Form Approved REPORT DOCUMENTATION PAGE OMB No. 0704-0188 Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS. 2. REPORT TYPE 1. REPORT DATE (DD-MM-YYYY) 3. DATES COVERED (From - To) 17-MAY-2005 FINAL 5a. CONTRACT NUMBER 4. TITLE AND SUBTITLE The Evolution of Airpower Theory and Future Air Strategies for Employment in the Gap **5b. GRANT NUMBER 5c. PROGRAM ELEMENT NUMBER** 6. AUTHOR(S) 5d. PROJECT NUMBER 5e. TASK NUMBER Francis M. Brown, Lt Col, USAF **5f. WORK UNIT NUMBER** Paper Advisor (if Any): N/A 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) 8. PERFORMING ORGANIZATION REPORT NUMBER Joint Military Operations Department Naval War College 686 Cushing Road Newport, RI 02841-1207 9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) 10. SPONSOR/MONITOR'S ACRONYM(S) 11. SPONSOR/MONITOR'S REPORT NUMBER(S) 12. DISTRIBUTION / AVAILABILITY STATEMENT Distribution Statement A: Approved for public release; Distribution is unlimited. 13. SUPPLEMENTARY NOTES A paper submitted to the faculty of the NWC in partial satisfaction of the requirements of the JMO Department. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Department of the Navy. 14. ABSTRACT Thomas P.M. Barnett in his book The Pentagon's New Map: War and Peace in the Twenty-First Century predicts future United States military involvement to be focused in the "disconnected" regions of the world he calls the "Gap." He theorizes that

14. ABSTRACT Thomas P.M. Barnett in his book The Pentagon's New Map: War and Peace in the Twenty-First Century predicts future United States military involvement to be focused in the "disconnected" regions of the world he calls the "Gap." He theorizes that the overall goal of the use of U.S. instruments of power in the Gap is to "connect" these disconnected states to the world's functioning "democracies" that he labels the "Core." In regards to future military involvement and specifically the application of airpower—what are the best air strategies to pursue, not only to achieve the strategic objectives, but to facilitate the desired end state of a "connected" emerging democracy? The original air theorists envisioned using airpower decisively, attacking an enemy's strategic and operational Centers of Gravity (COGs), making fielded forces irrelevant. Since the end of the Cold War, the U.S. retains the military capabilities to be the Hobbesian "Leviathan" in almost any future conflict. Has this overwhelming advantage in the air, focused on strategic COGs, been as decisive as the theorists envisioned? Can airpower be used effectively to coerce despotic Gap dictators to behave in accordance with accepted Core "rule sets?" Recent conflicts indicate that traditional airpower theories and strategies may not be as decisive as predicted. Future conflicts in the Gap are going to involve more innovative thinking to achieve the strategic objectives of the conflict while facilitating the desired end state. The realities of superior U.S. firepower require a reconsideration of the applicability and effectiveness of traditional airpower theory. Airpower needs to be brought to bear more surgically and jointly, doing only minimal damage to the economic, industrial, and informational systems to achieve the desired effects on the future battlefields of the Gap.

15. SUBJECT TERMS

Airpower, Airpower Theory, Core, Gap, Targeting, Coercion, Regime Change

16. SECURITY CLASSIFICATION OF:			17. LIMITATION	18. NUMBER	19a. NAME OF RESPONSIBLE PERSON
			OF ABSTRACT	OF PAGES	Chairman, JMO Dept
a. REPORT UNCLASSIFIED	b. ABSTRACT UNCLASSIFIED	c. THIS PAGE UNCLASSIFIED		25	19b. TELEPHONE NUMBER (include area code) 401-841-3556

NAVAL WAR COLLEGE Newport, RI

THE EVOLUTION OF AIRPOWER THEORY AND FUTURE AIR STRATEGIES FOR EMPLOYMENT IN THE GAP

By

Francis M. Brown Lieutenant Colonel, USAF

A paper submitted to the faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

16 May 2005

Abstract

Thomas P.M. Barnett in his book The Pentagon's New Map: War and Peace in the Twenty-First Century predicts future United States military involvement to be focused in the "disconnected" regions of the world he calls the "Gap." He theorizes that the overall goal of the use of U.S. instruments of power in the Gap is to "connect" these disconnected states to the world's functioning "democracies" that he labels the "Core." In regards to future military involvement and specifically the application of airpower—what are the best air strategies to pursue, not only to achieve the strategic objectives, but to facilitate the desired end state of a "connected" emerging democracy? The original air theorists envisioned using airpower decisively, attacking an enemy's strategic and operational Centers of Gravity (COGs), making fielded forces irrelevant. Since the end of the Cold War, the U.S. retains the military capabilities to be the Hobbesian "Leviathan" in almost any future conflict. Has this overwhelming advantage in the air, focused on strategic COGs, been as decisive as the theorists envisioned? Can airpower be used effectively to coerce despotic Gap dictators to behave in accordance with accepted Core "rule sets?" Recent conflicts indicate that traditional airpower theories and strategies may not be as decisive as predicted. Future conflicts in the Gap are going to involve more innovative thinking to achieve the strategic objectives of the conflict while facilitating the desired end state. The realities of superior U.S. firepower require a reconsideration of the applicability and effectiveness of traditional airpower theory. Airpower needs to be brought to bear more surgically and jointly, doing only minimal damage to the economic, industrial, and informational systems to achieve the desired effects on the future battlefields of the Gap.

