

CENTER FOR STRATEGIC AND BUDGETARY ASSESSMENTS:  
ONE THINK TANK'S INFLUENCE ON THE MOVEMENT TO TRANSFORM THE  
UNITED STATES MILITARY

By

TAIT SIMPSON

B.A. Hons., University of Western Ontario, 2004

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR  
THE DEGREE OF

MASTER OF ARTS

In

THE FACULTY OF GRADUATE STUDIES

(Political Science)

THE UNIVERSITY OF BRITISH COLUMBIA

August 2005

© Tait Simpson, 2005

## **ABSTRACT**

As the number of think tanks has more than quadrupled since the 1970s, a small number of scholars have been looking at what sort of influence these organizations can have on the policy process in the United States. Think tanks can be effective if they use their written work, seminars, and analysts to spread their ideas throughout the epistemic policy communities. This thesis asks the question of what, if any, influence has the Center for Strategic and Budgetary Assessments (CSBA) had on the movement to transform the United States military. Based in Washington D.C., the CSBA has been closely involved since 1994 in the discussions and analysis about what form the United States military should take in the future. This thesis relies upon existing work on think tanks, U.S. security, and military transformation. It is also heavily derived from interviews conducted with senior U.S. military personnel by Professor Colin Campbell in addition to my own interviews conducted at the Pentagon and at the CSBA. The CSBA has argued fervently that the U.S. military must undertake a transformation if it is to cope with the revolution in military affairs they believe is taking place. Only through a transformation that involves discontinuous change in technology, doctrines, organization, and operations can the United States military hope to dominate the military conflicts of the 21<sup>st</sup> Century. While think tanks can be intrinsically involved in conceptualizing change and policy formation, they require politicians or government policy makers to adopt their ideas in order to see their work applied to public policy.

## TABLE OF CONTENTS

Abstract .....	ii
Table of Contents .....	iii
Chapter 1) Introduction .....	1
Chapter 2) The influence of think tanks .....	10
2.1) Think tanks and the United States Policy Process .....	10
2.2) The Center for Strategic and Budgetary Assessments as a think tank.....	16
2.3) The 'seeding of ideas' .....	21
Chapter 3) Center for Strategic and Budgetary Assessments: A Profile .....	25
3.1) The Office of Net Assessment .....	25
3.2) Center for Strategic and Budgetary Assessments: History .....	28
Chapter 4) Transformation and the CSBA vision .....	38
4.1) Revolution in Military Affairs .....	38
4.2) Transformation .....	42
4.3) The CSBA vision of transformation .....	47
4.4) Experimentation .....	51
4.5) Network centric warfare .....	53
4.6) Changing Cultures .....	54
4.7) Alternatives to Forward Bases .....	56
4.8) Light but Lethal .....	59
4.9) Unmanned Aerial Vehicles (UAVs) and the technical boom .....	62
4.10) The cost of transformation .....	63
Chapter 5) The post 9/11 environment and impediments to transformation .....	66
5.1) Impediments to Transformation .....	66
5.2) The CSBA, transformation, and the post 9/11 world .....	73
Conclusion .....	82
Bibliography .....	86

## Ch.1) Introduction

It is very difficult to pinpoint the moment that an idea takes hold. It is, as a matter of research, far easier to track the evolving pattern of thought surrounding an idea—to see its growth and solidification—than it is to say when, or even if, that idea ever gained widespread acceptance. When then-presidential candidate George W. Bush outlined part of his foreign and defense policy in a speech at The Citadel in Charleston, South Carolina, he began by making the statement that the U.S. military needed to be rebuilt.<sup>1</sup> He promulgated, to a knowledgeable audience who would hold him accountable to the contents of his speech, that he felt that the U.S. military should skip a generation of technology. Those listening to the speech associated his words with the growing chorus of experts who wanted to see a transformation of the United States military. The presidential candidate's determination to go before a military audience displayed a desire to rebuild the armed services. His vision, as outlined in the Citadel speech, would provide much of the catalyst for change once he was in office a year-and-a-half later. His adoption of the idea of 'skipping a generation of technology' showed that reforming the U.S. military was being embraced at the national political level. Once elected, his appointees to the Department of Defense would articulate a vision centered around the need for reform. The President's words, and those of his top appointees, made the notion of 'reform' permanent for as long as George W. Bush was president.

Where to look for a detailed vision of how to "begin creating the military of the next century,"<sup>2</sup> as George W. Bush put it, was an entirely different matter. The first place

---

<sup>1</sup> "A Time of Testing: President's Message," Navy League of the United States, Feb. 2001  
< [http://www.navyleague.org/seapower\\_mag/feb2001/presidents\\_message.htm](http://www.navyleague.org/seapower_mag/feb2001/presidents_message.htm) > (Retrieved 2 June 2005).

<sup>2</sup> Ibid.

to look was among the cadre of advisors helping him define his foreign policy and national security vision, areas where he had a marked lack of expertise.<sup>3</sup> Those advisors, many with academic backgrounds, had watched carefully the policy debate in the late-1990s about how the U.S. military should adapt to the changes of a new century.

As the number of think tanks has quadrupled since the 1970s<sup>4</sup>, a small number of scholars have been looking at what sort of influence these organizations have had on the federal government of the United States. This thesis asks the question: "What, if any, influence has the Center for Strategic and Budgetary Assessments (CSBA) had on the movement to transform the United States military?" Based in Washington D.C., the CSBA has since 1994 been closely involved in discussions and analysis about the future of the United States military.

Transformation in regards to the U.S. military is defined as discontinuous change in technology, doctrines, organization, and operations so that the United States military can dominate the military conflicts of the 21<sup>st</sup> Century. Specifically, that means an emphasis on network centrality, long-range strike capability, and unmanned systems that is brought about through increased experimentation.

In much the same way as the Reagan administration greatly utilized the network of conservative think tanks in and around Washington D.C., the advisors to George W. Bush surveyed what was coming out of Washington's ever-expanding think tank network. The Reagan administration had actively used think tanks to help support its policy apparatus. In a 1987 speech in which he recognized the contributions of the American Enterprise Institute, Reagan announced his view of the changing policy

---

<sup>3</sup> See James Mann, Rise of the Vulcans: the history of Bush's war cabinet (New York: Viking, 2004).

<sup>4</sup> See Andrew Rich, Think tanks, public policy, and the politics of expertise (New York: Cambridge University Press, 2004).

apparatus in Washington D.C. "Today the most important American scholarship comes out of our think tanks,"<sup>5</sup> he proclaimed. While all may not share President Reagan's view of their importance, it certainly goes to show the degree of influence think tanks have attained since their inception after the First World War. American leaders from Lyndon B. Johnson to Newt Gingrich have praised them for their influence on American policy development.<sup>6</sup> One Washington think tank, and its influence on the how the idea of transformation became the most common buzzword in military planning circles, is the subject of this thesis.

Those whose profession it is to make predictions about the future often note how hard it is. The difficulty with planning will be expanded on later, but the importance of looking towards the future is clear. There are emerging threats, oftentimes amplified by emerging capabilities that can quickly render obsolete much of the operations, communications, and military hardware of the United States. Simply put, "the US military 20 years hence is already being formed and limited by decisions being made today."<sup>7</sup> If this is to be believed; and there is a great deal of evidence to back it up, it makes choosing the right path forward all the more important. CSBA researched showed that if the wrong approach to transformation were taken, or if there were no awareness of the changing environment, it would be difficult, if not impossible, for the Defense Department to catch up to new enemy threat capabilities.

---

<sup>5</sup> Donald E. Abelson. American Think-Tanks and their Role in US Foreign Policy (New York: St. Martin's Press Ltd, 1996), 89.

<sup>6</sup> Andrew Rich, Think tanks, public policy, and the politics of expertise (New York: Cambridge University Press, 2004), 1.

<sup>7</sup> Andrew F. Krepinevich, "Interview given on the future of war," PBS Frontline: the future of war. < <http://www.pbs.org/wgbh/pages/frontline/shows/future/interviews/krepinevich.html> > (Retrieved 30 May 2005).

There is clearly a growing concern within the decision-making community in Washington about how to deliver the military capabilities desired within a limited, albeit enormous, military budget.<sup>8</sup> As forward-looking author Robert D. Kaplan views the coming decades, "the American public, burdened with large government deficits, will demand an extraordinary degree of protection for as few tax dollars as possible."<sup>9</sup> The pressure to provide more protection with limited funding can push the military in one of two possible directions. It could usher in reform throughout the U.S. military, or it could solidify current spending models, as services and departments struggle to defend their own funding.

The CSBA has been able to straddle the line between objective analysis and hands-on involvement with government. In 1997, the its executive director Andrew Krepinevich was one of the nine members of the National Defense Panel. That panel was commissioned to present the Secretary of Defense, at the time William Cohen, with a report on how to best move forward with the improvement of the United States armed services. The panel, chaired by Phillip A. Odeen, brought together outside experts such as Krepinevich with retired generals and government experts such as Richard L. Armitage, Deputy Secretary of State in the first George W. Bush administration. In the words Odeen, the purpose of the panel was "to stimulate a wider debate on our defense priorities and the need for transformation to meet the challenges of 2020."<sup>10</sup> This mandate was very much in line with the way in which the CSBA has been trying to get others to think about military preparedness. By looking to a date more than 20 years in the future (2020), the

---

<sup>8</sup> David M. Kennedy, "The Best Army We Can Buy," *The New York Times*, 25 July, 2005, A18.

<sup>9</sup> Robert D. Kaplan, "Supremacy by Stealth," *The Atlantic Monthly*, Vol. 292, Issue 1, July/August 2003, 79.

<sup>10</sup> Phillip A. Odeen, "Statement of Goals." *National Defense Panel*. < <http://www.dtic.mil/ndp/> > (Retrieved 1 June 2005)

panel provided a real opportunity to look long-term at how the U.S. should approach the structure and operations of its military.

The drive to transform is being pushed forward by those who do not want to see America's hegemonic position disrupted. The great danger of *not* transforming is to witness the squandering of United States' military investment and a severe weakening of America's security position in the world, one analyst noted. As CSBA's Andrew Krepinevich states it:

*The risks associated with continuing along the current path are clear as well. They include investing in false starts and dead ends, arriving at the right solutions to the wrong threats, and, ultimately, the prospect of paying a price measured in jeopardizing security interests, national treasure, and the lives of young American service men and women.<sup>11</sup>*

Transformation, according to the CSBA, is a 10-15 year project.<sup>12</sup> The National Defense Panel's final report, delivered December 1, 1997, highlighted a long list of areas in which the military must adapt. From that list committee members wanted to get three points across to those members of Congress studying the report. The first was that these were not issues that could wait. The concerns raised by the panel had to be addressed to some degree or else U.S. forces would be perpetually trying to fight the previous war with no regard for what shape the next war might actually take. Secondly, they highlighted the importance of joint operations. Increasingly, the services would be fighting together, and yet there were far too few exercises in place jointly between the services. Joint experimentations would lead the way towards increasing the number of

---

<sup>11</sup> Andrew F. Krepinevich, "Lighting the Path Ahead: Field Exercises and Transformation," Center for Strategic and Budgetary Assessments, 45. Published 2/25/2002  
<[http://www.csbaonline.org/4Publications/Archive/R.20020225.Lighting\\_the\\_Path\\_/R.20020225.Lighting\\_the\\_Path\\_.htm](http://www.csbaonline.org/4Publications/Archive/R.20020225.Lighting_the_Path_/R.20020225.Lighting_the_Path_.htm)> (Retrieved 4 June 2005).

<sup>12</sup> Andrew F. Krepinevich, "Interview given on the future of war," PBS Frontline: the future of war.  
<<http://www.pbs.org/wgbh/pages/frontline/shows/future/interviews/krepinevich.html>> (Retrieved 30 May 2005).



joint operations which they envisioned as mounting in frequency in future conflicts.

Thirdly, the hard and fast rule they tried to convey to members of Congress was to understand the importance of experimentation. Purchasing large expensive systems before all tests have been completed takes options away from military officers and burdens them with a set of heavy machinery that may not fit with the way they would want to structure their forces. Krepinevich cites an old Pentagon analogy: "if all you have is a hammer, everything better look like a nail."<sup>13</sup> The National Defense Panel told the members of Congress that allowing for multiple lanes of experimentation would be the best way to approach future problems.

The research for this paper was conducted through a number of different means. In addition to the traditional literary research, I had access to an extensive archive of interviews (approximately 60) conducted by Professor Colin Campbell of the University of British Columbia. They were predominantly with current or former senior U.S. military personnel. For my research into the CSBA, its inner-workings and its position on transformation and other topics, I conducted seven interviews personally. Those interviews were conducted under the auspices of research being conducted by Professor Colin Campbell. As such, the anonymity of the interview sources has been protected. Numerous ideas and direct quotes were taken from interview respondents whose identity is concealed. I have done my best to assist the reader by placing most of the quotes and ideas within a general context of their original source. Therefore, there exists references such as a 'senior Air Force official' or 'a former Office of Net Assessment analyst.'

This paper is divided into five sections with a brief conclusion at the end. The influence that think tanks can have on government policy and the way they spread their

---

<sup>13</sup> Ibid.

ideas will be discussed in the second chapter. As a number of scholars have noted, there has been a perceptible increase since even the 1970s in the number and influence of American think tanks. The research will look at the growth of American think tanks and at how they have been utilized by Congress and presidential administrations alike. The varying opinions of scholars on think tanks will be addressed. The usefulness of the research conducted on think tanks is best illustrated by two juxtaposed conclusions about modern think tanks. One, by Kent Weaver of the Brookings Institute and David M. Ricci, describes them as scholarly, rigorous, and one of the most important sources of academic material in America. The other, by Donald Abelson and Andrew Rich, argues that think tanks pursue their own agendas and are too partisan.<sup>14</sup> This leaves few organizations capable of producing fair, unbiased analysis that can be useful in studying current debates over public policy.

The third chapter consists of an overview of the Center for Strategic and Budgetary Assessments itself, including its intellectual origins through its current day funding structure. The think tank has very strong ties to the Pentagon's Office of Net Assessment so there is a short explanation of the ONA to help illustrate the niche in which the CSBA operates. Attempting to explain and describe the intellectual history of an entire think tank would be an extremely lengthy process given the sheer volume of its publications. The focus therefore lies on the larger vision espoused by the CSBA, concentrating on its major works as identified in interviews with the analysts themselves.

---

<sup>14</sup> As Andrew Rich notes in his 2004 work *Think tanks, public policy, and the politics of expertise* (New York: Cambridge University Press, 2004), 6, that there have been fewer than 12 books written in the last 30 years that are focused on American think tanks. Political scientists wrote only 5 of those books, and 2 of those 5 were written by the same author. In that same period there were no articles specifically about think tanks that appeared in the *American Political Science Review*, the *American Journal Political Science*, the *Journal of Politics*, or any other major policy or sociology journals.

The CSBA is a relatively small think tank with approximately nine analysts, making a description of the organization a manageable task.

Whereas the third chapter explains the CSBA broadly as an organization, the fourth chapter focuses exclusively on the organization's main intellectual focus, namely, a transformation of the United States armed services. The chapter lays out an explanation of the different components that make up the CSBA's transformation vision. Yet transformation is not the domain of any one think tank. A number of other writers, as well as current and former military personnel, have a vision of what transformation of the military really consists of and how it can best be achieved. Many of their views are incorporated into this chapter.

The fifth chapter will explore how transformation, once introduced as a political objective by the administration of George W. Bush, has progressed, or not progressed, since 2001. It will look at the impediments to transforming such a large and rigid organization as the Pentagon as identified by the CSBA and others who have carefully followed the debate and rhetoric surrounding transformation. Throughout all of the chapters, but especially this last one, I will examine whether the CSBA has had considerable influence on transforming the U.S. military. It has, as an organization, put forth the most detailed and comprehensive description about what would be needed. Its ability to operate close to the policy development process, with its head serving as an official member of a congressionally commissioned panel, has allowed the CSBA to find a broad audience for the vision of transformation that it espouses.

While the CSBA does not write programmatic prescriptions that outline how to achieve transformation, as one senior fellow at CSBA said, "the analysis itself will lead

you to a certain area although you are free to make small adjustments along the way as you see fit." For civilian, political, and defense personnel alike, the vision put forth by the CSBA is the most detailed description of what transformation consists of that you can find anywhere in the defense policy community.

## Ch.2) The influence of think tanks

### 2.1) Think Tanks and the United States Policy Process

Defense- and national security-related think tanks have a long history in the United States. In fact, some of the first think tanks were charged with researching how America could most effectively conduct itself internationally. The first organizations that later became known as the think tanks were internationally minded organizations such as the Brookings Institution (1916), the Carnegie Endowment for International Peace (1914), and the Council on Foreign Relations (1921). There has been a long history of research on military matters within the confines of such organizations.

Originally referred to as independent public policy research organizations, think tanks developed their name during World War II. The name 'think tank' evolved from the use of the term to "characterize the secure environment in which military and civilian experts were situated so that they could develop invasion plans and other military strategies."<sup>15</sup> The first wave was almost exclusively focused on foreign affairs and strategy. It was not until the 1970s, with the proliferation of domestically oriented research centers, that the term 'think tank' was widely used to describe not only outward looking organizations but also those focused on domestic political, economic, and social issues.

