid that air attacks would motivate many civilians to join UN guerrillas.”<sup>12</sup> However, CINCFE had ordered his air forces “to destroy every means of communication and every installation, factory, city, and village” in North Korea, except for Rashin and the hydroelectric plants. General George Stratemeyer, Far East Air Forces Commander, justified these orders to the Bomber Command and Fifth Air Force by stating, “Under present circumstances all such have marked military potential and can only be regarded as military installations.”<sup>13</sup> The punishment campaign may have worked against North Koreans due to the personal nature of the punishing attacks, but the

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<sup>11</sup> Crane, 55. General Ridgway asserted that attacks should be scheduled “against targets of military significance so situated that their destruction will have a deleterious effect upon the morale of the civilian population actively engaged in the logistic support of the enemy forces.” He knew that the selection of proper targets to influence enemy decision makers would be difficult, not only for operational reasons, but also because of uncertainty about who those key decision makers were and how their minds worked. Ridgway’s initial determination to influence negotiations with airpower had been tempered by his disappointment in the results of the interdiction campaign and early battles with the JCS about bombing Rashin and Pyongyang. *Ibid.*, 116.

<sup>12</sup> *Ibid.*, 130-31. General MacArthur also added “I believe that with my air power, now unrestricted so far as Korea is concerned except as to hydroelectric installations, I can deny reinforcements coming across the Yalu in sufficient strength to prevent the destruction of those forces now arrayed against me in North Korea,” 40.

<sup>13</sup> *Ibid.*, 47. US Air Force Chief of Staff General Vandenberg emphasized that airpower was principally a destructive force, and to be really effective in Korea, “you would have to almost lay waste all of those facilities which would lend themselves toward hiding or storing and stockpiling equipment” in the North. *Ibid.*, 75.

Chinese would have required a different *defeat mechanism* for a successful punishment campaign.

The nuclear denial campaign, which was to be carried out against Chinese military targets in both North Korea and China, was never executed because the armistice was signed in 1953 before the campaign was to be carried out in 1954. The attacks would effectively constitute nuclear denial strategy, and conventional denial would have been too costly. Earlier attempts at conventional denial were carried out through the interdiction campaign, but were unsuccessful when considered in isolation. What all this suggests is that no one particular coercive strategy can be deemed successful, but the fact is the communists were compelled to sign the armistice in the summer of 1953.<sup>14</sup> Although the COA's selected were *feasible* and *acceptable*, the outcomes of the strategies have mixed indicators of success or failure. The *feasibility* criterion was met with adequate airpower made available to the effort. However, the *acceptability* criterion hinged on world opinion and international reaction, just as it did in the Libyan case and predictably in all future cases. The impervious nature of fire bombing cities and threatening nuclear strikes for either denial, risk or punishment vividly illustrate the political sensitivities that must be overcome to successfully meet the *acceptability* criterion.

This conclusion supports the assertion made earlier that administration officials will have to balance the cost of coercion attempts against the goals achieved. This is a major issue air planners will have to grapple with when planning coercive strategies—COA's that are *acceptable* in US eyes may not be *acceptable* to the rest of the world. The dilemma then becomes a question of need- how far will the US go, and how much will it risk, to execute its war on terror against

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<sup>14</sup> In February, Clark again asked for permission to conduct preemptive strikes against CCAF bases in Manchuria, but the JCS remained reluctant to grant it because of the political fallout. Apparently Eisenhower would change this in 1954 to execute his nuclear denial strategy. Ibid, 157. On 29 August the "All United Nations Air Effort," involved more than 1,400 sorties and had a special purpose: "to achieve psychological benefit from our ability to punish the enemy through airpower" during the Moscow Conference between the Chinese and Russians. Smart also scheduled additional attacks on targets in the far northwest of the peninsula to further "display the effect of our air power" to the attendees. Ibid, 123.

nation states that harbor terrorists? This appears to be a gray area right now, but another terrorist attack on US soil with devastating effects like 9/11 will undoubtedly bring out the full wrath of the American arsenal. The *acceptability* criterion may thus become a ‘unilateral’ consideration, since the goals will potentially become near unlimited.<sup>15</sup>

Desert Storm is the only existent attempt at decapitation and therefore offers a single data point for study. Although the results of Desert Storm are well known, the *defeat mechanism* employed for the decapitation strategy was counterforce, and Col Warden’s intent was to isolate the leadership and cause strategic paralysis. However, it is impossible to claim this as the only reason Saddam Hussein withdrew his forces from Kuwait. Undoubtedly, the denial campaign waged later in the war against Iraqi fielded forces was at least as successful in coercing the Iraqi’s

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to withdraw from Kuwait.<sup>16</sup> The decapitation COA will normally be both *feasible* and *acceptable* and therefore provide a valid option to planners. However, the result is more unpredictable than other approaches, and would appear to be more suited as a part of a hybrid approach when combined with other COA's.