Table of Contents

Introduction	1
Background: The Pentagon's New Map	2
Analysis	5
Recommendations	13
Conclusion	16
Notes	18
Bibliography	21

INTRODUCTION

Since the introduction of airpower as a weapon of war, airpower proponents, theorists, and zealots predicted that airpower would be "decisive" in future wars. The original promise of airpower was that it would eliminate the horrors of World War I attrition warfare on the ground. Theorists envisaged a future in which states that controlled the air would directly attack an enemy's will and ability to fight by attacking their leadership, economy, and industrial strengths. By destroying these strategic Centers of Gravity (COGs), the enemy's population and leadership would realize the futility of continued resistance. This is turn would directly reduce or eliminate the effectiveness of the enemies fielded forces making large armies in the field irrelevant.

Since the end of World War I, airpower has gone though a number of evolutions resulting in today's USAF, which has air and space capabilities that are vastly superior to any other force on the planet. "There is no external adversary in the world that can successfully challenge the extraordinary power of the American military in either regional conflict or in conventional war once the United States makes the commitment to take whatever action may be needed." When developing an air strategy for any future conflict, it is essential to gain control of the air rapidly. But once that is achieved, simply following the traditional theoretical recipe for the development of an air campaign strategy may not be the way to facilitate the desired future end state.

Since the end of World War II, the actual end states of conflicts involving the United States have a common central theme. The United States does not usually simply win the war and depart the battlefield leaving a defeated adversary to rebuild their country. The United

1

^{*} Decisive - determines the outcome.

States remains involved in the reconstruction of their economic, political, and legal frameworks and facilitates their integration or reintegration into the family of democratic states. From the Marshall Plan in Europe following World War II, to the current ongoing stability and security operations in Iraq and Afghanistan, the United States has always sought to rebuild its defeated enemies into emerging democracies and stays behind to defend them during the process.

So, if the United States has overwhelming military power, and the desired political end state in a future conflict is an emerging democracy with all of the infrastructure requirements to be self-sustaining—it would be counter-productive to unnecessarily destroy an enemy's economic and industrial strengths, only to be faced with the task of rebuilding them following the conflict. Today, the United States does indeed have overwhelming air dominance. Operational commanders should reconsider their reliance on traditional air theories/strategies that do not have a proven track record of being decisive and in fact, may have been counter-productive to the achievement of the end state. Future air strategies must adapt to the changing rules of twenty-first century warfare that are different from the state versus state, total wars envisioned by the air theorists of the past. In order to facilitate the achievement of this common end state, airmen must consider bringing airpower to bear more surgically and jointly, doing only minimal damage to the economic, industrial, and informational systems that enable enemy states to be brought rapidly back "on line".

BACKGROUND: THE PENTAGON'S NEW MAP

Unlike the relatively stable strategic environment of the Cold War, the rapidly changing twenty-first century security environment makes it difficult to precisely forecast the location of future conflict. On Sept 10, 2001, virtually no one would have predicted that the

United States would be involved in a major regime change effort in Afghanistan less than a month later. Thomas P.M. Barnett, in his book <u>The Pentagon's New Map: War and Peace in the Twenty-First Century</u> describes his theory for where the United States is going to face conflict in the future. He also offers a potential strategy for success, not just in individual future conflicts, but an overall grand strategy for the United States, and its allies.

Barnett's basic premise is that the world can be broadly divided into what he terms the "Functioning Core" and the "Gap." The Core is made up of states which are "functioning within globalization's expanding web of connectivity." The Core can be generally described as made up of "stable governments that neither require our periodic military interventions nor warrant our consideration as threats...those regions that are progressively integrating their economies into the world economy." The core includes (among others); North America, Mexico, Brazil, Argentina, Europe, Russia, India, China, Japan and Australia. While members of the Core may not all be "true democracies," Barnett's theory generally follows the common assertion that "democracies don't fight each other." Therefore, as states become more open, democratic, and integrated into the Core, there will be fewer disputes that will require military force to resolve.

On the other hand, the Gap is made up of "rogue states that demand our vigilance, and the endemic conflicts that fuel the terror we now recognize as the dominant threat not just to America's future security but to globalization's continued advance." The Gap is made up of states "which remain fundamentally disconnected from [globalization's] process." The Gap includes (among others) Central America, northwestern South America, Africa, the Middle East, Central Asia, Indonesia and North Korea. The Gap is the area where the United States and the rest of the Core need to focus their instruments of national power in

order to resolve conflicts and mitigate/eliminate threats to global security. Barnett's believes that the Core must continue efforts to "shrink the Gap." These "disconnected" states/regions must be "connected" to the Core by facilitating or creating more open, democratic, and economically interdependent societies that will function under the accepted "rule sets" of the Core.