A study of the inner workings of modern American think tanks shows that they operate in a number of ways. They share a number of different attributes according to the

---

<sup>15</sup> James G. McGann and R. Kent Weaver, Think Tanks & Civil Societies: Catalysts for Ideas and Action (New Brunswick, N.J.: Transaction Publishers, 2000).

six characteristics put forth by Kent Weaver and James G. McGann,<sup>16</sup> in their international overview entitled *Think Tanks and Civil Societies*<sup>17</sup>. They note: "Think tanks may do several different things, but that not all think tanks do the same thing."<sup>18</sup> The first characteristic is that think tanks, especially those that employ Ph.Ds in the social sciences, carry out research in ways comparable to university-based researchers. Their second role is to provide advice to government officials on the policy questions of the day. Third, they evaluate government programs. For example, "which of two potential weapons systems being considered by the military is the most efficient expenditure of defense procurement dollars?"<sup>19</sup> The fourth characteristic is to facilitate the exchange of ideas and the development of policy networks. Fifth, think tanks serve as revolving doors for government personnel when their party is out of office. Finally, think tank staff act as interpreters or promoters of policy positions to the electronic and print media.<sup>20</sup>

A consensus definition of a think tank does not exist. As Andrew Rich wrote as recently as 2004, "considerable disagreement exists over the organizations to which the label 'think tank' refers."<sup>21</sup> Think tanks operate in what has been termed the 'third sector', or what might be better known as the non-profit sector. This demarcation helps to distinguish them from government, which is funded by tax revenues, and private enterprise, which operates with the intention of turning a profit for the owners or investors in a company. Think tanks are not directly funded by tax revenues and do not strive to be money making ventures. While they make turn a profit on some projects,

---

<sup>16</sup> Ibid, 2.

<sup>17</sup> Ibid.

<sup>18</sup> Ibid, 5.

<sup>19</sup> Ibid, 6.

<sup>20</sup> Ibid, 6.

<sup>21</sup> Andrew Rich, *Think tanks, public policy, and the politics of expertise* (New York: Cambridge University Press, 2004), 11.

their intention is not to make money for their directors. They operate with a variety of agendas and are usually funded by some mixture of government, corporate contracts and private donations. While they attempt to influence the government, most often the think tanks themselves lie outside of the domain of either the private sector or government itself.

One definition of think tanks states that they are “independent, non-interest based, nonprofit organizations that produce and principally rely on expertise and ideas to obtain support and to influence the policymaking process.”<sup>22</sup> That means that they are classified as 501(c)3 non profit organizations in the United States. The think tank at the center of this thesis, the CSBA, is a 501(c)3 non profit organization. While not all organizations calling themselves think tanks fall into this classification, most do.

The notion of think tanks is by no means uniquely American. Think tanks, both large and small, have proliferated around the world, yet nowhere are they more numerous or prevalent than in the United States. “In no other country have they assumed such a visible role on the political landscape or been able and willing to rely on various governmental and nongovernmental channels to help shape the nation’s political, economic and social agenda.”<sup>23</sup> Due to the multiple number of entry points for policy in the American political system, as Brookings Institute scholar Kent Weaver has declared, “think-tanks fit naturally into this system in the United States.”<sup>24</sup> The policy process in Washington D.C. is cluttered by the over 1,000 think-tanks that compete in what has been termed ‘the marketplace of ideas.’ That the American policy process has multiple entry

---

<sup>22</sup> Ibid, 17.

<sup>23</sup> Donald E. Abelson, American Think-Tanks and their Role in US Foreign Policy (New York: St. Martin’s Press Ltd, 1996), 2.

<sup>24</sup> Ibid, 71.

points, with both Houses of Congress putting forth legislation themselves along with the executive branch, provides fertile ground for proposing new policy ideas.

The growth of the American think tank system has been greatly aided by another uniquely American factor – the prevalence of private philanthropy. No other citizenry gives as much money privately as do Americans.<sup>25</sup> Whether it was the existence of the estate tax that encouraged citizens to donate their money before death, or an innately American belief in the need to give money privately (top American universities for example have substantially larger endowments than any foreign universities), America has a long tradition of large private philanthropy. Both domestically and internationally, United States citizens cumulatively donate far more money than any other nation.<sup>26</sup> Think tanks with known ideological affiliations allow donors to support causes they deem important, and such, the growth in the number of think tanks in the United States builds upon the large private donations that fund their existence.

Of great interest to think tanks scholars has been the explosive growth of large, mostly conservative think tanks that began in the 1970s. In a private presentation that he has been showing to large donors of progressive causes, Rob Stein succinctly described what he calls “The Conservative Message Machine’s Money Matrix”.<sup>27</sup> In his presentation, Stein most successfully does what other authors have tried doing – explaining how the Republican Party has been so successful in finding saleable policy

---

<sup>25</sup> Carol C. Adelman, “The Privatization of Foreign Aid,” Foreign Affairs Nov/Dec2003, Vol. 82 Issue 6, 9-15.

<sup>26</sup> Ibid.

<sup>27</sup> Matt Bai, “Wiring the Vast Left-Wing Conspiracy,” The New York Times Magazine, (25 July, 2004), 37.



ideas.<sup>28</sup> These are messages that can be sold to the American voter to both win the Republican Party elections and allow for its conservative domestic and foreign policy beliefs to be translated into national policy.<sup>29</sup> A relatively small group of major donors: the Scaife, Olin, Bradley, and Coors families, have funneled millions of dollars to promote conservative think tanks in a process that began during the Nixon administration.<sup>30</sup> Those think tanks in turn provide the policy ideas and political training for prospective candidates that allow the conservative message to be promulgated effectively on the national stage.<sup>31</sup>

The presentation of Rob Stein about the interconnectedness between a small group of conservatively minded donors and the extensive number of think tanks they fund generated articles in both *The New York Times Magazine*<sup>32</sup> and *Harper's Magazine*<sup>33</sup>. What Stein wanted from those capable of witnessing his presentation was twofold. The first was to see actually how few families were behind the funding for many of these think tanks. The second was not to be fooled by the bland names that the think tanks give themselves. Citizens for a Sound Economy or the Hudson Institute were purposely given bland names to appear nonpolitical and objective. It was only by looking

---

<sup>28</sup> See Lewis H. Lapham's "Tentacles of Rage: The Republican propaganda mill, a brief history," *Harper's Magazine* (September 2004), 31-41.

<sup>29</sup> See Thomas Frank's *What's the matter with Kansas? How conservatives won the heart of America* (New York: Metropolitan Books, 2004) for more on how the Republican party has worked on selling their policies to voters.

<sup>30</sup> Matt Bai, "Wiring the Vast Left-Wing Conspiracy," *The New York Times Magazine* (25 July, 2004), 36.

<sup>31</sup> Andrew Rich's research has shown that since the 1970s "the overwhelming majority of of these ideological think tanks have been broadly conservative, producing work that favors limited government, free enterprise, and personal freedom." Andrew Rich, *Think tanks, public policy, and the politics of expertise* (New York: Cambridge University Press, 2004), 10.

<sup>32</sup> *Ibid.*

<sup>33</sup> Lewis H. Lapham's "Tentacles of Rage: The Republican propaganda mill, a brief history," *Harper's Magazine* (September 2004), 31-41.

more closely at them did their direct ties to, in this case, the Republican Party and conservative supporters become apparent.

Several analysts who were interviewed shed some light on what is required to start a think tank. The two most important elements are money and credibility. In regards to the financing, very few people are ready to pay for the staffing and overhead that are required to employ full-time analysts and see that their work reaches its intended audience. Foundations and corporate donors are most often prepared to support a research project of interest to them, but they are rarely prepared to fund more than that. In other words, they will put up enough money to produce research papers but not enough for those analysts writing the papers and doing the research to coalesce into their own think tank. A financial source must be willing either to fund the foundation of a think tank or pay for large research projects that will launch a think tank.

The second essential element is a person or persons who can give it credibility. That integrity is necessary for a number of reasons. It helps to convince potential funders that they should take a chance on your research; earns respect from other think tanks in the field; and increases the likelihood that interested parties will read the final product. Clearly not everyone must have first-class credentials. Some junior analysts may be just starting out or moving into new fields, but the person at the top will sign-off on their research, vouching in effect for its quality and accuracy.

## 2.2) The Center for Strategic and Budgetary Assessments as a think tank

The degree to which think tanks push their agendas on policymakers varies from the apolitical to the aggressively partisan.<sup>34</sup> Regardless, they are trying in some form or another to influence public opinion and public policy.<sup>35</sup> Most of them have a stated agenda that they wish to help policy leaders understand. The CSBA, for example, says the need to transform stems from a desire for America to be successful in its foreign policy and national defense. This underlying concern for the well being of America is no different from that of any other major think tank. They all want a more prosperous, more secure, and more successful America – they just have vastly different policy positions on how to achieve that goal.

Those differences have been accentuated by the desire of think tanks to get their message across to a large audience. With the rise in the number of news channels, and producers' desire to give their audiences a detailed explanation of current events, news shows have consistently turned to think tank analysts to provide insight. By doing so, the news organizations are opening an important channel to these organizations through which they can push their viewpoints, grow in influence, and shape public opinion.

A study of the inner workings of American think tanks by Kent Weaver and James G. McGann provided six features that characterize these organizations.<sup>36</sup> The CSBA shares many of them. There are however two areas where the CSBA does diverge

---

<sup>34</sup>See Andrew Rich, Think tanks, public policy, and the politics of expertise (New York: Cambridge University Press, 2004) for a more recent discussion of the aggressive manner in which think tanks are pushing their ideas publicly.

<sup>35</sup> Donald E. Abelson, American Think-Tanks and their Role in US Foreign Policy (New York: St. Martin's Press Ltd, 1996), 2.

<sup>36</sup> See page 10-11.

from some of the more highly recognizable think tanks. The first is the rather nonpartisan nature of the organization. Unlike the American Enterprise Institute or Heritage Foundation on the Republican side, or the Progressive Policy Institute, Center for American Progress, or Center on Budget and Policy Priorities on the Democratic side, the CSBA does not wear its partisanship on its sleeve. Even though it has received funding from known conservative philanthropic organizations, it seeks to articulate a vision for the future of the American military.

In its own words regarding the annual defense budget: "The CSBA is the balanced observer to which Congress, the media, policymakers and others turn to for accurate, reliable and unbiased information and insights on the US defense budget."<sup>37</sup> Many of its reports concern long-term strategic planning, a process that takes the length of three to four presidential terms. The CSBA, therefore, needs to make its ideas palatable to both parties and the military establishment. While this may not sound like an unusual concept, as Abelson notes, "advocating policy positions, rather than engaging in long-term research projects has become the main activity for many contemporary think-tanks."<sup>38</sup>

The second area where the CSBA's work differs from that of most think tanks is in the intellectual focus it brings to one specific area of the policy spectrum. Most think tanks provide policy work on a number of different areas, but the specificity of the CSBA's work allows it to provide not only policy guidance and general outlines but also lengthy and continually upgraded work on the future planning efforts of the U.S. military.

---

<sup>37</sup> "Defense Studies Online" < <http://www.csbaonline.org/> > (Retrieved 5 June 2005).

<sup>38</sup> Donald E. Abelson, *American Think-Tanks and their Role in US Foreign Policy* (New York: St. Martin's Press Ltd, 1996), 4.

Moreover, the CSBA has changed with the times from the historical role of a think-tank as an impartial provider of academic expertise. It has moved towards being a more modern think-tank that works aggressively to promote its ideas with busy policy makers. To propagate its ideas, the CSBA has undertaken many of the tactics formally observed in the behavior of modern think-tanks. Groups who work there hold regular seminars to brief interested parties on the status of the military planning process as well as its analysis of the defense budget. Abelson cites the Hoover Institution as saying, "meetings and seminars are now playing a critical role in the ongoing dialogue between scholars and policy-makers, which is so important to the effective development and implementation of legislative and executive department policies and programs."<sup>39</sup>

Think tanks in the foreign policy arena have attempted to do far more than simply react to the changing international environment. As Diane Stone of Warwick University has observed, "they play a strategic role in conceptualizing change. Furthermore, a small number of institutes, sometimes in conjunction with an epistemic community, have had substantial impact on foreign policy processes."<sup>40</sup> The work of the CSBA falls into the category of conceptualizing change, laying out a framework for the U.S. military that would shape the capabilities available to America to conduct its foreign policy.

Admittedly, those who write for the CSBA do so outside of the military structure traditionally charged with deciding and overseeing changes in technology, force structure, and threat concepts. Although not as aggressive as large think tanks like the Heritage Foundation or the American Enterprise Institute, the CSBA is trying to strengthen its ties with outside decision-makers. Through its seminars, briefings, budget

---

<sup>39</sup> Ibid, 68.

<sup>40</sup> Diane Stone, *Capturing The Political Imagination: Think Tanks and the Policy Process* (London: Frank Cass & Co, 1996), 184.

analysis, and presence in the media, CSBA fellows and analysts try to promote their position in Washington in the same manner as other think tanks. Abelson, a sharp critic of the objectivity of modern think tanks, notes that in this new competitive policy environment where he argues everyone has an agenda, “developing and strengthening their ties to government officials is vital for think tanks.”<sup>41</sup>

Despite the relatively newfound importance on the persistent development of relationships, it should be noted that not all governmental institutions are equally receptive to the views of think tanks. The State Department and the National Security Council are notoriously difficult for think tanks members to have access to. As former national security advisor Zbigniew Brzezinski said in regards to the State Department and NSC: “Unless you are there hacking away, working away day in and day out, you really can’t generate too much influence from the outside as a so-called adviser.”<sup>42</sup> The fast pace of the White House has also been receptive to the views of think tanks. Other than the National Security Council, outside analysts are hired to sit on the President’s Foreign Intelligence Advisory Board (PFIAB) and the President’s Intelligence Oversight Board (PIOB), among others.

On the other hand, the Defense Department, the largest recipient of CSBA material, has a history of being very receptive to the work of think tanks. The foothold gained by think tanks at the Department of Defense can partially be explained by its use of contracts. The contracts are awarded to think tanks on particular subjects; but the prominence of think tanks in the Department of Defense extends further than the contracts. There is a history of important defense related work being done outside of the

---

<sup>41</sup> Donald E. Abelson, American Think-Tanks and their Role in US Foreign Policy (New York: St. Martin’s Press Ltd, 1996), 72.

<sup>42</sup> Ibid, 74.

formal military structure. Rand Corporation, an outside organization, has had a long-standing and somewhat fabled relationship with the Pentagon. As Fred Kaplan describes in his 1983 book *The Wizards of Armageddon*<sup>43</sup>, Rand Corporation was very much at the center of thinking about how warfare would be conducted in a coming conflict. In his profile, the top defense thinkers from across the country wanted to go and work at RAND because that was where the most exciting work was being conducted. Today, the Department of Defense uses other groups in addition to the RAND Corporation. The Department of Defense culture is such that it is willing to contract out work and listen to outside experts about how its global role may be changing.

Even without the help of think tanks, the services that make up the U.S. military are prone to evolve, embrace technology and become more modern. As Colin Campbell and Michael Barzelay illustrate about the U.S. Air Force in the 1990s, large organizations do take it upon themselves to change. With varying degrees of outside influence they put themselves through strategic planning exercises in order to prepare for what they see as the future environments in which they will be operating.<sup>44</sup> Yet, in order for the services to transform the way they operate and connect with each other, there must be strong and detailed direction from the service leadership. A service can transform with direction from the internal head, but broader change requires political impetus.

*What makes civilian control so important is that military officers have a tendency to become consummate ideologues, too—not of a political ideology but a corporate one, the ideology of the professional military. They're reared in the culture of their service branch, build careers around war-fighting doctrines that are often outdated by the time they become heads of their services. They have an understandable tendency toward risk aversion and an equal tendency to conflate the interests of their services with those of the*

---

<sup>43</sup> Fred M. Kaplan, *The Wizards of Armageddon* (New York: Simon and Schuster, 1983).

<sup>44</sup> Colin Campbell and Michael Barzelay, *Preparing for the Future: Strategic Planning in the U.S. Air Force* (Washington D.C.: Brookings Institute Press, 2003).

*country. Civilians bring a fresh set of eyes to the problems of fighting wars. They tend to be less blinkered by preconceived notions and intellectual rigidity.*<sup>45</sup>

The impetus for transformation that came from the administration of George W. Bush has been strong on rhetoric but very short on details.

In regards to transformation, the CSBA has consistently put forth detailed plans that would have given the administration a sense of what it meant to transform the military. But having a detailed plan, in a vociferous and hectic environment such as Washington D.C. is not nearly enough. The next section explores how policy ideas and positions can move from the work of a small group into the policies of the government.

### 2.3) The ‘seeding of ideas’

The ideas produced by think tanks and their analysts are only useful if they can be injected into the public arena, so it is important to consider how think tanks get their message across. This is especially pertinent because analysts spend a great deal of time developing their ideas and yet do not have an obvious medium through which to get their ideas out. American politicians, and to a lesser extent government agencies, already have a podium from which to speak. A former Office of Net Assessment analyst in the Pentagon described this process as the “seeding of ideas.” To see how a small organization with a set of ideas plants the seed of their ideas in a larger audience it is especially useful to look at two organizations: the ONA and the CSBA. Each has only about a dozen employees, and yet is considered to be an important catalyst for future

---

<sup>45</sup> Joshua Micah Marshall, “The Pentagon’s Internal War,” Salon, August 2001, 13.



planning ideas. The ONA has been described as an internal think tank to the Pentagon while the CSBA is an external think tank with strong ties to the ONA and the Pentagon in general.