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<sup>15</sup> General Weyland conveyed his approval of the coercive success of airpower: "It also was an important component of the punishing air attacks that were the primary UN offensive strategy the last two years of the war; despite determined enemy efforts to challenge UN air superiority, it was, in his view, what finally compelled the Communists to accept the armistice." Ibid., 172. In terms of unlimited airpower, General LeMay had determined that "the incendiary bombs and warning leaflets he had dropped on Japan provided the inspiration of his ideal model for winning wars with airpower. As with the dam raids in 1953 just before the armistice, the LINEBACKER II B-52 attacks on North Vietnam shortly before the signing of the Paris Peace Accords appeared to justify the utility of unrestricted air attacks in a limited war to those who advocated them." Ibid., 181.

<sup>16</sup> Wijk, *The Limits of Military Power*. Additionally, in attacks conducted against Iraq years later, such as Operation Desert Fox, the United States and the United Kingdom carried out bombing raids to coerce Saddam Hussein into compliance with UN desires. The military action was meant as retribution for Saddam Hussein's obstruction of the UN Special Commission's inspections of Iraq's development of weapons of mass destruction. In 1999 and 2000, additional bombings continued, albeit with limited intensity. Another attempt at coercion includes the March 1999 Operation Allied Force—led by the United States and without a mandate by the UN Security Council—which intervened in Kosovo to force Milosevic to end his terror against the Albanian Kosovars and to find a solution to the situation in Kosovo.

## CHAPTER 5

### CONCLUSIONS AND RECOMMENDATIONS

The question this monograph has attempted to answer is whether “coercive strategies and their associated defeat mechanisms provide valid courses of action (COAs) for the US against global terrorist networks and nations that harbor terrorists?” The GWOT and the struggle against militant jihad exposed new challenges that air planners must confront in order to deal with this new type of threat. The environment created by the GWOT includes both terrorist organizations and the regimes of nations that harbor or support terrorists. Can either be coerced? Is the US dealing with individuals, legitimate governments, despots and dictators, or is it simply fighting a faction of Islam bent on militant jihad, seeking martyrdom and using murder and terror as a weapon? The US must approach GWOT with a strategy that not only protects against future attacks from the likes of al Qaeda, but it must also attempt to cause terrorists and nations that harbor them to change their behavior. Coercion is one approach that may be successful if attempted under the right circumstances. Airpower’s role in this mission was the focus of this study, oriented towards coercion theory application and its *feasibility* and *acceptability* as a valid course of action against global terrorist networks and harboring nations.<sup>1</sup>

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<sup>1</sup> Esposito asserts that quick and easy responses, such as moves to quiet the Arab street through overwhelming force, may be emotionally satisfying but will in the long run prove ineffective and contribute to greater radicalization and anti-Americanism. While some forms of terrorism, like some forms of cancer, respond to radical surgery, this deadly disease can only be effectively countered first by understanding how it originates, grows stronger, and spreads and then by taking action. The cancer of global terrorism will continue to afflict the international body until we address its political and economic causes, causes that will otherwise continue to provide a breeding ground for hatred and radicalism, the rise of extremist movements, and recruits of the bin Ladens of the world. Esposito, 160. For interesting additional reading, refer to the editorials written by Thomas L. Friedman in *The New York Times* since 9/11. An interesting summary of his viewpoints is also available in his three books *From Beirut to Jerusalem*, *The Lexus and the Olive Tree: Understanding Globalization*, and his newest release *Longitudes and Attitudes: Exploring the World since September 11*. These readings are highly recommended for any strategist to enlighten and help clarify what GWOT is all about, from one interesting point of view.

Pape identified four types of coercion as punishment, risk, denial, and decapitation. Punishment and risk were grouped into a COA category called countervalue, and both denial and decapitation fall into the counterforce category. These strategies have very different *defeat mechanisms*, and thus they present very different approaches to coercion. To summarize, the four coercive COAs and their associated *defeat mechanisms* are analyzed against two identified enemies—terrorist networks and the regimes of nations that harbor or support terrorists. They are tested using historical evidence to predict their *feasibility* and *acceptability* as useful tools and valid COAs using airpower in the GWOT.<sup>2</sup>

The concluding hypothesis does not provide a perpetual, everlasting set of principles that can be applied in all situations. The strategic environment and the rationality of the enemy has taken on even more importance since 9/11, with a lack of clarity in some instances that requires application of the Bush Doctrine, or preemption against those entities considered to be future threats to the US. However, the conclusions in this monograph offer a generalized overview of a way to think about coercive airpower COAs in GWOT, admittedly not a stand-alone blueprint that is timeless and suitable in all situations.<sup>3</sup> Nonetheless, evidence from previous airpower