Occasionally, in order to achieve Barnett's strategy of shrinking the Gap, military force will need to be used to either coerce a rogue Gap state to modify its unacceptable behavior or to effect regime change. An analogy to describe how Barnett envisions future military force being used in the Gap can be made by the way a SWAT Team is used in cities. For example, when the city police are confronted with a difficult hostage situation in a building, they may call in their SWAT Team. In order to resolve the situation, the SWAT Team does not come in and simply apply overwhelming force. While overwhelming force could potentially achieve the desired effect of capturing or killing the hostage takers, there are other possible outcomes. The hostages could be killed, infrastructure could be unnecessarily damaged or destroyed, and the legitimacy/public perceptions of the efficacy of the SWAT team could be adversely effected. So what the SWAT team does is apply tactics and strategies to minimize risk to the SWAT team (friendly military forces), kill the hostage takers (enemy regime/supporters), and rescue the hostages (the enemy population), while doing the minimal damage possible to the infrastructure.⁶ An ideal resolution to the situation has the SWAT team surgically killing the "bad guys" and walking out of an undamaged building with all the hostages unharmed.

⁻

^{*} For a full discussion of the concept of "rule sets" see Chapter 1 of <u>The Pentagon's New Map; War and Peace in the 21st Century</u>.

Barnett's theory and the SWAT analogy provide an analytical framework for the future development of airpower strategies and specifically targeting in the Gap. Future military engagements in the Gap will have two common factors. First, U.S./Core forces will have overwhelming military superiority. Second, the overall desired end state is going to be a viable, emerging democratic state, with the capability to govern itself, manage its international affairs, economy, and internal/external security. Andrew Krepinevich also envisions future conflict in the Gap:

If there was ever a doubt that the United States is in the regime-change business, the Second Gulf War should dispel it. Since the fall of the Berlin Wall, the United States has, directly or indirectly, deposed the regime of a foreign state roughly once every three years. But those who practice regime change incur certain responsibilities as well as moral and political consequences...This means the US military's preference to do what it does best—defeat enemy forces in the field and then quickly depart—must be overcome. The practice of crafting quick exit strategies must yield a willingness to develop a comprehensive strategy for winning the war and the post conflict period that follows.

ANALYSIS

This analysis will not attempt to address the development of an operational air strategy for a conflict against a potential future peer competitor. Instead, it will limit the focus to Barnett's defined Gap states, in which the US and its allies/coalition partners will have an overwhelming conventional advantage in the air. It also will not refute the absolute necessity of rapidly gaining air superiority in the opening stages of any future conflict. It will focus on current air theory/doctrine, the actual decisiveness of traditional airpower strategies in past conflicts, and the current evolution of air campaign strategies. Then, recommendations will be made as to how future analyses need to be done in order to ensure that effects-based air strategies match the military strategic objectives and facilitate the achievement of the desired end state.

Giulio Douhet, Hugh Trenchard, Billy Mitchell and John Warden—these airpower theorists provide the basis for today's air doctrine that promotes the primacy and efficacy of airpower. The early theorists (Douhet, Trenchard and Mitchell) were fascinated by the potential of airpower and wrote of potential air capabilities long before those capabilities became a reality. They also wrote to promote and defend a separate and independent Air Force, commanded by Airmen. These three theorists wrote in the interwar period between WW I and WW II, consequently their reference for defining methodologies for attaining victory from the air were the horrors of WW I trench warfare. These theories were largely based on affecting the will of the people by either attacking them directly from the air (which is no longer a viable strategy) or via strikes on leadership, economic and infrastructure targets. Warden subsequently wrote his treatise near the end of the Cold War and adapted the thinking of the early theorists to the capabilities and realities of airpower employment of the late 1980's.

Douhet, Trenchard and Mitchell framed their theories in terms of states fighting other states in total wars.⁸ While Warden acknowledges that there may be conflicts against non-state actors and limited war, he also generally frames his 5-ring theory in terms of state vs. state conflict.⁹ In essence, all of the theorists envision states fighting other states that have similar capabilities (mirror-imaging). Therefore their thoughts are limited or non-existent on a global superpower fighting an adversary that has vastly inferior military capabilities. So how did the theorists envision airpower being decisive in war?

"Giulio Douhet argued that an early air attack on the enemy's vital centers could win a humane victory, while surface forces could contain the enemy." Trenchard's beliefs were much along the same lines as Douhet in that "victory could be achieved by bombing enemy

vital centers and thus breaking his will." Billy Mitchell believed that "airpower could attack the enemy's vital centers without first defeating his armies and navies. Attacks on such vital targets would render war so decisive and quick that the total suffering would be less than otherwise..." These elder statesmen of airpower theory all believed in much the same philosophy—the primacy of airpower and potential of airpower to be decisive in war by attacking "vital centers" versus attacking an enemy's fielded force.

The more current theorist, Colonel John Warden and his "5 ring model," which advocates analysis of the enemy as a system, is often misused as the justification for decapitation strategies and attacking the "leadership/regime target sets" at the center of the five rings in order to achieve decisive effects. In reality, Warden's thesis is that "the art of air campaign planning is vital and that once air superiority is assured, airpower can be used either in support of the other arms or can be supported by the other arms, and sometimes can function independently to achieve decisive effects." This theory occasionally meets with resistance from airpower zealots who firmly believe in the elder theorists and the potential for airpower alone to be decisive. They believe that airpower should not be suborned to a secondary role supporting other services if it detracts from the primary objective of decisive strategic air operations.*

In a nutshell, the elder theorists believe that wars can be won from the air-targeting of strategic COGs. Warden takes a more balanced approach and believes analysis and strategy, connecting ends to means, is the way to successfully employ airpower. But has airpower actually ever lived up to the promises of any of the theorists? Are these theories still valid in the globalizing world of the 21st Century? Today, it may be more important to win the

-

^{*} Warden himself was a zealot during the planning for Operation Desert Storm, firmly believing that airpower alone would be decisive.