Think tanks spread their ideas in three key ways. The first is through written work, which outlines the organization's ideas with a high degree of specificity. The published material, everything from short opinion pieces and memos to full-length books, has an established audience prepared to read the work. For example, when the ONA publishes one of its assessments, there is flexible group of civilian analysts and military service people who will read the assessment, or at least look it over, because of the ONA's reputation. They respect the assessments of the organization and want to keep abreast of its thinking. The same goes for the CSBA and other think tanks that have credibility in their respective fields. Decision-makers will read the work to keep current with the thinking of an organization they like. Very few people are required to read any of this material. They take the time to do so because of its potential value to their own work.

The second way think tanks seed their ideas is through seminars to get personnel from the field to understand the think tank's message. While no two organizations run them the same way, seminars bring outside people into an event where the ideas of the think tank are presented. Participants bring with them their professional and personal experiences, as well as an understanding of how the seminar's subject fits into the current working environment. They ask pertinent questions on the subject and oftentimes can describe the practical steps and personnel connections necessary for a certain set of ideas or vision to move forward. Once back at their jobs, the seminar participants might apply

the ideas that they picked up at the seminar. Defense and national security seminars and meetings often draw personnel directly responsible for the planning decisions the think tanks are trying to influence. Even if the ideas presented in a seminar are not used immediately, a positive perception of the think tank is fostered and participants leave with the knowledge that a body of work exists that they may not have been fully aware of.

Thirdly, a think tank gets its ideas into the larger epistemic community through its analysts, both past and present. For instance, they are the talking heads on the television programs that offer insight into current events and the ones quoted in the print media. They defend their position to friends and colleagues in and around Washington D.C. or other policy circles. They are often selected to sit on boards or advisory committees where they share their knowledge. As noted previously, Dr. Andrew Krepinevich of the CSBA was asked to sit on the National Defense Panel, which acted as a counterweight to the first Quadrennial Defense Review in 1997. His involvement helped bring transformation strongly into that discussion. Another member of the panel, Richard Armitage, would go on to be advisor to the Bush/Cheney campaign in 1999/2000. Boards, panels, and commissions that are brought together and then disbanded often include current or former think tank analysts who offer up their ideas into the reports. Past analysts are nearly as important as current ones at spreading the message. Large think tanks, such as the American Enterprise Institute and Heritage Foundation, tend to have a fairly steady turnover as analysts come as residents and then move into jobs in government or elsewhere.

Those people who have spent considerable time at these organizations in most cases cannot help but become messengers for its ideas. Think tanks, especially the more activist conservative ones, have embraced the idea of bringing people into their offices. They teach them about their positions and the ideas behind them in hopes that they will hold influential positions in government and industry and apply what they have learned. The Heritage Foundation has even tried to apply this concept to students. It brings in a whopping 64 interns each summer and runs them through extensive training in hopes that they will carry the ideals of the Heritage Foundation with them as they move forward.<sup>46</sup>

Think tanks use their people extensively to seed their ideas to a much wider audience. As an outside consultant put it, "you are trying to steer the dialogue across the culture when you are publishing and going to conferences, so you keep going and over time your idea moves up the ladder." Supported with strong analytic backgrounds, written materials, and colleagues willing to assist them, many think tanks have spread their message widely. Through a policy process that is receptive to the work of think tanks, physically small organizations have been able to establish positions of considerable influence with the policy makers who steer the national political debate in the United States.

---

<sup>46</sup> Jason DeParle, "Next Generation Of Conservatives (By the Dormful)," The New York Times, 14 June 2005, A1.

### Ch.3) Center for Strategic and Budgetary Assessments: A Profile

#### 3.1) The Office of Net Assessment

In studying the Center for Strategic and Budgetary Assessments (CSBA) as a think tank, it is important to briefly mention the Office of Net Assessment (ONA) in the Pentagon. The ONA serves as both a major financial backer of the CSBA and the source of its executive director, Andrew Krepinevich, who has steered the direction of the organization more than anyone. The roots of the CSBA vision of transformation can be tied directly to the ONA, headed by Andrew Marshall. It was created in 1973, as an internal 'think tank' for the department. Marshall was named its first director, a position he still holds.

The office deals with issues of national survival, which at first glance may seem similar to what other Pentagon planning units do, but is actually markedly different. Small conflicts, for example, are not viewed in detail but are studied to see what trends can be derived from them.

For approximately its first 20 years, the ONA focused the bulk of its attention on the Soviet Union. Its assessments claim to have successfully predicated the sudden fall of the Soviet Union a decade before it happened by identifying some of the disguised weaknesses of the Soviet system.<sup>47</sup> The ONA has been immensely successful in using its past employees to spread its message. It usually has officials, like most units in the Pentagon, for two to three years before they move on to work somewhere else. The

---

<sup>47</sup> Ken Silverstein, "The Man from ONA," The Nation, Oct, 25, 1999.

office itself had a staff of 12 in 1999 and it has not grown much since. However, its size is by no means indicative of its influence in the Pentagon.

Andrew Marshall, is paid a great deal of reverence in the defense community for his futuristic approach to possible destabilizing influences on America. The office has spawned a number of the most influential thinkers on the topics of transformation and threats, with "a slew of Marshall's former staffers having gone on to industry, academia and military think tanks."<sup>48</sup> Leading the list is James Roche, who served as the Secretary of the Air Force from 2001 to 2003. Roche was the assistant director of the ONA during its early phase from 1975 to 1979. Throughout the 20-year period after he left the ONA, Roche remained close to Marshall and participated in its summer study at the Naval War College. Another notable former analyst is General Lance Lord, currently in charge of USAF Space Command in Colorado Springs. Also on the list are Dennis Ross who held the title of Special Middle East Coordinator for more than 12 years, and George 'Chip' Pickett who is a vice-president at Northrop Grumman, best known for manufacturing the B-2 bomber and the unmanned Global Hawk, both of which were on display during the U.S. war in Afghanistan.

Marshall's chief concern is that the United States not become complacent, initially in its approach to the Soviet Union, and currently about the hegemonic role that it has played since its fall. *The Nation* described Marshall in 1999 as someone "struggling to save the U.S. armed forces from becoming paralyzed by their own successes in the Cold War and Desert Storm."<sup>49</sup>

---

<sup>48</sup> Ibid.

<sup>49</sup> Ibid.

The ONA describes itself as an internal think tank for the Pentagon. It has served as a breeding ground to some of the brightest thinkers about America's military future. A number of those thinkers have moved onto the CSBA. Both Krepinevich and Barry Watts, a senior fellow at the CSBA, were employed full-time at the ONA and learned part of their methodology within its confines. The ONA's methodology involves assessing available information about both new technologies and foreign countries, then deducing trends from that information. For example, it looked closely at how AIDS has spread in Africa and argued that whole countries would begin to collapse because of the prevalence of the virus. It cited the widespread alcoholism in the Soviet Union as another corrosive element leading to its decline. On the technology side, as early as the late 1970s, it "argued that wars could be revolutionized by precision bombs, unmanned planes and wireless communications that would allow the U.S. to destroy enemies from a distance."<sup>50</sup>

As an internal think tank-type of office, it does not push hard to have the work of its assessments implemented. As a former ONA employee put it: "Marshall is brilliant intellectually but he's not a bureaucratic in-fighter. So he will give you ideas but he's not the kind of guy who gets them implemented."

Marshall's long-term thinking goes beyond traditional military conflicts to non-traditional security threats. He was one of the first people to sound the alarm about the threat posed by AIDS. In the early 1980s, Marshall said, "this is going to be much bigger

---

<sup>50</sup> Greg Jaffe, "At the Pentagon, Quirky Power Point Carries Big Punch," Wall Street Journal 11 May, 2004, A1.

than anyone realizes."<sup>51</sup> Soon, Marshall's office was on the phone with the Centers for Disease Control, urging it to devote more resources to the emerging scourge.<sup>52</sup>

Critics within Washington's defense community believe Marshall is so popular because he can always find a suitably scary enemy to justify the congressional spending on which the military-industrial complex thrives. One ex-Pentagon man who worked around Marshall said that he does not believe that Marshall really believed the cited weaknesses in the Soviets. "Until the very end, he was a major promoter of the line that 'The Russians are coming and they're 10 feet tall.'"<sup>53</sup> In *Private Warriors*, a book about the seedy underside of the defense industry, Ken Silverstein describes Marshall as someone who promotes the development of needless new weapons systems.<sup>54</sup> What is obvious is that he clearly does not believe in the notion of a 'peace dividend,' or that major military conflicts will become less likely because of the interconnectedness created by globalization. The ONA has a worldview that is continuously concerned about future threats. In constantly looking forward, they make sure that there is a voice in the Pentagon urging it to stay away from complacency.

### 3.2) Center for Strategic and Budgetary Assessments: History

The Center for Strategic and Budgetary Assessments credits its existence as a think tank to a smaller research center, the Defense Budget Project (DBP), which began

---

<sup>51</sup> Ibid.

<sup>52</sup> The ONA contact with the Center for Disease Control is questioned in other articles. In another article it states, "according to interviews with Pentagon sources who remember early '80s briefings on AIDS, no one can recall any involvement--or advocacy role--from Marshall's office." From Jason Vest, "The New Marshall Plan," *InTheseTimes.com* < <http://www.inthesetimes.com/issue/25/09/vest2509.html> > 2 April, 2001, (Retrieved 15 July, 2005).

<sup>53</sup> Ken Silverstein, "The Man from ONA," *The Nation*, Oct, 25, 1999.

<sup>54</sup> Ken Silverstein, *Private Warriors* (New York: Verso, 2000).

in 1983. The DBP published detailed annual reports that were the most exhaustive analysis of the defense budget available at the time. The DBP, through its affiliation under the Center on Budget and Policy Priorities (CBPP), suffered from being labeled a left-leaning operation. The label, not self-proscribed by the DBP, was caused by two realities. The first was simply that it was operating under the auspices of the CBPP, a markedly liberal organization. With a strong emphasis on the plight of low-income Americans and the importance of social programs, the CBPP could not be considered an entirely neutral organization. With early titles such as *From the Poor to the Pentagon* in 1984, the agendas of the two organizations could easily be perceived as having meshed. The DBP was in fact doing its own work and given free reign by the CBPP.

DBP founder Gordon Adams,, a noted Democrat, helped to perpetuate the left-of-center label. Despite his partisan affiliation, the analytical work of the DBP was very strong, as it would continue to be under the CSBA. But during the Reagan presidency, with a Democratic majority in Congress, any work that criticized the efficacy of current military spending was perceived as left-of-center and supporting the Democrats. That label would not be shed until Gordon Adams stepped down as head of the DBP.

In 1992, with the election of Bill Clinton as the 42nd President, Adams, who had never served in the government or military, accepted a position as the Associate Director at the Office of Management and Budget. In selecting Krepinevich to be the new head of the DBP in 1993, the group found someone who could bring credibility to the organization and help elevate it to the status of a fully independent think tank. Krepinevich had a long history in the military and had worked with Marshall at the ONA. After he left, Krepinevish, like many past members, was contracted to continue doing



work for the ONA. The funding from the ONA that resulted from this relationship would provide the financial support necessary for a think tank to develop. The DBP was funded by many of the same foundations that fund specific projects at the CSBA. Two noticeable differences are the large amount of Pentagon funding that the CSBA gets and the lack of funding from liberal foundations that supported the CBPP.

With Krepinevich as the new head, an irreconcilable clash developed with the Center on Budget and Policy Priorities. The DBP was going to embark on completing projects for the ONA, but the CBPP, in keeping with its concern for low-income Americans and its left-of-center tradition, could not as a matter of principle have the Pentagon on its list of financial supporters. And so, on good terms and with the new financial support of the ONA, the Center for Strategic and Budgetary Assessments began its separate existence in 1994.

As mentioned previously, the CSBA has a small staff, but a number of other senior people who should be mentioned. Michael Vickers, a frequent writer on military transformation and the future of warfare, heads the Strategic Studies section. He helped lead a study on transformation by the Secretary of Defense in 2001. Steven Kosiak heads the Budget Studies section, which provides in-depth analysis of the annual defense budgets in a similar manner that he did with the DBP. His analyses carefully examine the cost of major acquisition programs and attempt to show where cost savings could be realized. All of the researchers hold advanced degrees, and the majority bring with them decades in the U.S. military.

Krepinevich, the current executive director, is a graduate of West Point, and holds an MPA and Ph.D from Harvard, both of which he completed after his active military

service. His Ph.D thesis became the basis for *The Army and Vietnam*<sup>55</sup>, a book-length analysis of the strategic planning in the U.S. Army during the entire Vietnam conflict. Krepinevich then served on the personal staff of no fewer than three secretaries of defense. During his stint at ONA, he fortified his credentials in long-range planning and wrote *The Military-Technical Revolution: A Preliminary Assessment*.<sup>56</sup> That document, not published for public reading until 10 years later in 2002, arguably provides the first detailed outline of transformation. It has served as the backbone of many CSBA documents.

The tradition of the DBP, with its yearly assessment of the defense budget requests, has remained with the CSBA. What did change, was the emphasis on strategic studies. The organization's work is split between study of the defense budget process and analysis of longer-range strategic issues. The focus on strategic studies originated with Krepinevich who specialized in that area. The idea of military transformation falls most often into the work of the strategic studies section. However, it spills into the CSBA's budget analyses, especially in pointing out ways in which spending could be better oriented towards transformation. A CSBA analysis of the fiscal year 2000 Defense Budget stated that, "CSBA research makes clear the inextricable link between defense strategies and budgets in fostering a more effective and efficient defense and the need to transform the U.S. military in light of the emerging military revolution."<sup>57</sup> The manner in which the defense studies and the strategic studies vision for transformation have merged can be seen in part of the summary of the 2000 Defense Budget.

---

<sup>55</sup> Andrew F. Krepinevich, *The Army and Vietnam* (Baltimore: Johns Hopkins University Press, 1986).

<sup>56</sup> Andrew F. Krepinevich, *The Military-Technical Revolution: A Preliminary Assessment* (Washington D.C.: Center for Strategic and Budgetary Assessments, 2002).

<sup>57</sup> Steven Kosiak and Andrew Krepinevich, *The Fiscal Year 2000 Defense Budget –Increased Funding For A Flawed Strategy?* Center for Strategic and Budgetary Assessments; Washington D.C., 25 January, 1999.

*Over the longer term, however, fully funding DoD's current plan could indeed require adding \$25 billion a year, or more. On the other hand, national security requirements might be better served if the United States were to revise the strategy that drives the allocation of defense resources. Put another way, increasing funding for defense today is less important than spending our defense dollars more wisely. Spending more may reduce the risks we face in the near term, but those risks are already relatively low, especially compared to the Cold War. By contrast, even if the JCS's funding request is granted, unless we "spend smarter," DoD will be ill-prepared to meet the very different, and more dangerous, threats likely to emerge over the long term.<sup>58</sup>*

CSBA reports typically take a detailed look at the difference between the funding requests and the proposed allocations. It then discusses them in the context of how funds could be better put towards transformation. This merging of the two areas has allowed the CSBA to build on the traditional strength of budgetary analysis while trying to outline a new broader and longer-term strategy for the military.

Another change that occurred as the CSBA was being established as a full think tank was the speed with which it disseminates its views. As the Heritage Foundation became one of the powerful think tanks in Washington, aided by the Republican takeover of the House of Representatives in 1994, it set a new and faster pace. It issued daily one- or two-page papers to decision-makers in Washington. Anyone who wanted to counter its research had to consider keeping up with this rate of dissemination. The CSBA, whose scope is far narrower than that of Heritage, also tried to put out many short statements to keep themselves fresh in peoples' minds, but has since moved away from this communications model. It gave up trying to compete on the basis of how many releases it could put out, and instead focused on quality and detail of analysis. Its releases, whether in the form of new reports, opinions, backgrounds, or research projects, grew longer but

---

<sup>58</sup> Ibid.

less frequent. Many of its assessments and reports are commissioned by private companies or contain classified material for the Department of Defense, and as such are not made available to the public.

As the CSBA has grown in profile, it has remained fairly constant about its overall message as well as its size. The CSBA has maintained its small size for a number of reasons. In the think tank industry, large is not necessarily better. Larger think tanks develop hierarchies that force those at the top into spending most of their time managing the organization. As one senior CSBA fellow said: "Small is good for an organization like this; we can control it." In larger operations, the message of the think tank often gets distorted because of a higher turnover rate and the difficulty of getting competing analysts to agree. Large think tanks become more hectic as they grow. They almost invariably move into new areas that were not traditionally affiliated with the organization. The Council on Foreign Relations for example, has experienced such growth and has moved into a position where it holds policy views on a number of peripheral areas in regards to their traditional strengths including the media and public opinion, the environment, and the promotion of science and technology.<sup>59</sup>

On the other hand, growth and turnover can also yield the opposite effect. As think tanks strive to stay relevant and engaged in the policy discussions that are most popular during a certain period, traditional strengths can erode as emphasis is placed elsewhere.