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<sup>2</sup> Colonel Richard Szafranski offers insights into airpower's role in GWOT, particularly dealing with Homeland Defense. "Aerospace power is airpower plus space power plus the economic power of the American aerospace industry. Aerospace power can and will help—certainly more than providing combat air patrols. It will contribute more than keeping the aircraft-production lines of the major vendors alive and well, and more than helping to eradicate the enemy abroad. We must begin by accepting that in a complex world of multitudinous and multidimensional threats, authentic airpower expertise precludes advancing single, simple solutions to complex problems. Airpower is not just about simplistic thinking: "kicking down the door" of the enemy, or "rapid decisive operations," or "rapid halt," or even the "five rings." Clearly, none of these frameworks stimulated the thinking that preempted or deterred the attacks that rendered thousands of Americans "defenseless," to use Douhet's word, on 11 September 2001. Yet, the vantage of airmen ought to give them the advantage to systematically think through the complex problem of attacking economic "pillars" and "red-teaming" (role-playing the enemy during simulated planning and execution) our own economic infrastructure to envision what we must defend and how aerospace power can contribute." Richard Szafranski, Colonel, "Fighting Stupid, Defending Smart," *Aerospace Power Journal*; (Spring 2002, Airchronicles. Online); available from <http://www.airpower.maxwell.af.mil/airchronicles/apj/apj02/spr02/szafranski.html>; Internet; accessed 6 Nov 02.

<sup>3</sup> Karl Mueller correctly states that "Since it is the effects of air attack that matter to the strategist, an obsession with targets instead of coercive mechanisms threatens to lead to faulty analogical reasoning and poor use of historical evidence in developing strategies that will work in the future." Mueller, 187.

coercion attempts, such as the Libyan Raid, the Korean War, the Bekka Valley attacks, and the 1998 Afghanistan and Sudanese cruise missile strikes provide insights into the validity of coercive airpower that air planners can utilize. These case studies provide strong evidence that supports the conclusion that terrorist networks cannot be coerced and must be approached with complete destruction and eradication in mind. Nations that harbor terrorists, however, may be coerced, but not in the selective COA method Pape ascribes to.<sup>4</sup> A combination of each type of COA applied systemically, either simultaneously or sequentially, produces a hybrid approach that potentially will produce better results than if applied in isolation. Both countervalue and counterforce approaches to coercion should be considered in every situation when airpower coercion is the agreed upon strategy, subject of course to the rationality of the targeted regime. “Perhaps of greater interest to air strategists are the possibilities of coercive air strategies that are not intended to alter the enemy’s rational decision calculus at all, but rather to disrupt it by causing irrational reactions, such as through the shock effects produced by air attack.”<sup>5</sup>

Terrorist networks present military planners with a unique threat embodying characteristics different from those of classical, nation state wars prominent since Westphalia in 1648. These asymmetric, transnational, extremist terrorist networks are elusive, violent, and not afraid to die for the cause of jihad or militant Islam. For these reasons, identifying COA’s using coercive airpower that are both *feasible* and *acceptable* is a challenge not likely to be successful when attacking terrorist networks. With no regard for themselves and the religious zealotry demonstrated by members of al Qaeda, there is no reason to believe the terrorists could be coerced using airpower against countervalue targets. With proportionality disregarded and

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<sup>4</sup> Mueller agrees that “...the more important question when dealing with coercion in whatever form is not whether it works, but whether it is useful, and, if so, whether it is worthwhile. The problem is that it is natural to see coercion as an all-or-nothing affair.” Mueller, 204.

<sup>5</sup> Mueller, 221.

civilians fair game for attack by al Qaeda, the cost of countervalue targeting becomes prohibitive for *acceptability* as a valid COA. It is not *acceptable* for the US to target innocent civilians, and many targets terrorists would hold with high value, such as mosques or any other religious site, are not legal, legitimate, acceptable targets. Terrorists cannot be coerced using countervalue *defeat mechanisms*. Decapitation will not work, denial is not *acceptable* partly due to issues of sovereignty, collateral damage, and legitimacy, and the countervalue strategies of punishment and risk offer no *acceptable* alternatives. This is not to say that airpower cannot have an impact against terrorist organizations, but using coercion strategy is near impossible. Terrorists who do not fear for their own safety and will take the lives of innocent Americans cannot possibly be threatened or coerced into changing their behavior. The best air can do is disrupt and destroy when intelligence reveals targets of opportunity. GWOT will be a long, protracted war and will frustrate even the most patient air planners.<sup>6</sup>

Terrorists are motivated by ideals that are not common in the US, and the planners should take that into consideration when trying to apply coercion. This is not to say direct attacks against terrorist networks should not happen, to the contrary they must. Annihilation, eradication, termination, and extinction are terms that seem to embrace the strategy that may be required against terrorist networks. Indeed, attacks against al Qaeda and other networks must be carried out with rapidity and overwhelming force, no quarter given. But the *defeat mechanism* in those attacks should be aimed for military destruction without success being tied to coercion. The

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<sup>6</sup> “In all of this, we have to remember the basics. War remains close, personal, and brutal. There are no silver bullets to change that. There have been revolutions in how we fight such as gunpowder, nuclear weapons, and computers. In the end, however, it still comes down to our National will and the commitment, training, and tenacity of our troops. It is never safe, easy, or risk-free . . . Our national will, combined with their spirit and tenacious commitment, will define our success” William F. Kernan, General, *Statement before House Armed Services Committee U.S. House of Representatives*; (14 Mar 2002. USJFCOM. Online); available from <http://www.jfcom.mil/newslink/storyarchive/2002/pa031402.htm> Internet; accessed 6 Nov 02. Rob Wijk calls for less concern with acceptability; “Contemporary concepts, such as limited collateral damage and proportionality, have little value when preparing for the new wars.” Wijk, *The Limits of Military Power*.