"hearts and minds" of an enemy population that may be being held "hostage" by despotic Gap leaders than breaking their will.

Current USAF air doctrine is based on some of these theories and it advocates the effectiveness of airpower in recent conflicts. Air Force Doctrine Document 2-1 <u>Air Warfare</u> states:

Operation DESERT STORM (1991) validated the concept of a campaign in which aerospace power, applied simultaneously against strategic and operational centers of gravity (COGs), rendered opposing military forces virtually ineffective. Aerospace power emerged as a *dominant* form of military might. It was *decisive* primarily because it achieved paralysis of the enemy at all levels of war with minimal casualties to friendly forces. Recent events in Bosnia (1995) and Kosovo (1999) continue to re-validate that air warfare, using aerospace power and a joint air operations plan (JAOP), will continue to be an essential and sometimes decisive tool in future military operations.¹⁴ (emphasis added)

One might wonder whether the attacks on strategic/operational COGs really rendered Iraqi military forces ineffective. Is this a legitimate validation of the theories of Douhet and company? It is unclear if the direct air attacks on the Iraqi ground forces in Kuwait were included in these "strategic and operational COGs." However, the Combatant Commander did direct the air component to degrade the strength of Iraqi ground forces in the Kuwaiti Theater of Operations (KTO) by 50%. Since Saddam never voluntarily removed his forces from Kuwait, it only makes sense that it was these air attacks on Iraqi fielded forces followed by overwhelming land forces that facilitated the rout of Iraqi ground forces from Kuwait. Not the attacks against the regime, economic, and infrastructure targets in Iraq. Was airpower alone truly "decisive" in this or other recent conflicts or was airpower simply, as Robert Pape describes, "the hammer to the anvil of ground forces?" Robert Pape describes, "the hammer to the anvil of ground forces?" Robert Pape describes, "the hammer to the anvil of ground forces?" Robert Pape describes, "the hammer to the anvil of ground forces?" Robert Pape describes, "the hammer to the anvil of ground forces?" Robert Pape describes, "the hammer to the anvil of ground forces?" Robert Pape describes, "the hammer to the anvil of ground forces?"

Desert Storm was a limited war to eject Iraqi forces from Kuwait and restore

Kuwait's legitimate government. Iraq had an effective air force and air defense network

however, the Iraqi Air Force never came up to fight and consequently the coalition gained air superiority much more rapidly than anticipated. Once air superiority was achieved a dual track strategy was employed. Airpower continued to directly attack Iraqi fielded forces in the KTO, preparing the future ground campaign battlespace. It also focused on leadership, key production and infrastructure attacks throughout Iraq in an attempt to either coerce the Iraqi leadership to give up Kuwait without a ground battle, kill Saddam, or to encourage a coup d'état from within Iraq. ¹⁷ Neither the decapitation effort to target Saddam Hussein directly nor the efforts to indirectly effect regime change through attacks on economic and infrastructure targets were successful. Saddam Hussein remained in power following Desert Storm, under continued siege from the United States, until Operation Iraqi Freedom (OIF) forcibly evicted him from power in 2003. Today, the United States is spending considerable sums of taxpayers' dollars repairing the economic and infrastructure damage done by air attacks in Iraq from 1991-2003. There is evidence to suggest that strikes against Iraqi infrastructure may not have been necessary to achieve the limited objectives of Desert Storm. Additionally, decapitation efforts failed and the overall coercive effect of air attacks on Saddam Hussein from 1991 to the initiation of OIF was either limited or non-existent.

Operation Deliberate Force (1995) in Bosnia could be described as a small war to facilitate a negotiated peace amongst Gap combatants. Operation Allied Force in Serbia/Kosovo four years later was an effort by the Core to coerce a Gap state to cease its unacceptable behavior. The Gap states in question provide examples of two typical scenarios. One had virtually no air force (Bosnia) the other an inferior air force (Serbia). Serbia had a credible air defense threat and Bosnia had virtually none. Both operations

featured the exclusive use of airpower (by the Core) to achieve limited strategic objectives and end states.

Operation Deliberate Force was essentially NATO air attacks on Bosnian Serb fielded forces (the "bad guys") that successfully weakened what was a superior ground force to its Bosnian Muslim-Croat adversaries (the "good guys"). NATO became the Air Force of the Bosnian Muslim-Croat ground forces and forced the Bosnian Serbs to cease their ground offensive/active ethnic cleansing campaign in Bosnia-Herzegovina and resulted in the Dayton Peace Accords. This strategy was a success because NATO focused its efforts on killing the "bad guys" and had a credible ground force to be used in conjunction with airpower. This is truly an example of Pape's hammer and anvil and Barnett's SWAT team in action. Operation Deliberate Force supports what RAND researcher Stephen Hosmer espouses, that "the promise of airpower resides in air operations against enemy deployed forces, the demoralization of which might cause [an] enemy [forces] cohesion to disintegrate and battlefield resistance to collapse." An important lesson that was learned the hard way four years later in Kosovo.