As a resource for the print and broadcast media, the CSBA has developed a reputation for providing analysis on short notice. They do this so that their opinions can make it into larger stories pertaining to long-range military preparedness and national

---

<sup>59</sup> Council on Foreign Relations < [www.cfr.org](http://www.cfr.org) > (Retrieved 24 May, 2005).

security issues. As a former *Congressional Quarterly* journalist said, "With the numbers offered by the CSBA, you could take them to the bank. Sure, I double-checked them as any good journalist would, but they were always bang-on, good numbers." In 2001, quotes from CSBA analysts made it into *USA Today*, *The Washington Post*, *The Wall Street Journal*, *The New Republic* and *Business Week*, as well as a collection of regional newspapers.<sup>60</sup>

Clearly, the CSBA is only one of many sources to which the media can turn for quotes and analysis about defense and security related matters. In the opinion of the CSBA staff, the best organization that is currently providing analysis and work on these matters, other than the CSBA, is the Center for Strategic and International Studies (CSIS). Also centrally located in Washington D.C., the CSIS is a much larger organization with a list of 190 researchers at its disposal.<sup>61</sup> It does work on similar security related topics in the same non-partisan, objective manner as the CSBA.<sup>62</sup>

As Donald Abelson and Andrew Rich have shown, a think tanks' ability to be objective can be, and frequently is, compromised for a long list of reasons.<sup>63</sup> One of those, logically, is the funding of the think tank itself. As conservative think tanks began to flourish in Washington D.C. in the 1970s, many were strictly funded by large conservative backers who wanted to promote their political ideals. They would create foundations, which had a different tax status, and then use them to funnel money to think tanks, which rely heavily on their financing. Those think tanks, often under bland names

---

<sup>60</sup> Center for Strategic and Budgetary Assessments Annual Report 2001, 12.

<sup>61</sup> "CSIS at a glance," Center for Strategic and International Studies  
< <http://www.csis.org/about/index.htm#1> > (Retrieved 5 July, 2005).

<sup>62</sup> Another popular think tank that does work on the military is Frank Gaffney's Center for Security Policy [www.centerforsecuritypolicy.org](http://www.centerforsecuritypolicy.org), but it is strongly associated with neo-conservative movement and does do the kind of detailed analytic work that the CSBA and CSIS do.

<sup>63</sup> See Donald Abelson's Do Think Tanks Matter? Assessing the Impact of Public Policy Institutes (Montreal & Kingston: McGill-Queen's University Press, 2002).

that disguised their political orientations, produced scholarly looking reports that really just reflected the original beliefs of the wealthy individual founders.<sup>64</sup>

As mentioned earlier, a major hurdle to starting a think tank is getting the financial backing to cover the overhead costs of running such an organization. This is especially difficult if the think tank is trying to be impartial and academic because it will resist the temptation to take large donations from private donors who have particular political agendas. For small think tanks like the CSBA, in order to fund projects, be they assessments, reports, or new studies, it must find a donor who is ready to pay for such work. Since the end of the Cold War, everyone doing think tank-based work on defense and national security has noticed a drop-off in funding. Without the omnipresent threat that the Cold War provided, fewer people have been ready to fund projects. Even the September 11th, 2001, attack has not generated a return to Cold War-level funding. It is therefore a challenge to match donors still interested in defense and national security questions with analysts looking for funding for their work.

In its current form, the CSBA is funded by a mix of government, individual, corporate, and foundation money. Since 1995, that funding balance has tended to shift between 60 percent private money and 40 percent government money, to 60/40 the other way simply depending on the year.

Regarding corporate money, only a specific type of company is ready to pay for the type of future-based assessment reports the CSBA is commissioned to do. A core group tends to provide most of the funding. On a project that looks at, say, long-range strike capabilities, funding might come from the likes of Boeing, General Dynamics, Lockheed Martin, and Northrop Grumman. Aware of the difficulties that could arise from

---

<sup>64</sup> See also Paul Krugman's "Design For Confusion," The New York Times 5 August 2005, A19.

promoting transformation while taking money from the companies that rely on the current military's spending to operate, the CSBA does not publish reports on specific weapons such as long-range bombers. It will produce a more general report on the future of long-range capability, for example. The CSBA staff have found that while the companies may not like assessments that call for a discontinuation of some of their products, they accept the work once they see and understand the diagnosis behind the decision.

Private money also comes in from foundations that support their work. The Ford Foundation, Rose Foundation, MacArthur Foundation, and Rockefeller Family Fund have all contributed. Two of their largest supporters are the Smith Richardson Foundation and the Lynde and Harry Bradley Foundation. The CSBA was the fifth largest recipient of grants from the Smith Richardson Foundation between 1996-2003. The donations over that period totaled \$3,289,470.<sup>65</sup> The foundation espouses a vision of foreign programs to advance "U.S. interests and values abroad."<sup>66</sup> Observers of the foundation consider it to be strongly conservative.

The Lynde and Harry Bradley Foundation, described as America's "largest and most influential right-wing foundation,"<sup>67</sup> annually funnels millions of dollars to the conservative American Enterprise Institute and the Heritage Foundation. Authors John Micklewaite and Adrian Wooldridge in their book *The Right Nation: Conservative Power in America*, describe the Bradley foundation as one of the most important conservative

---

<sup>65</sup> "Recipients by amount granted by the Smith Richardson Foundation," Media Transparency < [http://www.mediatransparency.org/search\\_results/recipientsoffunder.php?providerID=6](http://www.mediatransparency.org/search_results/recipientsoffunder.php?providerID=6) > (Retrieved 1 June, 2005).

<sup>66</sup> Smith Richard Foundation, "Mission Statement" < <http://www.srf.org/> > (Retrieved 1 June, 2005).

<sup>67</sup> "The Lynde and Harry Bradley Foundation: Funder Profile," Media Transparency < <http://www.mediatransparency.org/funderprofile.php?funderID=1> > (Retrieved 31 July, 2005).

foundations in America.<sup>68</sup> The Bradley family is also one of the constant annual donors to the CSBA.

The analysts at the CSBA are not oblivious to the reputation of their donors. Their response is twofold. One, which can be supported by looking at the list of recipients from these specific foundations, is that while the donors may have a conservative reputation, they also give to a long list of charities, universities, and other projects. Secondly, no CSBA project has majority funding that comes from any one corporate or foundation source. A government project may be paid for entirely by that government agency but a private project must compile a list of donors where no one donor provides majority funding. Despite the agendas that can be construed for many of its donors, the CSBA strives to maintain its impartial agenda and tries not to be swayed by the sources of its funding.

---

<sup>68</sup> John Micklethwait and Adrian Wooldridge, The Right Nation: Conservative Power in America (New York: The Penguin Press, 2004), 206.



## Ch.4) Transformation and the CSBA vision

### 4.1) Revolution in Military Affairs

The long history of technological adaptation in the military has recently gone through a number of name changes that should be explained. The Red Army of the Soviet Union first identified the period of change that the ONA and the CSBA believe began in the late 1970s.<sup>69</sup> ONA analysts tracking the writings of Soviet military theorists in the late 1970s began to believe that a period of major change in warfare was underway.<sup>70</sup> They themselves began intellectualizing and writing about it, at first in response to the ideas that were expressed in the Soviet writings.<sup>71</sup> The changes were first called 'military-technical revolution.' That term was later changed to 'revolution in military affairs', "primarily as a consequence of the tendency on the part of some to equate the revolution primarily (and, in some cases, exclusively) with advances in technology."<sup>72</sup> Both terms are borrowed from the Soviet writings. What constitutes an RMA and how they have altered the course of not only military affairs, but also international relations more generally, is the topic of this section.

By any measure, the U.S military is far superior in numbers and might than any other force in the world. What concerns the CSBA analysts are the weaknesses in the American operations and how they could be attacked, thereby vitiating much of

---

<sup>69</sup> Andrew Marshall's foreword in Andrew F. Krepinevich, The Military-Technical Revolution: A Preliminary Assessment (Washington D.C.: Center for Strategic and Budgetary Assessments, 2002).

<sup>70</sup> Ibid.

<sup>71</sup> Ibid.

<sup>72</sup> Andrew F. Krepinevich, The Military-Technical Revolution: A Preliminary Assessment (Washington D.C.: Center for Strategic and Budgetary Assessments, 2002), ii.

America's advantage. As senior analyst Robert Work points out, "At the start of the 27-year Peloponnesian War, Athens had a great advantage over Sparta, which had no navy, but Sparta eventually emerged as the victor."<sup>73</sup>

The CSBA defines a revolution in military affairs (RMA) as follows:

*Military revolutions are major discontinuities in military affairs. They are brought about by changes in military relevant technologies, concepts of operation, methods of organization, and/or resources available, and are often associated with broader political, social, economic, and scientific revolutions. These periods of discontinuous change have historically advantaged the strategic/operational offense, and have provided a powerful impetus for change in the international system. They occur relatively abruptly—most typically over two-to-three decades. They render obsolete or subordinate existing means for conducting war.*<sup>74</sup>

There have been at least six periods over the past 200 years that have displayed the necessary discontinuities to be categorized as RMAs. Briefly, the first was the Napoleonic Revolution, which introduced universal conscription, the notion of 'corps', all-weather roads and more mobile artillery. Those changes all contributed to transform military tactics.

Secondly, between 1840 and 1870 the railway and the telegraph transformed the speed at which military affairs took place. It allowed statesman to have a better sense of what was occurring and the means to shift large numbers of soldiers to distant areas quickly.

At the turn of the 20th century the completion of dreadnoughts and submarines, with their ability to project force much further, ushered in a full transformation of naval tactics and the third RMA.

---

<sup>73</sup> Robert D. Kaplan, "The Next Cold War," *The Atlantic Monthly*, Vol. 295, No. 5, June 2005, 55.

<sup>74</sup> "Revolution in Military Affairs," CSBA Online <<http://www.csbaonline.org/>> (Retrieved 27 May 2005).

The German 'blitzkrieg' during WWII is perhaps the most insightful example of an RMA. During the interwar period, the Germans, French, and British invested a comparable amount in defense and defense-related areas. The French worked on improving their ability to fight trench warfare, an example of preparing to fight the last war. The Germans on the other hand, made widespread use of new technologies and experimentation. This new form of attacking made the old set of technology and tactics practically useless, as shown by the easy early victories over the French, British, Dutch and Belgian armies. It is this example that is cited most often by CSBA personnel who want at all costs to make sure that America's future military operates, experiments, and executes in the way the Germans did – not the French.

WWII saw another RMA, this one at sea involving the Navy and its use of longer-range strikes and aircraft. Aircraft were modified and operations altered in order to have large numbers of aircraft aboard naval vessels. These vessels could now do combat with enemies with whom they did not have visual contact. By 1943, America had put together a fleet of carriers that forced other countries to alter their strategies.

The sixth and final RMA, before the one we are currently undergoing, was the nuclear revolution. Starting in the middle of WWII, the nuclear revolution brought the prospect of widespread societal destruction into the strategic thinking of world leaders. As with all RMAs, new doctrines, tactics, technology and thinking appeared quickly in response to the latest discontinuity in military affairs.

A common misperception is that a RMA occurs whenever there is a significant change in fighting capability and that the revolution is caused exclusively by the change in technology. To be sure, a RMA involves the capacity to exploit emerging technologies on the military's behalf, yet it is only one of four components. "Historical examples of past military-technical revolutions make clear that technological change by itself is insufficient to bring about a military-technical revolution."<sup>75</sup> As Krepinevich wrote on behalf of the ONA in 1992, "What is revolutionary is not the speed with which the change takes place, but rather the magnitude of the change itself."<sup>76</sup>

The CSBA vision for transformation has a number of interrelated parts, all geared towards achieving a 21st-century military that has stayed abreast of the RMA it first identified as early as the late 1970s. The philosophical purpose of transformation is clear: the maintenance of American military supremacy through a reshaped military that allows no other country to surprise the United States, thereby ending its dominance.

As CSBA analysts are prone to write, history is replete with empires that thought their dominance was permanent, only to decline rapidly and be surprised by a new foreign force with superior capabilities and doctrine. Maintaining supremacy requires transformation because the historical examples of RMAs show that new technologies coupled with improved operations can quickly provide a country with military superiority.

One of the clearest examples of such a possibility is transformation's emphasis on space. The creation of U.S. Space Command is a recognition that if space is to be militarized America must be there first. "If a less liberal power such as China does so

---

<sup>75</sup> Andrew F. Krepinevich, The Military-Technical Revolution: A Preliminary Assessment (Washington D.C.: Center for Strategic and Budgetary Assessments, 2002), 1.

<sup>76</sup> Ibid, 3.

instead, then American dominance will be particularly short-lived, no matter how successful the war on terrorism.”<sup>77</sup> The reference to the war on terrorism, though, exemplifies how difficult it is to maintain such dominance over long stretches. The logistical, time, and resource problems associated with focusing on numerous different threats at once only compounds the trouble and amplifies the need for a successful 21st-century American military. “The goal in exploiting a military revolution is not to become more effective at the kinds of warfare that are passing into history but to dominate the military competitions that will define the emerging conflict environment.”<sup>78</sup> The proposed means through which to achieve the end goal of military dominance in future conflicts, according to the CSBA, is a full transformation of the U.S. military.

#### 4.2) Transformation

So then, after all, what precisely is military transformation and what does it entail? Transformation is an order of magnitude change, which, for the military, means alternative kinds of force structures, doctrines, technology, and organization. It is the response to the RMA that the ONA first saw coming in the late 1970s and believes is occurring now. Transformation occurs when you move an organization that is in one form and alter it so that it operates completely differently than it did previously.

Technology is pushing these proposals to transform the military but large-scale changes will be required in areas such as tactics, doctrine, organization, and operations. Simply

---

<sup>77</sup> Robert D. Kaplan, “Supremacy by Stealth,” The Atlantic Monthly, Vol. 292, Issue 1, July/August 2003, 83.

<sup>78</sup> Andrew F. Krepinevich, “The Unfinished Revolution in Military Affairs,” Issues in Science and Technology, Vol. 19 Issue 4, Summer 2003, 65.

improving technologically will result in your forces evolving *with* the technology.

Transformation calls for a revolution, not evolution, in what those forces look like and how they operate. In other words, it emphasizes discontinuous change over incremental change. Technologically, transformation relies heavily on a new set of tools that would allow America to stay ahead of what is occurring in other countries. This tool set is centered around extended-range power projection, network-based forces, stealth, and unmanned systems. Broadly, these are the areas where there is some degree of consensus among those writing about transformation.<sup>79</sup>

In response to a question about transformation, there are a number of common answers that reoccurred in interviews with Pentagon officials and other military personnel. A brigadier general said that, "transformation is whatever you want it to be." Others have said that they would be transforming if they were not so busy and had been given the proper funding to do so. Still more insist that the improvements they are making are transformational, and that transformation is therefore well underway, and not to worry.

A more careful examination of the literature on the U.S. military's efforts to transform shows that by 1994 the term 'transformation' was being regularly used in planning circles. Thomas P. Barnett, now at the Naval War College, believes that the concept of "transforming" the military took root in the mid-1990s. But, he notes, the idea scared many people, such as many in the Army, who felt that the next-generation military would operate without large numbers of ground forces.<sup>80</sup> There can be no doubt that

---

<sup>79</sup> See Douglas A. Macgregor, Transformation under fire: Revolutionizing how America Fights (Westport: Praeger Publishers, 2003).

<sup>80</sup> See Thomas P.M. Barnett, The Pentagon's New Map: War and Peace in the Twenty-First Century (New York: Berkley Books, 2004), 97.

trying to affect large-scale change in any organization will encounter some resistance by those who do not see a role for themselves within the newly altered organization. Yet, the military has a long history of both secular and politically induced change. As one respondent expressed, it is the role of visionaries to override the institutional resistance and move organizations towards changing themselves.

The term 'transformation' is used in different ways depending on who is using it. It is sometimes, although rarely, used to replace the term 'revolution in military affairs.' More often, it is to describe the discontinuous changes in technology, doctrine, organization, and operation that will allow the U.S. military to stay abreast of rapid change with the goal of dominating future conflicts. Transformation acknowledges that a revolution in military affairs (RMA) is underway and attempts to provide an approach for dealing with the RMA effectively.

The American military has a long history of relying on technology. While transformation adopts a number of evolving technologies, the armed forces have already been conditioned to looking to technology to assist them. As one ONA analyst explained, during the Cold War the American position in Europe was very vulnerable to the sheer number of enemy forces. He noted, "since they could not compete with the sheer numbers the Soviets had, they began to widely embrace technology."

For many decades, corporations in America looked to the Department of Defense for breakthroughs in technology.<sup>81</sup> Recently, private contractors doing independent research, not initiated by the Department of Defense, have had a growing impact on what

---

<sup>81</sup> The Internet was invented by a Pentagon organization called the Advanced Research Projects Agency (ARPA), which spent taxpayer dollars to develop a system (initially called ARPAnet, later called the Internet) that connected big research computers around the country. See Steven Segaller's Nerds 2.0.1: A Brief history of the Internet (Eugene: Oregon Public Broadcasting, 1998), for more on the relationship between the Department of Defense and technology innovation.

sorts of technologies the services utilize. Transformation will therefore have to find a way to stay abreast of rapid technological change, which if adopted by an opposing force, could make a great deal of the traditional American military technology obsolete.

In regards to new aspects of technology, General Fogleman of the U.S. Air Force was one of the key players pushing for a greater technological capability in space.<sup>82</sup>

Analysts have long touted the potential of putting weapons in space. What Fogleman and others have pressed for, a message that has arguably not reached the general public, or Congress for that matter, is that space should be utilized regardless of whether it is weaponized. "The military has been using space for a long time and that isn't going to change," said one former Air Force pilot. There are a number of political hurdles to overcome before weapons can be put into space. But importantly, those hurdles do not apply to many of the technologies that a transformed military could have in space.

Regardless of what other nations may think about it, transformation involves a greatly increased role of space in military operations. Simply put, the *Global Engagement* vision and the Long-Range Plan of the U.S. Air Force both state: "We are an Air Force today transitioning to an air and space force on an evolutionary path to a space and air force."<sup>83</sup> In a number of interviews, respondents said they were fairly pleased with the progress that they were making in regards to space.