geopolitical landscape notwithstanding, the war must be carried directly to this enemy using all aspects of DIME with the outcome never being in question. As illustrated earlier, coercion assumes that the targeted entity will calculate risks or rewards relating to continued action and make a decision before complete military defeat is reached. Al Qaeda does not understand anything but martyrdom, violence, and false hopes that are rooted deeply in militant jihad. The hope that coercion will work or is even a valid COA against these terrorist networks is a false one.<sup>7</sup>

Nation states that support or harbor terrorists present air planners with a more familiar problem dealing with COAs to fight terror than do terrorist networks. In contrast to terrorist networks, these entities provide identifiable, tangible borders governed by individuals or groups generally recognized by the international community. There are identifiable government entities to deal with, to coerce, and tangible targets to attack. Finding coercive COA's that are both *feasible* and *acceptable* will potentially be less difficult than is the case with terrorist networks. However, attacks on some countries that support terrorists could escalate into World War III making the *acceptability* criteria of a coercive COA somewhat tenuous. Targeting the states may be aimed at achieving symbolic public relations benefits and assuaging America's desires for revenge, to fulfill the need to "do something." However, actions against the states harboring terrorists may have adverse international relations and consequences on any emerging alliance,

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<sup>7</sup> Stephen Sloan of the Air Force Academy offers a good discussion of terrorist motivation. "While traditional motivation to resort to terrorism will continue and indeed be amplified because of the assertion of "primordial loyalties," the motivation may be analyzed as a function of frustration, relative deprivation, ethnic, racial, and religious strife, and other commonly ascribed causes of violence." Sloan continues "Motivational factors may also change in response to the new conflict environment. The changing nature of terrorist motivation will further be complicated by the increased significance of new non-state actors who may use political rhetoric as a means of justifying their acts of carnage, when in reality they may be ultimately apolitical. These apolitical terrorists come from an ancient tradition or organized and unorganized crime going back to the syndicates of the past—the Cosa Nostra, the Triads, and now the Russian mafia. Their power has increased with the breakdown of the nation-state system. They have found a fertile ground for extortion and other criminal activities in the "gray area" and will increasingly use terrorism to achieve a degree of power and wealth." Stephen Sloan; *The Changing Nature of Terrorism*; Chapter 3; (US Air Force Academy); available from <http://www.usafa.af.mil/inss/terrhp3.htm>; Internet; accessed 6 Nov 02.

miss the real enemies, provoke escalated terrorist responses, and potentially undermine the primary objective of combating terrorism. These are risks the administration may have to take to execute this part of the Global War on Terror, otherwise *acceptability* criterion cannot be met. Both countervalue and counterforce *defeat mechanisms* should be pursued as a hybrid or complimentary approach to be most effective. A lone countervalue approach could directly threaten the validity of the *acceptability* criterion, leading to a more problematic issue.<sup>8</sup>

Failed nations that give sanctuary to terrorists present unique strategic problems to air planners. Unlike Libya, the sanctuary given to binLaden's network in Afghanistan is more symptomatic of the terrorists' reliance on failed states as places in which they can operate than it is a case of mutual dependence between a nation state and a terrorist group. One of the lessons of September 11<sup>th</sup> is that those failed states matter—not just in humanitarian terms, but in national security terms as well. If allowed to continue, such states can become sanctuaries for terrorist networks, not to mention drug traffickers and organized criminals who exploit the dysfunctional environment. They therefore pose a direct threat to the vital interests not only of the United

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<sup>8</sup> “The same destructive power that makes airpower an effective deterrent by intimidating potential aggressors, or an effective military tool by punishing them for transgressions, can also make its use unpalatable to nations suspicious of American power or sensitive to civilian suffering. The military and political utility of the application of airpower must always be balanced against its diplomatic repercussions and the way its results will be perceived by world opinion. And as the disagreements over warning North Korean towns and cities demonstrate, what military leaders view as humane might not be interpreted the same way by diplomats or the press.” Crane, 184.

States but also to the international community at large. It is for these reasons that coercion against failed or semi-failed states can and must be attempted.<sup>9</sup>

At the time of this writing, Operation Iraqi Freedom is underway with the intent to disarm Iraq, bring about regime change, and less visibly sever Iraq's ties to terrorist networks. Rogue regimes such as that of Saddam Hussein directly threaten world security when weapons of mass destruction and ties with terrorists are combined. Whether one can classify the objective of this war as coercion is debatable and perhaps premature, but nonetheless this is a major strike at a rogue regime nation state that supports terrorism. The Bush Doctrine of attacking terrorist networks with all means available and holding nations that harbor or support them accountable is in full swing. Each situation GWOT brings will be different and it therefore is essential that air planners utilize a thought process fully open to all coercive strategies, used in conjunction with other instruments of national and international power to execute the Bush Doctrine effectively.<sup>10</sup>