In 1999, Serbian President Slobodan Milosevic turned his attention to Kosovo and NATO intervened in Operation Allied Force. This time however, an airpower-only coercive strategy was employed by NATO and was fundamentally flawed.²⁰ It was assumed by the politicians and the Combatant Commander that Milosevic was a rational actor and a few nights of classic strategic bombing of the Serbian leadership, key production and infrastructure from the vastly superior NATO air forces would achieve the strategic objectives.²¹ A Gap despot, Milosevic was not successfully coerced and proceeded to ratchet up his ethnic cleansing campaign in Kosovo. Seventy-eight days later, under duress on

multiple fronts, Milosevic capitulated for reasons that are still the subject of debate amongst experts.²²

Allied Force demonstrated some serious lessons learned for future air efforts in the Gap. Among them, the potential requirement for credible ground forces (anvil) to confront the "bad guys"/regime supporters. It also showed that coercive strategies based on the destruction of infrastructure/regime target sets may not be important or particularly effective. Attempts to coerce despotic Gap leaders, using a rational actor model, to behave predictably may be ineffective.

Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) presented different challenges to airpower planners. In Afghanistan, the U.S. was again faced with an underdeveloped Gap state with vastly inferior military capabilities across the board. The strategic objective was unlimited (regime change) and the destruction and capture of as much of Al Qaeda as possible. The desired end state is an emerging democratic Afghanistan, reconnected to the Core. In Operation Enduring Freedom, the lessons of both Deliberate Force and Allied Force were applied in a revolutionary conflict in which Special Forces were used in conjunction with indigenous ground forces and coalition airpower to provide decisive effects. Airpower was truly the hammer to ground power's anvil in Afghanistan. The strategic objectives were achieved in rapid time with minimal destruction of what was "stone age" infrastructure anyway. Hosmer and Pape swing the hammers again.

In the planning stages OIF actually moved back more towards the traditional air campaign strategy than OEF. The original plan for OIF envisioned "16 days and nights of air and SOF operations to "shape the battlespace" before the first coalition armor crossed the

berm."²⁴ However, in execution, due to evolving strategic considerations,* the ground campaign actually began before the air campaign. Once the ground forces started moving rapidly towards Baghdad, the hammer and anvil strategy again became predominant. However, the "shock and awe" that the air planners had envisioned still went ahead, bombing leadership and other strategic target sets throughout Iraq.²⁵ Did these additional airstrikes (other than the ones directly related to maintaining air superiority and support to other tactical considerations such as command and control) contribute to the achievement of strategic objectives and the end state? An alternative answer may be that it was a parochial attempt to "shock and awe" the enemy by the use of overwhelming airpower in a permissive environment which was potentially unnecessary to the achievement of the strategic objectives/end state and unnecessarily damaged Iraqi infrastructure.

The source of the OIF airpower sound bite "Shock and Awe" is Harlan Ullman and James Wade Jr's 1996 book, Shock & Awe: Achieving Rapid Dominance. Their basic premise mirrors that of the elder statesmen of airpower, attempting to affect the adversary's will to resist, but updates their theories by taking advantage of the United States' current overwhelming military superiority to "shock and awe" the enemy—destroying his will to resist. They believe that the shock and awe of the demonstrated overwhelming military superiority of US/Allied military capabilities will force an enemy to reconsider by "affecting an adversary's will, perception and understanding." In 1996, they envisioned a future Rapid Dominance campaign against Iraq:

^{*} And a failed effort to decapitate Iraqi leadership via an F-117 strike.

Shutting the country down would entail both the physical destruction of appropriate infrastructure and the shutdown and control of the flow of all vital information and associated commerce so rapidly as to achieve a level of national shock akin to the effect that dropping nuclear weapons on Hiroshima and Nagasaki had on the Japanese. Simultaneously, Iraq's armed forces would be paralyzed with the neutralization or destruction of its capabilities.²⁸

While these capabilities do exist today, this strategy is still much like the theories of Douhet and Mitchell and poses some questions that ought to be asked about the potential decisiveness of this "new" theory. What happens if the fielded forces are not shocked and awed and continue to fight, like in Kosovo? How do you shock and awe a backwards Gap state like Afghanistan that has virtually no infrastructure, vital information, or commerce to attack? In a future example, would attacking North Korea's dilapidated infrastructure and backwards economy be a successful strategy to coerce Kim Jong II? Will he respond predictably? Would it really paralyze North Korean fielded forces? RAND answers these questions and encapsulates the actual effects of attacking regime/leadership target sets using data from recent conflicts and gives a warning:

For the future, a caution is in order with respect to expectations of what air attacks on "regime" targets can achieve. Put simply, prompt regime collapse or decapitation is generally unlikely because of a host of limitations, some self imposed, on the effectiveness of such attacks. Achieving operational surprise is unlikely. The kind of intelligence needed to pinpoint leaders is hard to acquire, given the opportunities leaders have to hide. Redundant constraints on targeting will always be imposed so as to minimize civilian casualties and damage to infrastructure. And, in any case, the psychological effects of air attacks against "regime" targets cannot be expected to emerge quickly."²⁹