As crucial as technology is to transformation, the other three components of transformation cannot go overlooked. New operations, organization, and doctrines are also required. As one Pentagon official stated, "The technology is the easy part if it just means more toys for the boys." As the RMA that is most often cited, blitzkrieg provides

---

<sup>82</sup> Colin Campbell and Michael Barzelay, *Preparing for the Future: Strategic Planning in the U.S. Air Force* (Washington D.C.: Brookings Institute Press, 2003).

<sup>83</sup> Ibid, 56.



examples of developments in these other areas. The use of tanks and planes simultaneously with radio communication created a new form of organization. The quick and deep penetrations through narrow gaps in enemy lines and the air superiority that went with it formed a new operational concept. Finally, the way the Germans used mission-oriented tactics changed the way military organizations behaved. So technology may be the most visible sign of transformation, but it must bring with it changes in other areas to profoundly alter, or transform, military affairs.

What has caused a great deal of tension within military planning circles is the lack of a clear, detailed vision of how and where to transform the services. The Office of Force Transformation, the body charged with providing specifics, currently lacks a strong individual to the head the office and suffers from having no budget control. This lack of budget control means that it can only make suggestions. It has also been seen as unwilling to be confrontational enough with the different services.

The services themselves are prone to arguing both that they are transformational by nature and therefore do not need any outside guidance, and that they are conducting 'transformation in the rear-view mirror', by saying how transformational their approach was to the last mission. The Office of Joint Force Development is charged with trying to get the services to integrate some of their operations in order to find synergies and be able to adapt to new threat concepts. One member of their staff sees a lot more dialogue than action. "People will tell you that we are in the transformational business, the keyword transformation is misused to a great extent. When you look at what transformation is really all about, we are doing very little of it in very few fields." The CSBA has been sounding a similar notion for many years, that very little was being done to change the

U.S. military fundamentally. With thinking that originated at the ONA, it has brought forth a detailed vision of what needs to change and what the military needs to look like once those changes have taken place.

#### 4.3) The CSBA vision of transformation

The general outline of the CSBA vision of transformation can be traced to the work executive director Andrew Krepinevich did while at the ONA. One of the seminal papers put forth by the office was written, in large part, by Krepinevich—*The Military-Technical Revolution: A Preliminary Assessment*.<sup>84</sup> Originally circulated in 1992, it was made available to the public in 2002. Andrew Marshall, the infamous head of the ONA, called the work “perhaps the best-known assessment prepared by the ONA,” and a work that had “held up well over time.”<sup>85</sup>

The CSBA has continually been in front of the movement to push for transformation as a crucial element to U.S. national security. In doing so, it has been highly critical of government reviews that have attempted to look at the future and make recommendations for large changes. It criticized both the Clinton administration’s bottom-up review and the Commission on Roles and Missions in 1995 as documents that essentially gave America a “smaller but similar military,” according to one CSBA analyst. It took out ads in *Defense News* to criticize the 1997 Quadrennial Defense Review for not realizing the revolutionary changes taking place around them. They called its vision, “a military still centered overwhelmingly on short-range fighters, tanks, and

---

<sup>84</sup> Andrew F. Krepinevich, *The Military-Technical Revolution: A Preliminary Assessment* (Washington D.C.: Center for Strategic and Budgetary Assessments, 2002), i.

<sup>85</sup> Ibid.

aircraft carriers—measures of military power that first reached maturity during World War II.”<sup>86</sup> They leveled similar criticisms at the 2001 QDR because it did not go nearly far enough in proposing large changes to the way the services were conducting their training and purchasing. In the view of the CSBA, only the National Defense Panel’s 1997 report *Transforming Defense: National Security in the 21<sup>st</sup> Century*<sup>87</sup>, on which the CSBA had input, goes far enough in identifying the magnitude of the changes it feels must take place.

Two other widely circulated papers were seen as important by CSBA interview respondents: papers that essentially reiterated what was written in the 1992 ONA assessment but not published in its entirety until ten years later. “Calvary to Computer: The Pattern of Military Revolutions,” appeared in *The National Interest* in 1994.<sup>88</sup> “Recasting Military Roles and Missions,” appeared in *Issues in Science and Technology* a year later.<sup>89</sup> Those papers, published in the years directly after Krepinevich left the ONA, argued many of the same points that the ONA had been discussing but did so through a non-profit think tank. This helped establish the CSBA as one of the foremost experts on military restructuring and the pressures behind it.

Corporate America is replete with companies who once seemed as dominant as the U.S. military is today, only to lose their advantage quickly and unexpectedly to other companies. In fact, in the early 1990s, senior corporate executives from Xerox, AT&T, and IBM met with senior Pentagon officials to discuss how they had fallen from

---

<sup>86</sup> Center for Strategic and Budgetary Assessments, “QDR Fails To Boldly Confront Future,” *Defense News*, 16 June, 1997.

<sup>87</sup> “Transforming Defense: National Security in the 21<sup>st</sup> Century,” *Final Report of the National Defense Panel* < <http://www.dtic.mil/ndp/FullDoc2.pdf> > (Retrieved 26 June 2005).

<sup>88</sup> Andrew F. Krepinevich, “Calvary to Computer, The Pattern of Military Revolutions,” *The National Interest*, Fall 1994, 30-42.

<sup>89</sup> Andrew F. Krepinevich, “Recasting Military Roles and Missions,” *Issues in Science and Technology*, Vol. 11 Issue 3, Spring 1995, 41-49.

seemingly invincible positions.<sup>90</sup> These companies had injected a great deal of money into research and development and hired the most talented employees that they could find,<sup>91</sup> yet were unable to maintain their control or supremacy. The CSBA believes that a dominant position now is no guarantee of future dominance when quick technological advances could allow competing countries to seize upon a new idea before America does. The CSBA does not believe America's decline from its hegemonic position is inevitable. America can keep its position as long as it does not become complacent and fail to reform itself to meet future threats.

Another impetus behind the drive towards a transformed military is the growing belief that America and its allies will fight what has become known as 'asymmetrical warfare' —a non-traditional form of combat where the opponent, overmatched by the size and power of the U.S. military, fights using non-traditional techniques that pose a unique challenge to an established defense force. The attacks of September 11th, 2001, using airplanes, and the bombings of the USS Cole, are both examples of asymmetrical warfare being used to attack American positions. If America is focused on asymmetrical warfare as the future, "it isn't going to come from rising near-peers like China."<sup>92</sup> The first attack of a conflict with China may be a surprise attack more reminiscent of an asymmetrical fighting tactic, but the more that China modernizes its armed forces in an attempt to move into America's sphere of influence, the less it becomes an asymmetrical threat.

---

<sup>90</sup> Ibid, 41.

<sup>91</sup> Ibid.

<sup>92</sup> Thomas P.M. Barnett, The Pentagon's New Map: War and Peace in the Twenty-First Century (Berkeley Books: New York, 2004), 93.

Transformation proponents fear that the mere modernization of the armed forces does not go far enough in responding to the revolution in military affairs they see taking place. They see little value in becoming more effective at the kinds of warfare “that are passing into history.”<sup>93</sup> Fighting the last war more effectively does nothing to assist America in fighting the new kind of war that they see around the corner. The CSBA wants a hegemonic America that cannot be usurped by new forms of combat that their opponents might devise. It wants nothing less than to “dominate the military competitions that will define the emerging conflict environment.”<sup>94</sup>

The next section is a short rundown of some of the cornerstones of transformation that the CSBA has worked on defining. The summaries provided are exactly that—summaries. While the CSBA says that it does not do programmatic prescriptions, many of its documents, especially those that deal more directly with analysis of the defense budget, do provide a high level of detail. Take this one sentence from a 2001 document: “The Navy should develop and purchase a small number of Streetfighter combatants and convert four Trident SSBNs to SSGNs, while continuing to develop the CVX and DD-21.”<sup>95</sup> This level of detail is not typical of all documents, but the CSBA has written so extensively about transformation that it has refined and honed its vision to a point where there is little room to maneuver around their recommendations.

---

<sup>93</sup> Andrew F. Krepinevich, “The Unfinished Revolution in Military Affairs.” Issues in Science and Technology, Vol. 19 Issue 4, Summer 2003, 65.

<sup>94</sup> Ibid.

<sup>95</sup> Steven Kosiak, Andrew Krepinevich and Michael Vickers, A Strategy for a Long Peace (Center for Strategic and Budgetary Studies: Washington, D.C., 2001), 5.

#### 4.4) Experimentation

Transformation counts on the ability to more rapidly put together different force structures to encounter the changing or emerging threats. A force structure is simply the mix of personnel and assets (ships, planes, carriers, tanks, etc.) that comprise a mission. While the idea of altering a force structure may seem like a simple concept, the quicker, more flexible, more versatile force that transformation advocates wish to put forward is greatly hindered by the continual purchasing of expensive large-ticket items that may be of questionable usefulness in the future. In a situation where the military budget of the country is not infinite, money used for expensive platforms cannot be put towards current operations or experimentation work in the field to prepare for possible future conflicts.

Experimentation, in the broader sense, means diversifying your strengths so that they are not combined in a small number of platforms. It also means divesting yourself of capabilities that are a poor fit for the future strategic environment. This incorporates much of what was meant by the term 'skip a generation of technology,' according to a CSBA interview respondent. Experimentation, if done properly, will identify the capabilities and force structures that will be best suited to different tasks. The CSBA believes the services need to be more willing to use experimentation to see in real field exercises what new tools commanders are using and which ones they are leaving behind. In order to find the money to purchase and support those new capabilities, the military must identify areas that are a poor fit with its future vision. It must divest itself of those items to free up the necessary money for more transformational capabilities. As a number of sources have identified, the Army is investing very heavily in new systems, often

systems that are the dominant systems being used today. What concerns those who originally talked about skipping a generation is that those systems could depreciate very quickly in value because RMAs bring forth shifts in the kinds of military systems that win conflicts.

Which transformational capabilities might be most heavily relied upon in a future conflict is not known. This is a point the CSBA attempts to solidify in the minds of its readers. It has made projections about what future conflicts are likely to look like (anti-access techniques and power projection by opponents, asymmetrical attacks, technologically empowered groups and states), but the techniques used and the technologies that will be required are not fully known. The CSBA proposes widespread experimentation that includes everything from looking at different troop formations on the ground to the best use of satellites to support those ground forces.

So, while transformation adopts new information-based operating concepts and technologies, the mix of capabilities is still uncertain. As such, the CSBA is trying to direct policymakers towards more effective current and short-term defense budgeting. The procurement strategy of the Department of Defense, as a way to support experimentation and avoid relying heavily on too few capabilities, should focus on "limited production runs of a wide range of systems."<sup>96</sup> This type of management is not intended to save money but to allow for many systems to be available on short notice. This way, innovation is supported but no one set of capabilities is given large amounts of funding to the exclusion of others. When technology is changing quickly amid a great deal of uncertainty about what an adversary might do, having as broad a range of tools as

---

<sup>96</sup> Steven Kosiak, Andrew Krepinevich and Michael Vickers, A Strategy for a Long Peace (Center for Strategic and Budgetary Studies: Washington, D.C., 2001), 4.

possible is preferable when the threat level is low. Once adversaries have shown themselves, production can be increased to support the capabilities that will be needed in that new conflict.

Experimentation is another area where the CSBA cites the way in which the Germans developed 'blitzkrieg.' The Germans were experimenting with items that were still being invented. The Germans did a great many experiments, many of which ended in failure. In doing so they determined the right mix of communications, land forces, and air capacity to quickly overwhelm their opponents. In contrast, a number of analysts argued that the war games conducted by the services are structured in such a way as to stifle innovation and experimentation. This results in games where the results are essentially fixed. More resources need to be provided to test ways of altering U.S. overseas presence, new styles of war games, improving technical innovation in defense related spheres, and generally supporting transformational activities.

#### 4.5) Network-centric warfare

'Network-centric' warfare involves the use of computing technologies to make communications networks the locus around which military planning revolves. In contrast, 'platform-centric' warfare focuses on dominant assets such as ships and planes. In the 1990s, the new information technology led by use of satellites, fiber-optic cables, and much smaller computing devices, were rapidly becoming part of everyday life for many Americans. There was clearly a need to use this technology to benefit America's military. The goal, according to a CSBA document, was to "exploit the potential of rapidly



advancing information-related technologies that seemed to be driving dramatic change in so many other areas of human endeavor.”<sup>97</sup>

As forces become lighter, move more quickly, and are more dispersed, there will be an increasing reliance on network-based communications to unify efforts both within services and between services. The move towards ‘network-based forces’ will rely heavily on experimentation. If operatives in the field do not completely trust their new network-based equipment they have a tendency to turn it off when they come under fire. Downloads can take too long and information can be delayed, flawed, or irrelevant, all of which does nothing to help those in the field. Pictures in ads of soldiers with their laptops open in the field are also slightly misleading. Technology will be small, with each item limited in scope, such as GPS monitors to assist with locations. Communications will use satellites and fiber-optic cables the way that cell phones do, not the way laptops access wireless networks. The network-centric model still has a long way to progress. Still, the use of satellites to assist in navigation and communications indicates that increased connectivity is achievable and of potential great assistance to those in the field.

#### 4.6) Changing cultures

If transformation is to become the priority the CSBA forcefully argues it should be, new career paths that focus on innovation, experimentation, and interoperability must be established. Long on military experience, CSBA analysts understand that the implementation of their thinking is heresy to the dominant thinking in military planning

---

<sup>97</sup> Ibid.

circles. A change in culture represents a similar challenge to the dominant culture that drives each of the services.

The CSBA vision hinges, in part, on the notion that the military cannot continue to rely on large forward bases. With this in mind, they advocate improvements in long-range strike capabilities through missiles, UAVs, bombers that can fly long distances, and other tools. Yet, as Krepinevich noted in a 2000 PBS interview, the air force is in the process of modernizing its short-range fighters, which rely completely on carriers or forward bases to operate abroad.<sup>98</sup> As Colin Campbell and Michael Barzelay, as well as former ONA analysts have explained, the dominant Air Force culture is one where nearly all senior positions are held by fighter pilots. This is to the exclusion of some of the service members who flew bombers. They inherently resist change that moves them away from fighters such as the F-22.<sup>99</sup> The Navy and Army also have dominant cultures that are resistant to moving away from techniques that have been successful, especially when a new threat that requires a transformed force has not overwhelmingly presented itself.

The dominant culture in any organization is difficult to change. Senior leaders achieved their positions most often not by being innovative but by perfecting practices that were already in place. Therefore, a change in culture towards a more pro-transformation culture requires two important steps. The first, and somewhere where the CSBA has worked very hard, is to convince the world's best military that the challenges it faces tomorrow will be structurally different from those it currently faces. Without this understanding, the impetus behind the training and budgeting decisions required will not

---

<sup>98</sup> Andrew F. Krepinevich, "Interview given on the future of war," *PBS Frontline: the future of war*. < <http://www.pbs.org/wgbh/pages/frontline/shows/future/interviews/krepinevich.html> > 2000 (Retrieved 30 May 2005).

<sup>99</sup> See Colin Campbell and Michael Barzelay, *Preparing for the Future: Strategic Planning in the U.S. Air Force*, (Washington D.C.: Brookings Institute Press, 2003).

occur. Secondly, if you can get more people like the Air Force's General Fogleman, senior leaders who believe in transformation, they must put in place incentives and new careers path to coincide with the newly transformed military. The CSBA advocates using the ability to understand and lead transformation efforts as one of the key criteria in the selection of senior leaders including the Chairman of the Joint Chiefs of Staff, the service chiefs, and the vice chiefs.<sup>100</sup> If the culture remains by-and-large risk-averse transformation will be less likely to take hold.

#### 4.7) Alternatives to forward bases

Many of the ideas that characterize transformation, from increased long-range strike capabilities, the use of space, and the use of light and lethal troop groupings, stem in part from what analysts are beginning to see developing currently. The notion of smaller, more connected and more empowered groups of soldiers is partly in response to the realization that the massing of troops together in most instances is not the safest strategy. "It's dangerous, it's vulnerable, and it was designed to make supervision easier," said one analyst. It takes a long time to get large numbers of troops into a massed position and that position, once established, becomes very vulnerable to an aerial attack. A widely dispersed troop formation makes such an attack impossible and the linking of small groups together with technology makes small formations a viable option.

The increased mobility provided by transformation, coupled with the increased long-range capabilities of the Air Force and segments of other services, will lessen the

---

<sup>100</sup> Steven Kosiak, Andrew Krepinevich and Michael Vickers, A Strategy for a Long Peace (Center for Strategic and Budgetary Studies: Washington, D.C., 2001), 3.

need for large forward bases. In a transformed military, the flexibility, speed and range of U.S. forces could be expected to make up for a reduction in the number and size of foreign bases. This development would make America's responses less foreseeable, frustrating those enemies who want to utilize anti-access strategies. The minimum six-month build-up of resources that could be seen on the southern Iraqi border in 2002 and 2003 overly exposes American forces in hostile regions and makes America's actions less reactive and more predictable.