The issue of validity for coercive COAs requires planners to take into account a vastly changed political landscape since 9/11. Perhaps a toughened military doctrine is required to fight GWOT, where pragmatic considerations sometimes may have to give way to hard-line

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<sup>9</sup> Campbell and Flourney, 40 and 167-68. They also point out that if al Qaeda is ejected from Afghanistan, other soft spots in the international system may come under pressure to serve as a basis for terrorist operations. The most likely candidates range from Somalia to the Caucasus, Yemen, Sudan, or parts of the Philippine or Indonesian archipelagos, Ibid., 181. Pakistan is of primary importance not only because of the vast border it shares with Afghanistan, but also because of its controversial political and intelligence ties there, 189. US interest in Pakistan's own stability is if anything stronger than ever. A weaker Pakistani state is more likely to be a haven—wittingly or not—for future terrorists with global ambitions. Ibid, 192. "In Afghanistan as in the rest of the region, one of the real dangers for the United States is unintended consequences. Military operations and political upheavals in Afghanistan could lead to upheavals in Pakistan, India-Pakistan clashes, and agonizing and complex clashes in priorities between the United States and all three of these countries. Crises drive governments toward short-term thinking to deal with the emergency at hand. In this case, however, a long-term perspective needs to be factored in from the start, or the United States is likely to reap a whirlwind." Ibid, 196.

<sup>10</sup> As Defense Secretary Rumsfeld pointed out, "wars in the 21st century will increasingly require all elements of national power: economic, diplomatic, financial, legal, law enforcement, intelligence, as well as overt and covert military operation. Clausewitz said that war is the continuation of politics by other means. In this new century, many of those means may not be military . . . wars can benefit from coalitions of the willing, to be sure, but they should not be fought by committee." Rumsfeld, *Remarks to The National Defense University*, 31 Jan 2002.



principles.<sup>11</sup> Major geopolitical fault lines emerged with the fall of the Berlin Wall and terrorist attacks throughout the 1990s culminating with the 9/11 tragedy. The US appears to have moved beyond the Cold War into an era of increased responsibility as the sole superpower. This leap forward, however, produces an impression of aggressive bullying with unilateral tendencies to the rest of the world, including traditional, long standing allies. The familiarity of the traditional 1648 Westphalian nation-state conflict is no longer the only practical way to think about warfare.<sup>12</sup>

One of the keys to success for air planners will be to avoid atrophy of thought. A certain rigidity can harden into extreme dogmatism, a condition that could reduce the potential success of airpower in GWOT. Anecdotes abound concerning the proper application of airpower, but unfounded confidence, arrogance that ignores political and military realities, combined with

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<sup>11</sup> Joe Pitts wrote in the *Limits of the Military Metaphor* "Thoughtful voices in the U.S. and abroad have already begun to make the distinction between indiscriminate and counterproductive revenge, on one hand, and more prudent and narrowly tailored defensive military action combined with other methods, on the other. Confronted with such evil, U.S. citizens, politicians, and media have outdone each other with jingoistic calls for revenge. A New York Post columnist wants to "kill the bastards . . . flatten their cities." William Safire in The New York Times wants to "pulverize" them. U.S. Senator Zell Miller said "bomb the hell out of them . . . [i]f there's collateral damage, so be it. They certainly found our civilians to be expendable." Other, usually responsible voices, like National Public Radio host Juan Williams, have actually started to express sympathy for a nuclear attack aimed at putting a conclusive end to this risk (though Secretary of State Colin Powell, to his credit, has treated such comments dismissively). Of course, exactly whom the U.S. would annihilate remains unclear, as the most direct perpetrators sent themselves to their heavenly reward as part of the atrocity. The calls for "something to be done" to punish the perpetrators are a natural and necessary follow-on to the initial shock and grief, as the entire nation passes to anger and rage." Pitts. *Limits of the Military Metaphor*.

<sup>12</sup> Rob Wijk of the The Center for Strategic and International Studies and Massachusetts Institute of Technology calls for a radical rethinking of the US approach to warfare and submits coercion simply will not work. "The studies on which these [coercion] theories are based, however, do not have much relevance for policymakers today. The terrorist attacks on the United States demonstrate the need for policymakers and the military to reevaluate the concepts that underlie their approaches to balancing political ends and military means. Most theories of coercion find their origin in the Cold War period, but preoccupation with deterrence has distorted the concept. Deterrence as a concept is useless for today's challenges because the world cannot deter individuals such as bin Laden and his lieutenants. Deterrence also does not work for failed states, many of which provide sanctuaries for insurgents and terrorists. Because negotiating with failed states and terrorists is impossible, both coercive diplomacy and coercion are meaningless. The only solution in those cases is direct action with SOF support, backed up by airpower . . . Worse, excessive military force could split the fragile Islamic alliance that is cooperating with the United States in the war against terrorism. In other words, coercion might not only be ineffective, it might also backfire. Effective engagement requires techniques that come very close to war crimes." Wijk, *The Limits of Military Power*.