RECOMMENDATIONS

Barnett prophesizes that the United States will be involved in future conflicts in order to "shrink the Gap" by either coercing a state to modify its unacceptable behavior or to effect regime change in a rogue state. In order to facilitate the overall success of these operations,

the strategy developed by the Combatant Commander must keep an eye on the desired end state ("connecting" to the Core/a viable emerging democratic state) and not just the strategic objectives (coercion/regime change) of the military operation. This is typically a weakness for both commanders and planners in that the strategic objectives are usually very militarily tangible, while the end state is a much more intangible, long-term prospect. This typical weakness is even outlined in USAF doctrine: "failure to properly analyze the mechanism that ties tactical results to strategic effects has historically been the shortcoming of both airpower theorists and strategists." In addition to identifying this common misconception among Airmen, the words "end state" are critically missing from this statement. Commanders and planners must keep their eyes on the end state and not just the strategic objectives.

Barnett's "SWAT Team," Pape's "hammer and anvil," and Hosmer's "attack deployed forces,"—they all believe that the future of airpower employment involves true joint operations against the "bad guys" and not airpower alone versus strategic COGs.

Unarguably, the first step in airpower strategy development is going to be using the Core's overwhelming advantage in the air to gain air superiority. Planners must remember that at some point in any future air campaign in the Gap, the air environment will become permissive. Then, as Warden espouses, there are a menu of options to choose from.

Targeting considerations must go beyond parochial, traditional air strategies. While these traditional air strategies are potentially low risk to friendly forces, they may also have a reduced potential to achieve the strategic objectives and may not facilitate the end state.

This is not to say that there is any one right answer to the development of any air strategy in the future. The important thing to remember is that consideration should be given to all options. Operational commanders must remain flexible and disciplined in the use of

overwhelming airpower in a permissive environment. Unnecessary destruction of "legal" targets, which have the potential to generate low collateral damage and support traditional airpower theories, may be counter-productive. The lessons learned in recent conflicts should be carefully considered.

An air strategy that targets infrastructure in an attempt to coerce enemy leadership requires them to behave "rationally" based on the assumption that they value these target sets. Gap dictators have shown that this may not be the case. They may only have one COG—remaining in power. If this is not directly threatened by the strategy employed, they are not going to be coerced. In the Gap environment of the future, it is important to consider that people support regimes, infrastructure supports the state. Destruction of infrastructure may weaken the state as a whole but have little effect of the regime. Is weakening the state part of the strategic objectives/end state or is it coercing/changing the regime? Air strategies and analysis should consider who is supporting the regime while acknowledging the difficulties of decapitation strategies. Infrastructure, while appealing to our sense of logic may not be a COG, especially versus a Gap state dictator or leader.

In the end, the theories of the elder statesmen of airpower are appealing and elegant. Yet the truth may be that traditional airpower theory is becoming dogma. The elder theorists hypothesized that targeting strategic COGs would be decisive and make armies in the field irrelevant. While there is evidence that destruction of an enemy's strategic COGs made contributions to the achievement of the strategic objectives, it can not be said with absolute clarity that it has ever been truly decisive. Traditional COG based strategies have also usually not led to quick decisive victories but typically protract a conflict because the effects will inherently take time to have an impact. Decisiveness and facilitation of the end state are

critical concepts and <u>The National Military Strategy</u> highlights the importance of determining what is going to be decisive and how to achieve it:

Decisiveness allows combatant commanders to overwhelm adversaries, control situations and achieve definitive outcomes. *Decisiveness requires tailored packages of joint capabilities designed to achieve specific effects and accomplish objectives. Achieving decisiveness may not require large force deployments but rather employing capabilities in innovative ways.* Transforming the Armed Forces' capacity to mass effects while retaining the ability to mass forces, if needed, is key to achieving decisiveness. By focusing on decisive outcomes, combatant commanders can more precisely define the effects they must generate and determine the capabilities they require.³¹ [emphasis added]

The innovation of future air strategies may not be reliance on the traditional theories of Douhet and Mitchell et al. It is truly using the precise capabilities today's airpower can bring to the table as a member of the joint team. It may be forming that SWAT team in conjunction with ground forces and determining what or who to target in order to achieve those elusive decisive effects quickly and with minimal damage to infrastructure. This strategy will facilitate the transition of a disconnected Gap state to the Core without having to rebuild an enemy country's destroyed infrastructure.

CONCLUSION

There is no doubt that the U.S. currently possesses the capacity to be the Hobbesian "Leviathan" in future conflicts in the Gap. Analysis of recent conflicts against Gap States indicates that future conflicts may have some common features. Air superiority and in many cases even air supremacy will be gained rapidly. Airpower will then be able to operate, with impunity, in a permissive environment. Dogmatic reliance on traditional air strategies or "shock and awe" strategies that target an enemy's economic, industrial, and informational systems may not be effective and may unnecessarily protract the conflict. While risk to

friendly forces may be increased by introducing ground forces, their influence in the battlespace cannot be replaced using airpower alone.