In the same way, the emphasis on space surveillance and long-range strike capabilities originates from a view that large concentrations of force in a foreign area such as America's forward bases, are extremely vulnerable. An attack on such a forward base, as part of what is termed 'an anti-access strike', could quickly impede a U.S. attack if America were trying to project force through the use of its forward bases. Analysts believe that the proliferation of ballistic and cruise missiles, as well as asymmetrical attacks, coupled with the displeasure many locals have with such bases, make them too exposed to be part of America's future military structure. As Robert D. Kaplan explains in his analysis of a potential conflict in the Asia Pacific arena: "The problem with big bases in, say, Turkey—as we learned on the eve of the invasion of Iraq—is that they are an intrusive, intimidating symbol of American power, and the only power left to a host country is the power to deny us use of such bases."<sup>101</sup>

There will be increased use of smaller forward bases that in times of peace are far less threatening to the domestic population. These smaller bases will range from those in Central Asia and the Federated States of Micronesia where financial aid is dependent on defense agreements, to even smaller entities. Called 'cooperative security locations',

---

<sup>101</sup> Robert D. Kaplan, "The Next Cold War," *The Atlantic Monthly*. Vol. 295, No. 5, June 2005, 60.

already in place in East Africa and Asia, they rely on informal relationships with the host government instead of formal agreements. The lack of formal agreements allows the host governments to deny their presence even though most senior officials acknowledge their existence.<sup>102</sup> Succinctly, these locations can vary from a corner of a civilian airport, a military airport, or a private airport owned by a local contractor who is a former U.S. serviceman. Where it is not a private airport, the U.S. does military training and humanitarian work with the local military and pays to upgrade local facilities. All this is in exchange for the option to use their facilities on short notice. Cooperative security locations will work in tandem with long-range strike capabilities in a relationship that varies depending on the mission.

Transformation advocates are united in the belief that America must focus on being able to operate without large forward fixed bases. This opens up a number of other ways to project forces on other continents. The Navy will clearly be used more often to project force abroad and serve as a launching pad for American weapons and troops. Now that the U.S. Navy has a virtual monopoly on the world's oceans (leaving aside the aging Russian fleet and 17 new stealthy diesel submarines and three nuclear submarines that the Chinese Navy has announced they will deploy by the end of the decade<sup>103</sup>), it can be used to help project force onto land.

The emphasis on long-range strike capabilities goes beyond the attempt to have Air Force aircraft that can fly further because of anti-access techniques by foreign enemies. It must carry over to the Navy, who recently purchased new attack aircraft that

---

<sup>102</sup> Ibid, 60.

<sup>103</sup> Ibid, 55.

have a range that is shorter, not longer, than the previous models.<sup>104</sup> Transformation, as the CSBA sees it, calls for the Navy to embrace the idea that they will not be allowed at all times to get as close to foreign enemies as they would like. The Navy will have to use new techniques and technologies to achieve similar effects. As well, they will help to deliver the Marines Corps. Finally, long-range strike applies also to the Army. Using rocket artillery as opposed to tube artillery, and using light infantry as opposed to mechanized infantry, would allow the Army to operate more quickly and at a greater distance from the enemy. Understanding the need for long-range strike capabilities due to the unreliability of large forward bases is one of the core components of a CSBA plan for transformation.

#### 4.8) Light but lethal

The notion of using fewer soldiers is one commonly noted aspect of transformation that has been greatly misunderstood. Some Army generals have resisted the whole idea of transformation because they believe it is slanted unfairly towards the other services. They fear there will be more missions like Kosovo, where the Army was not equally represented. Fearing for their own careers and concerned that the belief in technology to solve problems was being pushed too far, they resisted efforts to even discuss transformation. Others have accused the Bush administration of undercutting the recommendations of generals in regards to force structure. The administration believed fewer soldiers would be more efficient and effective. This debate, most often in regards

---

<sup>104</sup> Andrew F. Krepinevich, "Interview given on the future of war," PBS Frontline: the future of war. < <http://www.pbs.org/wgbh/pages/frontline/shows/future/interviews/krepinevich.html> > 2000 (Retrieved 30 May 2005).

to the number of troops in Iraq, has also served to damage the idea of using fewer, but better equipped, soldiers. Importantly, the idea of using far fewer but better equipped and connected soldiers can only be applied so far. As more of the world moves into urban areas and large cities experience urban sprawl, it follows that a greater percentage of combat will take place in those urban environments. As Krepinevich notes: "The Army will likely find itself engaged in more Groznys, Mogadishus, Belfasts, and Port au Princes in the future than rice paddies, mountains and deserts."<sup>105</sup> The impact of these urban engagements is that the urban environment decreases the value of technology because you are fighting in such close proximity with a high number of civilians present. The manpower requirements therefore must go up and the Army, which will want to emphasize technology, must adapt to the increased reliance on the individual soldier in these instances.

Still, the use of light infantry and Special Forces will increase as the military has to move more quickly around the globe. Looking into hypothetical conflicts, the CSBA wrote that, "ground forces may be increasingly centered around formations of highly mobile extended-range non-line-of-sight (LOS) systems."<sup>106</sup> Being out of sight is a continuation of the ideas related to projecting force from afar. The notion of using far fewer troops is a tempting idea, particularly because it is associated with fewer casualties, but it is a projection that has numerous qualifications to it. In addition to the concerns mentioned above, forces will still be needed to occupy terrain when called upon to do so.

---

<sup>105</sup> Andrew F. Krepinevich, "Interview given on the future of war," PBS Frontline: the future of war. < <http://www.pbs.org/wgbh/pages/frontline/shows/future/interviews/krepinevich.html> > (Retrieved 30 May 2005).

<sup>106</sup> Andrew F. Krepinevich, The Military-Technical Revolution: A Preliminary Assessment (Washington D.C.: Center for Strategic and Budgetary Assessments, 2002), 26.

Having the large mechanized systems, such as tanks, also offers protection to ground soldiers who are most vulnerable.

If the forces are to be lighter, more mobile, and more independent, the Pentagon must attract quality people, even in the face of the recruitment problems the Army experienced in 2004 and early 2005. Krepinevich expressed concern even before 2001 that the Army was having difficulty attracting talented young officers to lead in the field. In the words of one current military planner;

*One of the things we need to look at, is recruiting, retaining, developing the best people because that is probably the most precious resource that we have out there. To run a modernization or transformation program, you can't just throw money at that and expect it to happen if you do not have those people.*

As American forces are dispersed in the field, they will be required to implement pragmatic solutions. These plans can best be put in place by “field officers of exceptional character, with hands-on experience.”<sup>107</sup> This is a point driven home in Robert D. Kaplan’s *Atlantic Monthly* article “Supremacy of Stealth.”<sup>108</sup> He discusses the military’s work that often gets ignored in places like Yemen, Columbia, The Philippines and Micronesia. He argues that when given fewer resources, the military can be quite successful if it is guided by exceptional people given wide latitude to make decisions.

---

<sup>107</sup> Robert D. Kaplan, “Supremacy by Stealth,” *The Atlantic Monthly*. Vol. 292, Issue 1, July/August 2003, 80.

<sup>108</sup> Ibid.



#### 4.9) Unmanned Aerial Vehicles (UAVs) & the technical boom

Admittedly, the technological aspect of transformation can appear to have a 'Star Wars' or science fiction bent to it. Transformation, as the CSBA describes it, calls for a great deal of experimentation with a new generation of technology. Some of the technology mentioned is mind-boggling. Micro-robots, micro-satellites, hypersonics, next-generation stealth, and performance-enhancing exoskeletons, all bring to mind visions of the future that many seem too distant to be relevant in current planning circles. The CSBA calls for more financial resources to be put into programs like the Future Years Defense Program to develop a wide variety of new technologies that can be tested and available for new threats.

Included in that list are a new generation of Unmanned Aerial Vehicles (UAVs). The first generation has already been developed, tested, and put to use in Afghanistan and Iraq. Their adoption, primarily by the Air Force which has pushed to make large unmanned aerial systems their domain, shows how this new breed of technology can quickly enter the existing culture. To find people willing to fly UAVs, the Air Force had to make UAV pilots rated flyers. The UAV pilots have become an important element to surveillance and war fighting. Their roles should only grow in the future as UAV technology is accepted and improved. UAVs are both less intrusive and less costly than normal planes and can help with the move towards long-range force projection. UAVs therefore serve as a good example of how entirely new technologies can be adopted by a service, in this case the Air Force, and assist them in moving away from older platforms.

#### 4.10) Costs of transformation

The cost surrounding the task of transforming the U.S. military is a matter of strong debate. The CSBA has argued vehemently that not only is transformation absolutely necessary if America is going to continue to project power internationally, but that it can be done at a manageable cost. As Kaplan has tried to get across to his readers, the need to become lighter and more flexible, while pragmatic, is also driven by the need to operate in dozens of countries in a cost efficient manner: "The American public, burdened with large government deficits, will demand an extraordinary degree of protection for as few tax dollars as possible."<sup>109</sup> In a 2000 interview, Krepinevich held onto the argument that more than money is required for transformation to occur. In his words, unless transformation as a doctrine is embraced, "more money would reinforce the tendency to buy what's already in the pipeline—to improve the Desert Storm force—as opposed to prepare for a transformation force."<sup>110</sup>

The cost of transformation is often mistaken for the modernization costs of current military equipment. The costs associated with new training, experimentation, and alternative force structures are manageable. Better joint operations that are both more agile and more effective do not need to be more expensive. What is placing a great deal of strain on the money that could be put towards transformation is large and expensive modernization technology. Currently the Pentagon has over 80 major new weapons systems in development. The new planes and ships that they are modernizing cost three

---

<sup>109</sup> Robert D. Kaplan, "Supremacy by Stealth," The Atlantic Monthly (Vol. 292, Issue 1, July/August 2003), 79.

<sup>110</sup> Andrew F. Krepinevich, "Interview given on the future of war," *PBS Frontline: the future of war*, < <http://www.pbs.org/wgbh/pages/frontline/shows/future/interviews/krepinevich.html> > 2000 (Retrieved 30 May 2005).

to five times as much as the weapons they are replacing.<sup>111</sup> According to Air Force chief of staff General Jumper, the military “gets only a fraction of the bang for the buck it once did.”<sup>112</sup>

The increase in spending, coupled with a decline in productivity that Jumper cited, poses a particular problem for transformation advocates. The paradox put forth by expensive modernization has been succinctly argued by foreign policy fellows at the Progressive Policy Institute, a think tank affiliated with the centrist wing of the Democratic Party. They say, “more money spent on military business as usual can actually inhibit transformation rather than promote it, because it becomes easier to hide continuity beneath a veneer of change.”<sup>113</sup>

Krepinevich and others fault the Clinton administration for not providing any additional transformation funding, relegating transformation efforts to what the services can do internally on their own accord. Looking forward in 2000, Krepinevich uses the number of General Shinseki who said that transformation efforts would cost between \$40 billion to \$70 billion. That figure is over the next 10 to 15 years in order to create the types of capabilities and forces that he believes are necessary to confront a threat in 2025.<sup>114</sup> Another analysts have said that they believe that five per cent of the total defense budget should be allocated for transformation. That would put the number in the neighborhood of \$20 billion a year. Looking very generally, the total figure is somewhere

---

<sup>111</sup> Tim Weiver, “Arms Fiascoes Lead to Alarm Inside Pentagon,” The New York Times, 8 June, 2005, A1.

<sup>112</sup> Ibid.

<sup>113</sup> James R. Blaker and Steven J. Nider. “Front and Center: Military Transformation: Smoke or Fire?” Progressive Policy Institute.

< [http://www.ppionline.org/ppi\\_ci.cfm?knlgAreaID=124&subsecID=159&contentID=3315](http://www.ppionline.org/ppi_ci.cfm?knlgAreaID=124&subsecID=159&contentID=3315) > Written 27 April, 2001, (Retrieved 14 May, 2005).

<sup>114</sup> Andrew F. Krepinevich, “Interview given on the future of war,” *PBS Frontline: the future of war*, < <http://www.pbs.org/wgbh/pages/frontline/shows/future/interviews/krepinevich.html> > 2000 (Retrieved 30 May 2005).

between \$50 billion and \$200 billion according to one CSBA analyst. Once a new threat is identified, spending would have to be ramped up for programs required to counter the threat. The figure is high, but the CSBA believes that it is both manageable and absolutely essential.<sup>115</sup>

This chapter has aimed to do a number of things. First it introduced the term 'transformation', how it came about, and how it is most commonly used in regards to the U.S. military. It then talked about the six revolutions in military affairs that have been documented over the last 200 years. Those RMAs show how major discontinuities in military affairs can quickly upset the balance of power in the international system. It then introduced the idea that another RMA, first identified by the Soviets, is now underway. As a way to prevent America from being on the losing end of the next generation of changes, it showed how the CSBA advocates for a complete transformation of the U.S. military to cope with the RMA. The CSBA vision in detail is finally summarized and broken down into a number of its key components to give the reader a fuller sense what the CSBA means when it says the military must transform. Lastly, the issue of how much transformation might cost was introduced. In the next chapter, examples will be brought forward about where the CSBA has been influential in the debate around transformation. It will also show where they had hoped to exert influence, but instead ran into world events and policymakers that made implementing transformation much more difficult.

---

<sup>115</sup> In the 2000 presidential campaign, George W. Bush proposed a \$45 billion increase in defense funding over 10 years while his opponent, Al Gore, proposed \$100 billion increase over the same period. In a period where defense budgets exceed \$350 billion, the costs for transformation cited by the CSBA are manageable.

## Ch.5) The post 9/11 environment and impediments to transformation

### 5.1) Impediments to Transformation

In the early part of the 1990s, Krepinevich, with the help of others, produced a detailed outline of what transformation would have to look like. Despite the rigidity with which the CSBA has stuck to its original vision, there is no exact date when it would be possible to say that the idea of transformation took hold. The popularized use of the term within military circles indicates only that the idea has been *acknowledged*, not that it is being *pursued*, and certainly not that it is being pursued in conjunction with the way the CSBA has presented it. Often it was observed that senior military personnel were interested in transformation planning because they did not want their segment of the military to be unaccounted for in the plans for a next-generation force. As one former analyst remarked, "the U.S. military continued to buy one sort of military while operating another. 'Transformation,' or the push to modernize the U.S. military for future threats, was more rhetoric than reality."<sup>116</sup>

The widespread use of the term transformation and its inclusion in senior level military deliberations clearly grew during the 1990s until it was commonplace in the military vernacular by the late 1990s. General Fogleman, the Air Force chief of staff between 1994 and 1997, remarked that upon his ascension to the position of chief of staff, he was surprised by how widely those around him were talking about adapting to a

---

<sup>116</sup> Thomas P.M. Barnett, The Pentagon's New Map: War and Peace in the Twenty-First Century (Berkeley Books, New York, 2004), 107.

revolution in military affairs.<sup>117</sup> After the publication of the *National Defense Panel Report* in 1997, then-Secretary of Defense William Cohen testified before Congress about the report that advocated transformation. So both the military and civilian leadership were using the term in the 1990s; it was just that very little action was taken.

The carefully constructed view by the CSBA of the barriers to transformation does not present all of the difficulties that the services will have in revolutionizing their force. As the technological component of transformation is being phased in, technical problems in real-time battle can quickly lead soldiers and commanders to doubt the usefulness of the newest additions. In Operation Peach, a battle to control a bridge over the Euphrates River on April 3, 2003, the largest counterattack of the Iraqi War occurred in an environment where no information made it to the front lines of the battle. No information reached the troops and they were ambushed repeatedly. Despite plenty of technical advantage behind the front lines, the technology that was suppose to help the military was largely absent on the front lines of this traditional style battle. John Gordon, a senior researcher at RAND and retired Army officer described Operation Peach as, "the way it was done in 1944. The First Marine Division found the enemy running into them, much as the forces have done since the beginning of warfare."<sup>118</sup>

The technological problem was not only an unfortunate flaw but it also put troops in danger. Downloads of enemy positions were said to have taken hours and software locked up, thereby preventing any intelligence from getting through. According to an article in *Technology Review*, once fighting began technology breakdowns became the

---

<sup>117</sup> Colin Campbell and Michael Barzelay, *Preparing for the Future: Strategic Planning in the U.S. Air Force* (Washington D.C.: Brookings Institute Press, 2003), 38.

<sup>118</sup> David Talbot, "How Technology Failed in Iraq", *Technology Review*. Novemeber 2004, 37.

norm.<sup>119</sup> In three unfortunate cases, Iraqi forces attacked U.S. vehicles while they stopped to receive and download intelligence data on enemy positions. A number of commanders on the ground eventually turned off the equipment in the belief that they did not have time to wait.<sup>120</sup> The services, with their emphasis on technology, must therefore do a great deal of experimentation to make sure that all the varying components will function in a war zone. A smaller and smarter force that loses the ability to be smart quickly becomes only a smaller, more vulnerable force, if it does not have functioning technology there to support it. Still, there is a sense that the implementation of technology into wartime communications is evitable in the American forces. As one ONA analyst familiar with the problems noted, soldiers may not like having to wait for downloads, but they like having the GPS system there to tell them where they are.

The dangers illustrated by the Iraq example serve to illustrate one of the other major impediments to transformation. As an Air Force colonel said, turning transformation into a bumper sticker phrase in Washington D.C. does not mean that those using the phrase, especially in the political class, understand what it means. If decision makers are unclear about what constitutes transformation, the door is open for term to be misapplied and given a negative connotation. As he says, "there was one political guy who said that the reason we gave them such a small force was that we wanted them to do Iraq in a transformational way, which I think is just absolutely perverse if that is the case." This mischaracterization of transformation can only serve as a setback for transformation advocates. An idea or system that is linked with increasing the risks posed

---

<sup>119</sup> Ibid, 38.

<sup>120</sup> Ibid.

to U.S. forces, the antithesis of transformation's real intentions, will dampen the necessary enthusiasm for such an idea.