rhetoric that divides rather than unites, can create an ethos that is more detrimental than it is helpful. US airpower enjoys numerically and qualitatively superior advantages over the rest of the world, and continued mastery of basic airpower principles will continue to contribute to that advantage. Nonetheless, we have to remember the basics. Coercion is but one strategy air planners can implement, and the results of this monograph should at least provide a starting point for planning. However, original thought combined with hybrid strategies appears to be the way of the future for airpower application in GWOT.<sup>13</sup>

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<sup>13</sup> Karl Mueller also calls for a “Hybrid” approach to coercive warfare in his critique. “*Bombing to Win* presents this taxonomy in deductive terms, relating each of the strategy types to one of the variables in an equation intended to illustrate the victim’s decision calculus in the face of coercive pressure . . . *Bombing to Win* does not discuss hybrid strategies combining punishment and denial, . . . even though Pape does recognize that denial strategies usually inflict pain while they are encouraging hopelessness . . . The weaknesses and omissions in Pape’s coercive taxonomy are less a result of using a flawed equation or misusing a good one than of focusing too heavily on classifying the theorists of the past and too little on employing the broader variety of strategies that might be employed in the future.” Mueller, 189-190.

## SELECTED BIBLIOGRAPHY

### Books and Periodicals

- Campbell, Kurt M. and Michele A Flourney,. *To Prevail: An American Strategy for the Campaign Against Terrorism*. Washington, D.C. The Center for Strategic and International Studies Press, 2001.
- Clausewitz, Carl von. *On War*. Ed. And trans. By Michael Howard and Peter Paret, Princeton: Princeton university Press, 1976.
- Clodfelter, Mark. *The Limits of Airpower: The American Bombing of North Vietnam*. New York, NY. The Free Press, 1989.
- Cordesman, Anthony H. *Terrorism, Asymmetric Warfare, and Weapons of Mass Destruction*. Center for Strategic and International Studies. Praeger Publishers, 2002.
- Crane, Conrad C. *American Airpower Strategy in Korea 1950-1953*. Lawrence: University of Kansas Press, 2000.
- Department of the Air Force. *Air Force Doctrine Document (AFDD)1-2, Air Force Glossary*, 9 July 1999.
- Department of Defense. *Joint Publication 5-00.1, Joint Doctrine for Campaign Planning*, 25 January 2002.
- Douhet, Giulio. *Command of the Air*. Trans. By Dino Ferrari and edited by Richard Kohn and Joseph Harahan, Washington, D.C. Office of Air Force History, 1983.
- Esposito, John L. *Unholy War*. New York. Oxford University Press. 2002.
- George, Alexander and William Simons, eds. *The Limits of Coercive Diplomacy*. Boulder: Westview Press, 1994.
- Hoge, James H. & Gideon Rose, Ed. *How Did This Happen? Terrorism and the New War*. New York. Public Affairs, 2001.
- Lewis, Bernard. *What Went Wrong? Western Impact and Middle Eastern Response*. New York, Oxford University Press, 2002.
- Mueller, Karl. "Strategies of coercion: Denial, punishment and the Future of Air Power" *Strategic Studies* 7:3, Spring 1998, pp. 182-228.
- O'Neill, Bard E. *Insurgency & Terrorism: Inside Modern Revolutionary Warfare*. Brassey's, Inc., 1990.
- Pape, Robert A. *Bombing to Win: Air Power and Coercion in War*. Cornell Studies in Security Affairs. Ithaca and London: Cornell University Press, 1996.

- \_\_\_\_\_. "The Limits of Precision Guided Airpower." *Strategic Studies* 7:2, Winter 1997/98, pp.
- \_\_\_\_\_. "Air Force strikes back: A reply to Barry Watts and John Warden." *Strategic Studies* 7:2, Winter 1997/98, pp. 191-214.
- Rashid, Ahmed. *Jihad: the Rise of Militant Islam in Central Asia*. R.R. Donnelley & Sons. Yale University, 2002.
- Schelling, Thomas C. *Arms and Influence*. New Haven: Yale University Press, 1966.
- Van Nederveen, Gilles Capt. *Wizardry for Air Campaigns: Signals Intelligence Support to the Cockpit*. Maxwell AFB, AL CADRE: AU Press, 2001.
- Warden, John A. "Success in modern war: A response to Robert Pape's Bombing To Win." *Strategic Studies* 7:2, Winter 1997/98, pp. 170-188.
- Woodward, Bob. *Bush At War*. Simon & Schuster, Inc., 2002.