The technological marvel that U.S. airpower is today needs to be brought to bear as precisely as possible in the future without undue confidence on potentially unreliable theories. RAND highlighted that regime/decapitation strategies have not been effective in the past and will probably have a low probability of being rapidly decisive in the future. Pape and Hosmer emphasized the combined arms approach. This approach capitalizes on the incredible effectiveness and precision of airpower to compliment ground forces, going after the "bad guys" that support despotic regimes in the Gap. Barnett envisions the intervention of the Core SWAT team and outlines what the potential desired end state of these conflicts will be. Krepenivich highlights that achieving the strategic objectives of the military operations (i.e.; regime change) does not signal the conclusion of military involvement.

In the end, dogmatically targeting an enemy's economic, industrial, and informational systems in an attempt to achieve decisive results is counter-productive and hinders follow-on operations. The reality of future airpower employment is—anything that is attacked and damaged or destroyed kinetically has the potential to have to be rebuilt. As Colin Powell said, "You break it, you own it." Why break it if it doesn't need to be broken? Certainly no need to break it just because you can...

NOTES

¹ Harlan Ullman and James Wade Jr., <u>Shock and Awe: Achieving Rapid Dominance</u> (Washington DC: National Defense University Press 1996), 1.

² Thomas P.M. Barnett, <u>The Pentagon's New Map; War and Peace in the 21st Century</u> (New York: G.P. Putnam's Sons 2004), 122.

³ Ibid., 121-122.

⁴ Ibid., 122.

⁵ Ibid., 121.

⁶ Thomas P.M. Barnett. <thomaspmbarnett@mac.com> "JMO Paper." [E-mail to Francis Brown <francis.brown@nwc.navy.mil>]21 March 2005. (Source of SWAT analogy).

⁷ Andrew Krepinevich, <u>Operation Iraqi Freedom: A First Blush Assessment</u> (Washington DC: Center for Strategic and Budgetary Assessments, 2003), i.

⁸ David Mets, <u>The Air Campaign: John Warden and the Classic Airpower Theorists</u> (Maxwell AFB, AL: Air University Press, 1998), 73.

⁹ Ibid., 73.

^{10 5} Peter Faber, <u>Competing Theories of Airpower: A Language for Analysis</u> (paper delivered at the Air and Space Symposium, College of Aerospace Doctrine, Research and Education, Air University, Maxwell AFB, Ala., 1 May 1996), and A.J. Forrest, <u>Giulio Douhet</u> (Australian Defence Force Journal, May/June 1995), 4.; quoted in David Mets, <u>The Air Campaign: John Warden and the Classic Airpower Theorists</u> (Maxwell AFB, AL: Air University Press, 1998), 12.

¹¹ David Mets, <u>The Air Campaign: John Warden and the Classic Airpower Theorists</u> (Maxwell AFB, AL: Air University Press, 1998), 22.

¹² Billy Mitchell, <u>Winged Defense</u> 16.; quoted in David Mets, <u>The Air Campaign: John</u> <u>Warden and the Classic Airpower Theorists</u> (Maxwell AFB, AL: Air University Press, 1998), 34.

¹³ David Mets, <u>The Air Campaign: John Warden and the Classic Airpower Theorists</u> (Maxwell AFB, AL: Air University Press, 1998), 59.

¹⁴ United States Air Force, <u>Air Warfare</u>, Air Force Doctrine Document 2-1 (Maxwell AFB, AL: 22 January 2000) i.

¹⁵ ³⁴H. Norman Schwarzkopf, It Doesn't Take a Hero (New York: Bantam Books, 1992), 319: quoted in Don Chipman, "Desert Storm and the Triumph of Joint War Planning" <u>Air Power History</u>. Spring 2005. Vol. 52, Iss 1. ProQuest document ID 807760241; Washington D.C., (18 March 2005).

¹⁶ Robert A. Pape, "The True Worth of Air Power" <u>Foreign Affairs</u>, Mar/Apr 2004, Vol 83, Iss 2. ProQuest Document ID 586448701; New York, (13 April 2005).

¹⁷ Don Chipman, "Desert Storm and the Triumph of Joint War Planning" <u>Air Power History</u>. Spring 2005. Vol. 52, Iss 1. ProQuest document ID 807760241; Washington D.C., (18 March 2005).

¹⁸ Robert A. Pape, "The True Worth of Air Power" <u>Foreign Affairs</u>, Mar/Apr 2004, Vol 83, Iss 2. ProQuest Document ID 586448701; New York, (13 April 2005).

¹⁹ Wesley P. Hallman, <u>Airpower and Psychological Denial;</u> (Joint Forces Quarterly, Issue 37, 2nd Quarter 2005), 33.

²⁰ Ivo H. Daalder and Michael E. O'Hanlon, <u>Winning Ugly: NATO's War to Save</u> Kosovo. (Washington DC: Brookings Institution Press, 2000), 183.

²¹ Ibid., 2.

²² Ibid., 184.

²³ Robert A. Pape, "The True Worth of Air Power" <u>Foreign Affairs</u>, Mar/Apr 2004, Vol 83, Iss 2. ProQuest Document ID 586448701; New York, (13 April 2005).

²⁴ Tommy Franks, <u>American Soldier</u> (New York: Harper Collins, 2004), 439.