The continual upgrading of service platforms to ameliorate the performance of the services in re-fighting the last war is not isolated to Desert Storm and America's second war with Iraq in 2003.<sup>121</sup> The idea of fighting the last war corresponds to numerous American involvements. As the American government dealt with Slobodan Milosevic and the Serbian army, first in Bosnia, then over Srebrenica, and then finally over Kosovo, the Serbians army developed a clear picture of what to expect from American forces.<sup>122</sup> "The intervention replicated many of the familiar patterns. The United States and its allies expected the Serbs to respond to the NATO bombing of Kosovo the way they did earlier to NATO's 1995 bombing in Bosnia."<sup>123</sup> While the Americans were more precise with their bombings during Kosovo, the Serbs knew when to expect the bombings and how to hide safely among civilian populations.<sup>124</sup>

The tendency to plan for a situation that replicates the last war has an extensive history with American military planning. As one former ONA analyst said, the war games or war simulations that were most common in the years following the first Gulf War looked suspiciously like a repeat of the first Gulf War itself. They involved a foreign coalition coming to the rescue of a smaller nation that had been taken over by a hostile neighbour.<sup>125</sup>

---

<sup>121</sup> See Jeffrey Record, Dark Victory: America's Second War Against Iraq (Annapolis: Naval Institute Press, 2004).

<sup>122</sup> See Wesley K. Clark, Winning Modern War: Iraq, Terrorism, and the American Empire (New York: Public Affairs, 2003).

<sup>123</sup> Samantha Power, A Problem from Hell: America in the Age of Genocide (New York: HarperCollins, 2002), 451.

<sup>124</sup> Ibid.

<sup>125</sup> Thomas P.M. Barnett, The Pentagon's New Map: War and Peace in the Twenty-First Century (Berkeley Books, New York, 2004), 90.



The need for transformation, as seen by the CSBA and others, was amplified by the rift over the role the United States military should be playing on the world stage during the 1990s. As a Naval War College instructor described the Clinton years of 1993-2000, "the military itself was basically coming apart at the seams, splitting into two rival camps over the decade: one that had to deal with the international security environment as it was and another that preferred to dream of one that should be."<sup>126</sup>

One of the key impediments to the version of transformation outlined by the CSBA will be what the Bush administration has done since it came into office. It wanted to skip a generation of technology and create the kind of firestorm that could force change upon the military. Observers of the George W. Bush administration, and especially the Office of the Secretary of Defense under Donald Rumsfeld, identify three key problems with its version of transformation. The CSBA is well positioned to identify these shortcomings. Krepinevich advised on the writing of the 1999 Citadel speech that introduced Bush's desire to skip a generation of technology. Richard Armitage, who was advising the campaign, wrote much of the speech for the then-candidate, using the assistance of Krepinevich who he had worked with on the National Defense Panel.

The problem, as stated by Krepinevich, was that outside of Armitage and himself, very few people could adequately explain what either 'skipping a generation' or 'transformation' was really all about. In Krepinevich's words, skipping a generation refers to "investment strategies when you think you're in a period of discontinuity. And so what you don't want to do is lock yourself in to capital stock that might depreciate at an accelerated rate from the discontinuity hits."<sup>127</sup>

---

<sup>126</sup> Ibid, 97.

<sup>127</sup> Andrew F. Krepinevich, "Interview given on the future of war," *PBS Frontline: the future of war*,

so what you don't want to do is lock yourself in to capital stock that might depreciate at an accelerated rate from the discontinuity hits."<sup>127</sup>

In regards to both terms, 'skipping a generation' and 'transformation', perhaps the strongest reason that they have become such commonly used terms is that "the appropriate terminology captures the imagination of people."<sup>128</sup> Unfortunately, there quickly develops a chasm between the terms as they were used by those who coined them and those decision-makers who adopted them without a granular sense of the ideas they represent.

One analyst said that the administration's reports were so filled with fancy social science and business terms that they could have been describing anything. If they do have a more detailed plan for transformation, which is highly doubtful, than they are not doing an effective job of communicating their vision to those charged with implementing it. The process of transformation will necessarily take longer than even two presidential terms. The military personnel charged with implementing the changes must be given detailed plans and be convinced of the urgency of moving forward. The misunderstanding of how to go about transformation has in some ways served to tarnish the concept of military transformation altogether. As the example about network breakdowns in Iraq showed, bad experiences with items that have been associated with transformation serve to strengthen distrust in the idea. That same distrust has crept into the idea that future conflicts can be fought with fewer troops. The CSBA writings on

---

<sup>127</sup> Andrew F. Krepinevich, "Interview given on the future of war," *PBS Frontline: the future of war*, < <http://www.pbs.org/wgbh/pages/frontline/shows/future/interviews/krepinevich.html> > 2000 (Retrieved 30 May 2005).

<sup>128</sup> Ibid.

transformation say this is only the case when they are better equipped, not used as occupying forces, and not operating in urban environments.

While space is an important component of transformation, the second problem with the current administration's transformation vision is its overemphasis on space. Space, and most notably the weaponization of space, is an unproven entity and is highly unpopular abroad. Rumsfeld, whose understanding of transformation was shaky from the beginning, had much more experience with ballistic missiles and space. These were the subjects of the two commissions he had served on. Their overemphasis on space has served to delay progress in a number of other areas. As an Air Force colonel remarked, "political leadership has come up with this bumper sticker transformation and there is very uneven follow through on that."

The third major problem has been the operational tempo, which has made it difficult to focus on transformation as a priority. Different analogies have been used by both civilians and servicemen to describe this problem. Yet however it is stated, the services are under more strain than they are comfortable with. This prevents a critical mass of people from looking beyond current conflicts.<sup>129</sup> Stated by someone focused on strategic development and experimentation:

*Right now the Pentagon is consumed with fighting the war, particularly in the Army because of the incredible demand it has put on our force structure. I personally think we're way overextended and in that regard I think a lot of things the chief had started on may have lost some energy in terms of transformation and for all the right reasons. The focus has to be on the war.*

---

<sup>129</sup> One former ONA analyst uses the analogy of the 'closest alligator to the boat.' In other words, the focus is on Iraq and no one has the time to think about the future. This creates a tension between current operations and future planning.

As another Pentagon official, a brigadier general, said: "I think the problem is that right now we are consumed with current events. It is consuming all the money. It is going to consume everything. It's consuming the people". CSBA analysts warn that the need to deal with current operations can easily provide the necessary incentives to take all focus off responding to a revolution in military affairs and other issues of national survival. In a 2003 article in *Science and Technology*, Krepinevich argued strongly that the RMA was still occurring. He wrote that the U.S. was being left behind because it refuses to take a transformational approach in the face of current operations.<sup>130</sup>

#### 5.2) The CSBA, transformation, and the post 9/11 world

As illustrated in the previous section, many of the problems associated with the Bush administration's failure to adequately undertake transformation stemmed from its unfamiliarity with the what 'skipping a generation of technology' and 'transformation' actually meant. For those best connected with the ideas behind transformation such as the CSBA staff, Richard Armitage and others,<sup>131</sup> there existed a political plan to implement the specific vision of transformation. While its origins are uncertain, there was a prevailing rumour after George W. Bush was elected that Senator Dan Coates (R-IN) would be the next Secretary of Defense and that Richard Armitage would be his deputy. Coates, along with Senator Joe Lieberman (D-CT), had written the legislation to create

---

<sup>130</sup> Andrew F. Krepinevich, "The Unfinished Revolution in Military Affairs." *Issues in Science and Technology*, Vol. 19 Issue 4, Summer 2003, 65.

<sup>131</sup> Former Senator Sam Nunn, now the chair of the board at the Center for Strategic and International Security, Admiral Art Cebrowski, and Senator Joe Lieberman's defense and legislative assistant Fred Downing are three others who are frequently mentioned as having a comprehensive sense about what comprises transformation.

the National Defense Panel on which both Armitage and Krepinevich sat. Lieberman was the person who recommended placing Krepinevich on the panel. The panel's final document goes further than any other government publication in calling for transformation. The combination of Coates and Armitage, two of the key drivers behind the National Defense Panel, would have been a very different combination than the duo of Donald Rumsfeld and Paul Wolfowitz. The thinking of Lieberman and Coates is well articulated in this excerpt of an interview by Lieberman.

*There were some of us on the Senate Armed Services Committee, particularly Senator Dan Coates of Indiana, Republican of Indiana, and I, who had been sharing our own feeling that in the way the process works, too often we're going from either crisis to crisis, or day to day in the budget and authorization process here in Congress without looking out over the horizon and deciding what we should be doing today to be prepared to defend America's security.<sup>132</sup>*

Close observers of intra-Pentagon matters have given a fair amount of credit to Krepinevich as someone able to push the transformation agenda forward. A major-general who served in Air and Space Operations of the Pacific Air Forces was one of those who cited his influence. During the 1997 internal deliberations of the National Defense Panel, the general noted that it was Krepinevich who was the 'champion' of transformation. He says that many of Krepinevich's ideas came, rightly so, from his time with Andy Marshall and what they saw taking place during the fall of the Soviet Union and the events surrounding the first Gulf War.

The analysts at the CSBA were very dismayed that the duo they hoped to see in charge of the Defense Department, did not materialize. It should be noted though that their plan might have had several holes. It is impossible to know the 'real' reason why

---

<sup>132</sup> Joe Lieberman, interview given to < <http://www.cdi.org/adm/1044/Lieberman.html> > (Retrieved 20 May 2005).

Coates did not become secretary and was instead made ambassador to Germany, but there are many theories. It was perhaps because of his strong and vocal opposition to gays and lesbians in the military.<sup>133</sup> It could have been that Bush was perceived as being very inexperienced in foreign policy and wanted more experience around him. Vice President Cheney who knew Rumsfeld very well, could have highly recommended him. Or it could have been that he had not been one of the so-called 'Vulcans' who coached Bush through the primaries and presidential campaign and whom he trusted.<sup>134</sup> An official with the Clinton administration said that in his interview for the position in Crawford, Texas, Coates had come across as an "odd" person who did not possess the mental sharpness the interviewers wanted. Whatever the reason, the plan to implement transformation by the strong cadre who knew the most about it (Krepinevich, Armitage, Lieberman, and others) suffered a major setback from which efforts to push aggressive transformation on the services are still recovering.

In 2001, the three most senior analysts at the CSBA published a paper *entitled A Strategy for a Long Peace*.<sup>135</sup> In a similar fashion to many previous papers, the authors continued to call for an overhaul of the U.S. military that would allow it to be prepared for the threats on the horizon, thereby heeding the lessons of history. In regards to the detailed transformation plan that was first articulated in the early 1990s, the authors believed that there was far more talk about transformation than there was concrete action. Referring to transformation, the authors said, "thus far little has been accomplished

---

<sup>133</sup> "Bush nominees mixed on gay issues," Planet Out News and Politics 2 January, 2001 < <http://www.tgguide.com/soapbox/news/1002.htm> > (Retrieved 25 May 2005).

<sup>134</sup> See James Mann's Rise of the Vulcans: the history of Bush's war cabinet (New York: Viking, 2004).

<sup>135</sup> Steven Kosiak, Andrew Krepinevich, and Michael Vickers, "A Strategy for a Long Peace," Center for Strategic and Budgetary Assessments (30 January 2001) < <http://www.csbaonline.org> > (Retrieved 22 June 2005).

toward this end.”<sup>136</sup> Much of the paper was devoted to criticizing the most recent *Quadrennial Defense Review* in which they saw numerous flaws. Their paper made scant reference to the asymmetrical threat that would launch the United States into an engagement in Afghanistan later that year. Moreover, the authors envisioned a transformed military that was quicker and more responsive, but their work held little direct mention of the where the next attack might come from.

What the authors did recognize was that the spreading availability of weapons and technology was empowering not only states, but small groups that operated within states. Those states had little control over these small but powerful entities. In addition to the listed threats, they wrote, “to this must be added the need to cope with this military revolution’s empowerment of small groups, to include irregular forces, terrorist groups and transnational criminal organizations, with weapons of mass destruction and disruption.”<sup>137</sup>

If there was disagreement within the Pentagon over what form transformation should take—fighting a near-peer competitor versus numerous smaller opponents in the near term—it was essentially ended by the events of September 11th, 2001. The search for a target large enough to occupy all of the military’s energies had been found in terrorist groups and the disconnected nations that harbored them. “Overnight, China dropped off the radar, to be replaced by terrorist groups “with global reach” and any rogue nation suspected of supporting them.”<sup>138</sup>

---

<sup>136</sup> Ibid, 3.

<sup>137</sup> Ibid, 3.

<sup>138</sup> Thomas P.M. Barnett, *The Pentagon’s New Map: War and Peace in the Twenty-First Century* (Berkeley Books: New York, 2004), 104.

The appointments of President George W. Bush in the defense realm had come into office with their distinct views about transformation. Their use of the term, lead by Rumsfeld, showed few direct parallels with the CSBA vision. They viewed their Pacific Command (PACCOM) as the new center of focus as they tried to deal with the perceived threat from China and North Korea. The War on Terrorism as fought in Afghanistan and Iraq is essentially being fought with thousands of professional troops who were originally under the command of PACCOM.<sup>139</sup> As Thomas P. Barnett has written, “the ‘defense transformation’ they were pushing back was driven by a fear of a rising near-peer in the East, not a collection of lesser included in the Middle East.”<sup>140</sup>

In 2003, the CSBA was still arguing its ideas for transformation in the face of current operations that were seemingly swamping the resources of the Department of Defense. In regards to the larger transformation agenda, the CSBA concluded that the Afghanistan and Iraq conflicts offered nothing more than “tantalizing hints”<sup>141</sup> about what a fully transformed military could look like.

Transformation, as the CSBA sees it, depends to some degree on where America views its military priorities. As Samantha Powers describes in her account of how America has reacted to foreign genocides over the last 30 years, America is looking strictly to projecting force abroad. “Many are now arguing, understandably, that fighting terrorism means husbanding the country’s resources and avoiding humanitarian intervention, which is said to harm U.S. ‘readiness.’”<sup>142</sup> While the CSBA’s publications

---

<sup>139</sup> See Robert D. Kaplan, “The Next Cold War,” *The Atlantic Monthly*, Vol. 295, No. 5, June 2005.

<sup>140</sup> Thomas P.M. Barnett, *The Pentagon’s New Map: War and Peace in the Twenty-First Century* (Berkeley Books: New York, 2004), 181.

<sup>141</sup> Andrew F. Krepinevich, “The Unfinished Revolution in Military Affairs,” *Issues in Science and Technology*, Vol. 19 Issue 4, Summer 2003, 80.

<sup>142</sup> Samantha Power, *A Problem from Hell: America in the Age of Genocide* (New York: HarperCollins, 2002), 512.



can state in a detailed manner what will be required by America's future forces, two outside authors who urge their readers to look beyond current engagements describe the rational for the changes in a more engaging manner. The first is Thomas P. Barnett of the Naval War College whose book, *The Pentagon's New Map: War and Peace in the Twenty-First Century*<sup>143</sup>, argues that America's military will be engaged on all continents dealing with states that are not sufficiently connected to the global economy.

The other writer is the *Atlantic Monthly*'s Robert D. Kaplan, whose vision of the international security environment and America's role in it is thoroughly described in two feature *Atlantic Monthly* stories. His views will be further expanded on in a forthcoming book about the U.S. military. In long essays entitled *The Next Cold War* and *Supremacy by Stealth*, Kaplan argues that America will continue to be engaged internationally in a wide variety of missions that will require great devolution of control to increasingly skilled commanders on the ground. The military will also use stealth tactics, UAVs, and fewer large forward bases. These two authors paint the most engaging vision of America's military future that I could find, although they did diverge on the topic of China. Barnett dismisses it as a creation of the Cold War warriors, as he calls them, who feel the need to create a large looming enemy to justify their funding and to keep them out of smaller engagements with less traditional opponents. Kaplan, on the other hand, believes that China is a real threat that will begin to assert its power into the Pacific, making American large forward bases highly vulnerable.<sup>144</sup>

---

<sup>143</sup> Thomas P.M. Barnett, *The Pentagon's New Map: War and Peace in the Twenty-First Century* (New York: Berkley Books, 2004).

<sup>144</sup> Robert D. Kaplan, "The Next Cold War," *The Atlantic Monthly*, Vol. 295, No. 5, June 2005, 49-64. and "Supremacy by Stealth," *The Atlantic Monthly*, Vol. 292, Issue 1, July/August 2003, 65-83.

Much like Kaplan, those still watching China as the possible focal point of future transformation efforts note the growing complexity of the Chinese-American relationship. In the words of Michael Vickers, a former CIA officer and current CSBA analyst, "getting into a war with China is easy. You can see many scenarios, not just Taiwan – especially as the Chinese develop a submarine and missile capability throughout the Pacific. But the dilemma is, how do you end a war with China?"<sup>145</sup> The list of concerns over both China's ability to strike American targets and the constantly escalating international trade and monetary exchange between the two countries adds increased layers of complexity to such a possible conflict. As one Pentagon advising extreme caution over the growing focus on China has said, "ending a war with China will force us to substantially reduce their military capacity, thus threatening their energy sources and the Communist Party's grip on power. The world will not be the same afterward. It's a very dangerous road to travel on."<sup>146</sup>

The rapidly increasing connectivity with China would mean that hostile behaviour would not be limited to the military realm. Transformation focuses on recognizing and adapting to a revolution in military affairs, but is short on how military conflicts can influence others aspects of the relationship between two countries. As Barnett has attempted to instill in his readers, we must think war in terms of everything else that is going on.<sup>147</sup>

Air Force colonels James Callard and Peter Faber have drawn on the work on two colonels in the People's Liberation Army of China to study how the Chinese view how a

---

<sup>145</sup> Robert D. Kaplan, "The Next Cold War," *The Atlantic Monthly*, Vol. 295, No. 5, June 2005, 54.