### Online Resources

- A *Conceptual Framework for the Military Contribution to the Campaign Against International Terrorism Abroad*. 18 July 2002. UK Ministry of Defence. Online. [http://www.mod.uk/issues/sdr/newchapter/info\\_analysis/framework.html](http://www.mod.uk/issues/sdr/newchapter/info_analysis/framework.html) last accessed 2 Oct 02.
- Bellon, Timothy E. *Military Responses to State-Sponsored Terrorism: Re-Thinking Deterrence and Coercion Theory*. Master's thesis, Naval Postgraduate School, Monterey CA. Stinet DTIC. Dec 1999. <http://handle.dtic.mil/100.2/ADA374049> last accessed 30 Jan 03.
- Brozenick, Norman J. *Small Wars, Big Stakes: Coercion, Persuasion, and Airpower in Counterrevolutionary War*. Master's thesis, Air Univ Maxwell AFB AL School of Advanced Airpower Studies. Stinet DTIC. JUN 1998. <http://handle.dtic.mil/100.2/ADA391656> last accessed 30 Jan 03.
- Bush, George W. President of the United States. *Address to a Joint Session of Congress and the American People*, United States Capitol, Washington, D.C. 20 Sep 2001. White House News & Speeches. Online. <http://www.whitehouse.gov/news/releases/2001/09/20010920-8.html> last accessed 19 Dec 02.
- \_\_\_\_\_. *Full Text: Bush's National Security Strategy*. The New York Times Online. Sep 2002. [http://www.nytimes.com/2002/09/20/politics/20STEXT\\_FULLL.html](http://www.nytimes.com/2002/09/20/politics/20STEXT_FULLL.html) last accessed 22 Jan 03.

- \_\_\_\_\_. *Remarks by the President in Address to the United Nations General Assembly*, New York, New York. 12 Sept 2002. White House News & Speeches. Online. <http://www.whitehouse.gov/news/releases/2002/09/20020912-1.html> last accessed 19 Dec 02.
- \_\_\_\_\_. *President's Remarks to the Nation, Ellis Island* New York, New York. 11 Sep 2002. White House News & Speeches. Online. <http://www.whitehouse.gov/news/releases/2002/09/20020911-3.html> last accessed 19 Dec 02.
- \_\_\_\_\_. *The President's State of the Union Address*, The United States Capitol, Washington, D.C. 29 Jan 2002. . White House News & Speeches. Online. <http://www.whitehouse.gov/news/releases/2002/01/20020129-11.html> last accessed 19 Dec 02.
- \_\_\_\_\_. *Remarks by the President To United Nations General Assembly*, U.N. Headquarters New York, New York. 10 Nov 2001. White House News & Speeches. Online. <http://www.whitehouse.gov/news/releases/2001/11/20011110-3.html> last accessed 19 Dec 02.
- College Of International And Security Studies: *The Executive Program In International And Security Affairs*. Marshall Center Programs. Online. <http://www.marshallcenter.org/CISS/English/InternationalPrograms/EP/syllabi/EP%202002-4%20Syllabus%20E.doc> last accessed 18 Sep 02.
- Cordesman, Anthony H. "The U.S. Military And The Evolving Challenges In The Middle East." *NWC Press Review*. Summer 2002. Online. <http://www.nwc.navy.mil/press/review/2002/summer/art3-su2.htm> last accessed 18 Sep 02.
- Cordesman, Anthony H. *The Lessons of Afghanistan: Warfighting, Intelligence, Force Transformation, Counterproliferation, and Arms Control*. 12 Aug 2002. The Center for Strategic and International Studies. Online. <http://www.csis.org/burke/sa/lessonsofafghan.pdf> last accessed 18 Sep 02.
- Damiano, Mark T. *Employing Aerial Coercion to Combat Terrorism: Recommendations for the Theater CINC*. Research paper, Naval War Coll Newport RI Joint Military Operations Dept. Stinet DTIC. 04 Feb 2002. <http://handle.dtic.mil/100.2/ADA400937> last accessed 3 Feb 03.
- DoD Responses to Transnational Threats. The Defense Science Board 1997 Summer Study Task Force. Vol III Supporting Reports, Feb 1998. OUSD for Acq and Tech. Online. <http://www.acq.osd.mil/dsb/transnat'l3.pdf> last accessed 18 Sep 02.
- Fargo, Thomas Admiral. *Text of Admiral Thomas Fargo's remarks at APCSS Biennial Conference*, Honolulu, HI, July 17, 2002. US Embassy. Online. <http://www.usembassy.state.gov/tokyo/wwwhse1535.html> last accessed 18 Sep 02.
- Franks, Tommy R. General. *Speech to AFA National Symposium*, Orlando FL. 14 Feb 2002. Aerospace Education Foundation. Online. <http://www.aef.org/pub/franks202.asp> last accessed 30 Jan 03.