²⁵ Robert A. Pape, "The True Worth of Air Power" <u>Foreign Affairs</u>, Mar/Apr 2004, Vol 83, Iss 2. ProQuest Document ID 586448701; New York, (13 April 2005).

²⁶ Ullman, Harlan, and James Wade, Jr., <u>Shock and Awe: Achieving Rapid Dominance</u> (Washington DC: National Defense University Press 1996), 15-16.

²⁷ Ibid., xix.

²⁸ Ibid., 37.

²⁹ RAND, <u>Iraq: Translating Lessons into Future DoD Policies</u>, <u>Report to the Secretary of</u> Defense (Washington, DC: 2005), 1.

³⁰ United States Air Force, <u>Air Warfare</u>, Air Force Doctrine Document 2-1 (Maxwell AFB, AL: 22 January 2000), 3.

³¹ United States Department of Defense, <u>National Military Strategy of the United States</u> of America: A Strategy for Today; A Vision for Tomorrow (Washington DC: 2004), 7.

³² Bob Woodward, <u>Plan of Attack</u> (New York: Simon and Shuster 2004), 150.

BIBLIOGRAPHY

- Barnett, Jeffery. <u>Future War: An Assessment of Aerospace Campaigns in 2010</u>. Maxwell AFB, AL: Air University Press, 1996.
- Barnett, Thomas P. M. <u>The Pentagon's New Map: War and Peace in the Twenty-First</u> Century. New York: G.P. Putnam's Sons, 2004.
- Boyne, Walter. Operation Iraqi Freedom. New York: Tom Doherty Associates, 2003.
- Chipman, Don. "Desert Storm and the Triumph of Joint War Planning" <u>Air Power History</u>. Spring 2005. Vol. 52, Iss 1. ProQuest document ID 807760241; Washington D.C., (18 March 2005).
- Clark, Wesley K. Winning Modern Wars. New York: Public Affairs, 2001.
- Daalder, Ivo H. and O'Hanlon, Michael E. <u>Winning Ugly: NATO's War to Save Kosovo</u>. Washington DC: Brookings Institution Press, 2000.
- Douhet, Giulio. <u>The Command of the Air.</u> New York: Coward-McCann, 1942. Reprint, Washington DC: Office of Air Force History, 1983.
- Franks, Tommy. American Soldier. New York: Harper Collins, 2004.
- Freedman, Lawrence. <u>Strategic Coercion: Concepts and Cases</u>. Oxford UK: Oxford University Press, 1998.
- Friedman, George. <u>America's Secret War: Inside the Hidden Worldwide Struggle Between</u> <u>America and its Enemies</u>. New York: Doubleday, 2004.
- Hallman, Wesley P. "Airpower and Psychological Denial." <u>Joint Forces Quarterly</u>, (2nd Quarter 2005, Issue 37): 33-39.
- Hinman, Ellwood P. The Politics of Coercion: Toward a Theory of Coercive Airpower for Post-Cold War Conflict. Maxwell AFB, AL: Air University Press, 2002.
- Kan, Paul. "What Should We Bomb? Axiological Targeting and the Abiding Limits of Airpower Theory." <u>Air & Space Power Journal</u>, (Spring 2004, Vol 18): 25-32.
- Krepinevich, Andrew. <u>Operation Iraqi Freedom: A First-Blush Assessment</u>. Washington DC: Center for Strategic and Budgetary Assessments, 2003.
- Mueller, Karl. <u>The Essence of Coercive Air Power: A Primer for Military Strategists</u>. 17 Sept 2001. http://www.airpower.au.af.mil/airchronicles/cc/mueller.html [6 May 2005].

- Mets, David. <u>The Air Campaign: John Warden and the Classic Airpower Theorists</u>. Maxwell AFB, AL: Air University Press, 1998.
- Naval War College. Style Manual and Classification Guide. Newport RI: August 2000.
- Posen, Barry. "Command of the Commons: The Foundation of U.S. Hegemony." International Security, (Summer 2003, Vol. 28, No.1): 5-46.
- RAND. <u>Iraq: Translating Lessons into Future DoD Policies</u>. Report to the Secretary of Defense. Washington, DC: 2005.
- Ullman, Harlan, and James Wade, Jr. <u>Rapid Dominance-A Force for All Seasons</u>. Weymouth, United Kingdom: Royal United Services Institute for Defence Studies, 1998.
- . Shock and Awe: Achieving Rapid Dominance. Washington DC: National Defense University Press, 1996.
- United States Air Force. <u>Air Warfare</u>. Air Force Doctrine Document 2-1. Maxwell AFB, AL: 22 January 2000.
- United States Department of Defense. <u>National Military Strategy of the United States of America: A Strategy for Today; A Vision for Tomorrow</u>. Washington DC: 2004.
- Vallance, Andrew. <u>The Air Weapon: Doctrines of Air Power Strategy and Operational Art.</u> New York: St. Martin's Press, 1996.
- Walker, Scott. "A Unified Field Theory of Coercive Airpower", <u>Aerospace Power Journal</u>, Maxwell AFB, AL: Summer 1997, http://www.airpower.au.af.mil/airchronicles/apj/sum97/walker.html [6 May 2005].
- Warden, John. <u>The Air Campaign: Planning for Combat</u>. Washington DC: Pergamon-Brassey's, 1989.