<sup>146</sup> Ibid.

<sup>147</sup> See Thomas P.M. Barnett, *The Pentagon's New Map: War and Peace in the Twenty-First Century* (New York: Berkley Books, 2004).

possible conflict. In another example of the American military taking ideas from others, (in the same way the ONA did from the Soviets thinking about a coming military technical revolution) the Chinese were describing 'combination warfare.' Outlined in the *Georgetown Journal of International Affairs*<sup>148</sup>, combination warfare would see a 21st-century conflict that went beyond even a conflict against America's transformed military, but involved "financial warfare, trade warfare, resource warfare, legal warfare, and so on."<sup>149</sup> It widely cites the way in which the U.S. government went after the Saudi Arabian charities and other financial vehicles they felt were supporting terrorism against the United States. This notion of combination warfare is outside of the purview of the Pentagon and not supported by some analysts who believe a military conflict with China could unfold while economic and transportation channels remained open.<sup>150</sup> It does, though, serve to show how even a successfully transformed U.S. military, in and of itself, may not be enough to win a conflict. It is none-the-less, the most important cornerstone of an effective American presence in international affairs.

Transformation in the post-9/11 environment still faces a number of challenges. Efforts that are underway have largely been funded by the supplemental appropriations passed in an attempt to support the war on terrorism. What will happen to the limited transformation efforts that are underway if the supplementals decrease in size, or disappear entirely, is not certain. As one three-star general in the Army pointed out, President Clinton during his second term wanted transformation but was not willing to

---

<sup>148</sup> James Callard and Peter Faber, "An Emerging Synthesis for a New Way of War," *Georgetown Journal of International Affairs*, Vol. 3, No. 1 (Winter/ Spring 2002), 61-77.

<sup>149</sup> Kaplan, Robert D. "Supremacy by Stealth," *The Atlantic Monthly*, Vol. 292, Issue 1, July/August 2003, 82.

<sup>150</sup> See Thomas P.M. Barnett, *The Pentagon's New Map: War and Peace in the Twenty-First Century* (New York: Berkley Books, 2004).

pay for it. He left it to the services to do in their own respective domains. Such a scenario could easily repeat itself if the defense budget finds itself under strain again.

Transformation, as outlined by the CSBA, can be achieved with a manageable amount of investment. Yet any movement of funds away from the funding structure that is currently in place will encounter some resistance because it upsets the current dominant culture.

## Conclusion

Clearly by the late 1990s, the term 'transformation' was being widely used within the defense establishment. It was being discussed internally within the services themselves and had gotten a political foothold with the final report of the National Defense Panel. The CSBA has delved into the subject continuously at great length for over 10 years but others have also written on the subject. Transformation will entail altering the procurement strategy and divesting in aging capabilities in order to free up money to allow for experimentation. Long-range strike capabilities will become part of the core military doctrine as alternatives to forward bases are demanded. UAVs and other technical advances will continue to proliferate. Network-centric platforms will allow for a devolution of control to empowered small units of soldiers. As one senior CSBA analyst concluded, "highly distributed, highly networked forces would be very much a change in the way you do business."

Those who argue that a price tag for transformation that runs into the tens of billions is unrealistic have failed to grasp what the CSBA is trying to get the defense policy community to understand. Transformation as a doctrine must be embraced. This is far more important than adding dollars. More money without a new doctrine will only reinforce what is already in the pipeline. It will reinforce the current force structure instead of being used to create a new one.

As was repeatedly mentioned by interview respondents, far too many people, especially in the political class, misapply the term because of a misunderstanding of what transformation entails. The services themselves have senior officials who do understand

it. As units have returned from Iraq since 2003, the Army has begun to equip some units with network-based capabilities. This is to be the first step towards fully networking every member of the military involved in operations. In regards to planning, war games can only be transformational if they involve experimentation that makes real the chance for failure. Current war games do not end in failure. Too often they tend to be simulations that re-fight the last war.

The battles in Iraq and Afghanistan, even though they used the most recent weapons, were not transformational, nor were they 'new style' wars. The second war with Iraq in 2003 was a classic example of re-fighting the last war with improved equipment. The Afghanistan and Iraq conflicts offered nothing more than "tantalizing hints"<sup>151</sup> about what a fully transformed military might look like. As the example of network breakdowns and troop numbers in Iraq showed, bad experiences with items that have been associated with transformation serve only to strengthen distrust in the idea. For those at the CSBA, there exists a disappointment that they have not been able to go further with the implementation of their transformation. Referring to transformation in 2003, Krepinevich said, "thus far, little has been accomplished toward this end."<sup>152</sup>

There are a small number of scholars who have tried to look closely at the impact that think tanks have on policy. As Diane Warwick has noted about foreign policy think tanks: "They can play a strategic role in conceptualizing change. It is possible that a small number, if put in contact with the epistemic community, can have a substantial impact on

---

<sup>151</sup> Andrew F. Krepinevich, "The Unfinished Revolution in Military Affairs," Issues in Science and Technology. Vol. 19 Issue 4, Summer 2003, 80.

<sup>152</sup> Ibid, 3.

foreign policy.”<sup>153</sup> If nothing else, the CSBA has been at the forefront of conceptualizing what changing the U.S. military should entail.

In trying to establish what sort of influence policy experts can have on public policy, a group of authors have looked at how to gauge influence. Abelson has noted that not all government departments and branches are equally receptive to outside opinions.<sup>154</sup> Weaver, McGann<sup>155</sup>, and Ricci<sup>156</sup> all believe that think tanks are large and influential but that they are also scholarly and removed from the policy process. John W. Kingdon has argued that politicians and policy experts operate in mutually exclusive spheres.<sup>157</sup> It is only by having politicians or government officials adopt their work that their research can be brought to bear on public policy. Even in the think tank environment portrayed by Abelson and Rich, where analysts are increasingly actively engaged in current political debates, analysts still must find others to implement their ideas. In rare cases, analysts receive government jobs or political appointments.

The CSBA has been able to get close to policy makers in a number of direct ways. The ONA contracts out work to the CSBA and uses its work in the presentations they give to the Secretary of Defense. Krepinevich sat on the National Defense Panel in 1997 and advised on the writing of George W. Bush’s Citadel speech in 1999. During the 1997 internal deliberations of the National Defense Panel, a major-general who was interviewed notes that it was Krepinevich who was the ‘champion’ of the notion of

---

<sup>153</sup> Diane Stone, Capturing The Political Imagination: Think Tanks and the Policy Process (London: Frank Cass & Co, 1996), 184.

<sup>154</sup> Donald E. Abelson, American Think-Tanks and their Role in US Foreign Policy (New York: St. Martin’s Press Ltd, 1996).

<sup>155</sup> James G. McGann and R. Kent Weaver, Think Tanks & Civil Societies: Catalysts for Ideas and Action (New Brunswick, N.J.: Transaction Publishers, 2000).

<sup>156</sup> David M. Ricci, The transformation of American politics: the new Washington and the rise of think tanks (New Haven: Yale University Press, 1993).

<sup>157</sup> John W. Kingdon, Agendas, alternatives, and public policies (New York: HarperCollins Publishers, 1995).

transformation. But the problem, as stated by Krepinevich, was that outside of Richard Armitage and himself, very few people could adequately explain what either 'skipping a generation' or 'transformation' was really all about.

The CSBA has the most carefully constructed and detailed ideas about what constitutes transformation but as the previous chapter showed, it ran into a number of impediments. It sincerely hoped that the new Bush administration would appoint a group of officials who understood its position. Its preferred combination of Senator Coates and Richard Armitage to lead the Defense Department failed to materialize. In their place was a leadership that was unclear about the details pertaining to transformation. That leadership placed an overemphasis on the weaponization of space to the detriment of many less costly and more promising capabilities.

Finally, by engaging in Afghanistan and Iraq, the operational tempo of the services has increased so much that very few people are looking beyond the most current operations. Some authors are still writing about future engagement scenarios but they are receiving little attention as the services find themselves stretched by current obligations. With all of these impediments, what can be salvaged of CSBA's plans for transformation will depend a great deal on how effectively it can continue to disseminate its ideas. It will also search out opportunities to match its vision with high-powered government officials who are determined to see through a transformation of the U.S. military. Only through convincing politicians and other leaders of the imperative nature of transformation does the CSBA have the chance to have its work become reality.



## BIBLIOGRAPHY

- Abelson, Donald E. *American Think-Tanks and their Role in US Foreign Policy*. New York: St. Martin's Press Ltd, 1996.
- Abelson, Donald E. *Do Think Tanks Matter? Assessing the Impact of Public Policy Institutes*. Montreal & Kingston: McGill-Queen's University Press, 2002.
- Adams, Gordon. *The politics of defense contracting: the Iron Triangle*. New Brunswick N.J.; Transaction Books, 1981.
- Adelman, Carol C. "The Privatization of Foreign Aid," *Foreign Affairs*. Nov/Dec2003, Vol. 82 Issue 6, 9-15.
- Bai, Matt. "Wiring the Vast Left-Wing Conspiracy," *The New York Times Magazine*. 25 July, 2004, 30-37.
- Blaker, James R. and Steven J. Nider. "Front and Center: Military Transformation: Smoke or Fire?" *Public Policy Institute*. 27 April, 2001.
- Barnett, Thomas P.M. *The Pentagon's New Map: War and Peace in the Twenty-First Century*. New York: Berkley Books, 2004.
- Callard, James and Peter Faber. "An Emerging Synthesis for a New Way of War," *Georgetown Journal of International Affairs*. Vol. 3, No. 1 (Winter/ Spring 2002), 61-77.
- Campbell, Colin and Michael Barzelay. *Preparing for the Future: Strategic Planning in the U.S. Air Force*. Washington D.C.: Brookings Institute Press, 2003.
- Clark, Wesley K. *Winning Modern War: Iraq, Terrorism, and the American Empire*. New York: Public Affairs, 2003.
- Center for Defense Transformation. "CDI Military Reform Project – Defining Transformation?" < <http://www.cdi.org/mrp/transform-pr.cfm> > (Retrieved 28 July 2005).
- DeParle, Jason. "Next Generation Of Conservatives (By the Dormful)" *The New York Times*, 14 June 2005, A1.
- Diamond, Larry. *Developing Democracy: Toward Consolidation*. Baltimore: Johns Hopkins University Press, 1999.
- Editors, The. "U.S. Military Bases and Empire," *Monthly Review*. Vol. 53, No. 10 March 2002.
- Esposito, John L. *Unholy War: Terror in the Name of Islam*. New York: Oxford

University Press, 2002.

Frank, Thomas. *What's the matter with Kansas? How conservatives won the heart of America*. New York: Metropolitan Books, 2004.

Friedman, Thomas L. *Longitudes & Attitudes: Exploring the World after September 11*. New York: Farrar Straus Giroux, 2002.

Gray, Colin S. *The Sheriff: America's Defense of The New World Order*. Lexington: The University of Kentucky Press, 2004.

Huntington, Samuel P. *The Clash of Civilizations and the Remaking of World Order*. New York: Simon & Schuster, 1996.

Huntington, Samuel P. *The Third Wave: Democratization in the Late Twentieth Century*. Norman: University of Oklahoma Press, 1991.

Ignatieff, Michael. *Virtual War: Kosovo and Beyond*. Toronto: Viking, 2000.

Kaplan, Fred M. *The wizards of Armageddon*. New York: Simon and Schuster, 1983.

Kaplan, Robert D. "The Next Cold War," *The Atlantic Monthly*. Vol. 295, No. 5, June 2005, 49-64.

Kaplan, Robert D. "Supremacy by Stealth," *The Atlantic Monthly*. Vol. 292, Issue 1, July/August 2003, 65-83.

Kennedy, David M. "The Best Army We Can Buy," *The New York Times*, 25 July, 2005, A18.

Kingdon, John W. *Agendas, Alternatives, and Public Policies*. Longman: New York, 2003.

Kotter, John. "Leading Change: Why transformation efforts fail," *Harvard Business Review*. Mar/Apr 1995, Vol. 73 Issue 2, 59-68.

Krepinevich, Andrew F. "Calvary to Computer; The Pattern of Military Revolutions." *The National Interest*, Fall 1994, 30-42.

Krepinevich, Andrew F. "Interview given on the future of war," *PBS Frontline: the future of war*.

< <http://www.pbs.org/wgbh/pages/frontline/shows/future/interviews/krepinevich.html> > 2000 (Retrieved 30 May 2005).

Krepinevich, Andrew F. *The Military-Technical Revolution: A Preliminary Assessment*. Washington D.C.: Center for Strategic and Budgetary Assessments, 2002.

- Krepinevich, Andrew F. *Lighting the Path Ahead: Field Exercises and Transformation*. Washington D.C.: Center for Strategic and Budgetary Assessments, 2002.
- Krepinevich, Andrew F. "Recasting Military Roles and Missions." *Issues in Science and Technology*. Vol. 11 Issue 3, Spring 1995, 41-49.
- Krepinevich, Andrew F. "The Unfinished Revolution in Military Affairs." *Issues in Science and Technology*. Vol. 19 Issue 4, Summer 2003, 65-68.
- Krepinevich, Andrew F. *The Army and Vietnam*. Baltimore: Johns Hopkins University Press, 1986.
- Kosiak, Steven, Andrew Krepinevich and Michael Vickers. *A Strategy for a Long Peace*. Center for Strategic and Budgetary Studies: Washington, D.C., 2001.
- Landau, Saul. *The Pre-Emptive Empire: A Guide to Bush's Kingdom*. Sterling, Virginia; Pluto Press, 2003.
- Mann, James. *Rise of the Vulcans: the history of Bush's war cabinet*. New York: Viking, 2004.
- Macgregor, Douglas A. *Transformation under fire: Revolutionizing how America Fights*. Westport: Praeger Publishers, 2003.
- McGann, James G. and R. Kent Weaver. *Think Tanks & Civil Societies: Catalysts for Ideas and Action*. New Brunswick, N.J.: Transaction Publishers, 2000.
- McGray, Douglas. "The Marshall Plan," *Wired*. Issue 11.02, February 2003  
< [www.wired.com/wired/archive/11.02/marshall.html](http://www.wired.com/wired/archive/11.02/marshall.html) > (Retrieved 24 July, 2005).
- Mead, Walter Russel. *Power, Terror, Peace, and War: America's Grand Strategy in the World at Risk*. New York: Knopf, 2004.
- Micklethwait, John and Adrian Wooldridge. *The Right Nation: Conservative Power in America*. New York: The Penguin Press, 2004.
- Mihn, Stephen. "The Quest for the Nonkiller App," *The New York Times Magazine*. 25 July, 2004, 38-43.
- Pal, Leslie A. and R. Kent Weaver. *The government taketh away: the politics of pain in the United States and Canada*. Washington D.C.: Georgetown University Press, 2003.
- Power, Samantha. *A Problem from Hell: America and the Age of Genocide*. New York: HarperCollins, 2002.

- Purdy, Jedediah. *Being America: Liberty, Commerce, and Violence in an American World*. New York: Borzio Books, 2003.
- Record, Jeffrey. *Dark Victory: America's Second War against Iraq*. Annapolis: Naval Institute Press, 2004.
- Ricci, David M. *The transformation of American politics: the new Washington and the rise of think tanks*. New Haven: Yale University Press, 1993.
- Rich, Andrew. *Think tanks, public policy, and the politics of expertise*. New York: Cambridge University Press, 2004.
- Ricks, Thomas E. "Pentagon Study May Bring Big Shake-Up," *Washington Post*. Friday, February 9, 2001, A1.
- Schwarz, Benjamin. "Managing China's Rise," *The Atlantic Monthly*. Vol. 295, No. 5, June 2005, 27-29.
- Silverstein, Ken. "The Man from ONA," *The Nation*. Oct, 25, 1999.
- Silverstein, Ken. *Private Warriors*. New York: Verso, 2000.
- Soros, George. *The Bubble of American Supremacy*. New York: Public Affairs, 2003.
- Stone, Diane. *Capturing The Political Imagination: Think Tanks and the Policy Process*. London: Frank Cass & Co, 1996.
- Talbot, David. "How Technology Failed in Iraq", *Technology Review*. November 2004, 35-41.
- Thompson, Kenneth W. (ed.) *Philanthropy: private means, public ends*. Lanham, MD: University Press of America, 1987.
- Towell, Pat. *Forging The Sword: Unit-Manning in the US Army*. Washington D.C.; Center for Strategic and Budgetary Assessments, 2004.
- United States Government – National Defense Panel Final Report 1997. Available at < <http://www.defenselink.mil/topstory/ndp.html> >
- "U.S. National Military Strategy Options." Hearing Before the *Committee on Armed Services House of Representatives, One Hundred Seventh Congress, First Session*, Hearing Held 20 June, 2001.
- Weaver, Kent. "Advocates and Analysts: Think Tanks and the Politicization of Expertise in Washington," with Andrew Rich, *Interest Group Politics*, Allan Cigler and Burdett Lommis, editors (fifth edition, 1999)

Weiner, Tim. "Arms Fiascoes Lead to Alarm Inside Pentagon," *The New York Times*, 8 June, 2005, A1.

Woodward, Bob. *Bush at War*. New York: Simon and Schuster, 2002.

Woodward, Bob. *Plan of Attack*. New York: Simon and Schuster, 2004.