- Grier, Peter. "Air Force leaders check their progress on the road toward transformation. The Strength of the Force." *Air Force Magazine Online*. April 2002 Vol. 85, No. 04. <http://www.afa.org/magazine/april2002/0402orl.asp> last accessed 30 Jan 03.
- Johnstone, Mark A. *A Proposed Grand Strategy for Defeating Bin Laden and His Al Qaeda Network*. Strategy research project, Army War Coll Carlisle Barracks PA. Stinet DTIC. APR 2002. <http://handle.dtic.mil/100.2/ADA404667> last accessed 30 Jan 03.
- Kernan, William F. General. *Statement before House Armed Services Committee U.S. House of Representatives*, 14 Mar 2002. USJFCOM. Online. <http://www.jfcom.mil/newslink/storyarchive/2002/pa031402.htm> last accessed 6 Nov 02.
- Kimminau, Jon A. *The Psychology of Coercion: Merging Airpower and Prospect Theory*. Master's thesis, Air Univ Maxwell AFB AL School of Advanced Airpower Studies. Stinet DTIC. JUN 1998. <http://handle.dtic.mil/100.2/ADA391799> last accessed 15 Jan 03.
- Koski, Douglas J., Jr. *Counterterrorism Policy - Do We Have It Right?* Research paper, Army War Coll Carlisle Barracks PA. Stinet DTIC. 19 Feb 2002. <http://handle.dtic.mil/100.2/ADA402012> last accessed 18 Sep 02.
- Lessor, Ian O. "Strike at the Roots of Terrorism." *RAND Full Alert: An Arsenal of Ideas for the War Against Terrorism*. Fall 2001, vol 25, no. 3. Online. <http://www.rand.org/publications/randreview/issues/rr.12.01/rrfall2001.pdf> last accessed 2 Oct 02.
- Lutes, Chuck. *Al-Qaida in Action and Learning: A Systems Approach*. Research Paper, George Washington University. Air University. Online. Dec 2001. [http://www.maxwell.af.mil/au/awc/awcgate/readings/al\\_qaida2.html](http://www.maxwell.af.mil/au/awc/awcgate/readings/al_qaida2.html) last accessed 30 Jan 03.
- Martin, Gregory S General. *Speech to AFA National Symposium*, Orlando FL. 14 Feb 2002. Aerospace Education Foundation. Online. <http://www.aef.org/pub/martin202.asp> last accessed 3 Feb 03.
- Martin, John R. Col, ed. *Defeating Terrorism: Strategic Issue Analyses*. Jan 2002. Carlisle ISS. Online. <http://carlisle-www.army.mil/usassi/ssipubs/pubs2002/terror/terror.htm> last accessed 6 Nov 02.
- Pitts, Joe W. III. "Limits of the Military Metaphor." *The American Prospect Online*. Web Exclusive 20 Sep 01. <http://www.prospect.org/webfeatures/2001/09/pitts-j-09-20.html> last accessed 30 Jan 03.
- Rekkedal, Nils Marius. *Assymetric Warfare and Terrorism - An Assessment*. The Norwegian Atlantic Committee, Security Policy Library no. 5-2002. [http://www.atlanterhavskomiteen.no/publikasjoner/sp/2002/5\\_utskrift.htm](http://www.atlanterhavskomiteen.no/publikasjoner/sp/2002/5_utskrift.htm) last accessed 6 Nov 02.
- Reilly, James. *A Strategic Level Center for Gravity Analysis on the Global War on Terrorism*. Strategy research project, Army War Coll Carlisle Barracks PA. Stinet DTIC. 09 APR 2002. <http://handle.dtic.mil/100.2/ADA401641> last accessed 18 Sep 02.

- Rinaldi, Steven M., Donald H. Leathem, and Timothy Kaufman. "Protecting the Homeland Air Force Roles in Homeland Security." *Aerospace Power Journal*, Spring 2002. Airchronicles. Online. <http://www.airpower.maxwell.af.mil/airchronicles/apj/apj02/spr02/rinaldi.doc> last accessed 6 Nov 02.
- Rumsfeld, Donald H. *Remarks to The National Defense University*. 31 Jan 2002. EMediaMillWorks. Online. <http://www.shadowyproblems.com/penduringfreedom/rumsfeldfightingmodernwar.htm> last accessed 6 Nov 02.
- \_\_\_\_\_. "Interview with Jim Lehrer." *PBS Newsmaker*. 7 Feb 2002. Online. <http://www.scoop.co.nz/stories/WO0202/S00019.htm> last accessed 6 Nov 02.
- Shanker, Tom. "Rumsfeld Takes Aim at a New Kind of Enemy." *New York Times*, 5 Sep 2002. International Herald Tribune. Online. <http://www.iht.com/articles/69760.html> last accessed 18 Sep 02.
- Sloan, Stephen. *The Changing Nature of Terrorism*. Chapter 3. US Air Force Academy. Online. <http://www.usafa.af.mil/inss/terrhp3.htm> last accessed 6 Nov 02.
- Szafranski, Richard Colonel. "Fighting Stupid, Defending Smart." *Aerospace Power Journal*, Spring 2002. Airchronicles. Online. <http://www.airpower.maxwell.af.mil/airchronicles/apj/apj02/spr02/szafranski.html> last accessed 30 Jan 03.
- Wijk, Rob de. "The Limits of Military Power." 2001. The Center for Strategic and International Studies and Massachusetts Institute of Technology. *The Washington Quarterly*, 25:1, pp 75-92. Winter 2002. Online. <http://www.twq.com/02winter/dewijk.pdf> last accessed 30 Jan 03.
- Wolfowitz, Paul D. *Remarks at the 38<sup>th</sup> Munich Conference*. 2 Feb 02. Expand Nato. Online. <http://www.expandnato.org/munwolf.html> last accessed 6 Nov 02.