

Defense, Deficits, and Deployments: The Future of US Military Policy

*Henry M. Jackson School of International Studies
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Defense, Deficits, and Deployments: The Future of U.S. Military Policy

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Task Force Report 2012*

Task Force Advisor:

The Honorable Congressman Adam Smith

Task Force Evaluator:

Under Secretary of the Air Force Ms. Erin C. Conaton

Task Force Members:

Mike Beckett
Jessica Beers
Tyler Emsky
Dan Hollenbeck
Gregory Johnsen (editor)
Stefan Kaehler
Jennifer Kang
Jordan Laramie
Erika Nicks
Marc Quint
Marcus Sweetser
Zhenni Thomas (editor)
Andrew White
Meagan Winnie

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Executive Summary | *By Gregory Johnsen and Zhenni Thomas*

America's economic strength and military might go hand in hand. Each is indispensable to the other. Thus, in times such as the present when America's deteriorating fiscal position requires swift and reasoned attention, it becomes incumbent on the Department of Defense to evaluate how its own operations help or hinder the situation. Deliberate decisions by Congress have further entrenched this relationship *vis-à-vis* the Budget Control Act of 2011 which directly imposes cuts to DoD spending as part of a larger effort to bring the federal budget toward balance.

Even if not for the fiscal circumstances, the present moment is a good one for reevaluating the trajectory of US military strategy. Now that Operation Iraqi Freedom has ended and activities in Afghanistan are waning, DoD will face very different demands on its resources than it has over the past ten years. Asymmetric threats to national security such as terror cells and cyber warfare also continue to pose novel challenges, requiring adaptation by the department.

This task force report begins at a sensible point, by conducting a comprehensive evaluation of the present and projected threats to US national security. Only with an understanding of the threats faced can we begin to talk about the forces necessary to repel them. We examine asymmetric threats including terror cells, WMD, and cyber warfare. Next we examine unstable regimes such as Afghanistan, Pakistan, Iran and North Korea. We also consider the growing military and economic power of China, which should not be viewed as an immediate threat, but must be taken into consideration. Finally, our review of strategy conducts an analysis of the role that basing and alliances have in US military policy.

The second major section of this report is a careful evaluation of the budgetary matters at hand. We begin with a critical examination of the overall federal budget and projected trends. This includes thoughtful discussion of the interplay between economic and military might. A comprehensive review of our defense spending is then in order, to consider whether our present level of DoD funding is high or low. We conclude neither—that in truth, the appropriate way to judge a defense budget is by its ability to counter threats as efficiently but effectively as possible. Toward that end, we propose that two key actions DoD must take are ensuring auditability and reforming procurement practices.

The third and final section of our report lays out a comprehensive vision for the future structure of our military forces. We cover the strategic nuclear arsenal, Air Force, Navy and Marine Corps, Army, and Special Operations. Our findings indicate that there are certainly efficiencies to be found, which can reduce DoD expenditures without gravely jeopardizing national security. We structure these proposals into three tiers, each suitable to different defense budget scenarios. Lastly we examine department-wide reforms to personnel and operations and maintenance. These expenditures continue to consume an increasing share of our national defense budget and cannot be ignored.

In all of this, our effort is to show that cautious and prudent examination of American defense spending can find room for efficiencies without sacrificing national security. Indeed, in some ways it may improve it, as a strategic restructuring of the forces brings them closer into line with the contemporary threats of the world we face. Our approach is in contrast to the blunt instrument of across-the-board budget sequesters which loom as a result of the Budget Control Act. We hope that it inspires those in positions of

power to step back from their own narrow areas of interest and examine a greater picture—one of a twenty-first century American defense that is capable, accountable, and efficient.

SECTION I: STRATEGY

Introduction | *By Stefan Kaehler*

The United States Armed Forces are currently undergoing a dramatic paradigm shift in their approach to the mission of global security. Previous strategies, such as the “Two War” strategy, are no longer viable for financial and strategic reasons. As the United States tries to reduce its deficit, military spending will be one of the large items in line to be reduced. Additionally, prolonged wars, such as the Iraq and Afghanistan war, have depleted any willpower that the US public has for troop deployments in broken countries and the inherent nation building that ensues. The Afghanistan and Iraq wars have also challenged the military’s conception of warfare. Previously, the US military has been designed for fighting conventional warfare; insurgents in Iraq and Afghanistan exploited this weakness through guerilla tactics. The current US military focus on fighting conventional threats may no longer be cost-effective or viable.

Within the strategy section of this report, we will analyze a broad range of potential threats, current US strategies to cope with those threats, and military capabilities. We will then make policy recommendations based on the analyzed threats, projecting the optimal US force design to meet those threats. Throughout the strategy section, we will also be looking for ways for the defense budget to maintain sound fiscal discipline. During the entire process of developing these strategic recommendations, we will be looking for ways to achieve national security objectives in the most effective and cost-efficient way possible.

The United States will have to prioritize threats when reassessing how its defense resources are spent for the next ten years. Resources will be further constrained during the

next ten years as spending will have to happen in conjunction with a drawing down of our presence in both Iraq and Afghanistan. Currently, the most pressing threat to US security is in the form of asymmetric threats. These asymmetric threats can take various forms, from cyber hacking to nuclear proliferation. Preventing the proliferation of nuclear weapons to terrorist groups is of vital importance to the United States. The second highest priority threat is ensuring the stability of Afghanistan and Pakistan. The United States cannot afford the collapse of Pakistan (which possesses nuclear weapons) or chaos and destabilization in Afghanistan. Collapse in either country would cause further unrest in South West Asia and would allow the countries to continue to provide a training ground for Islamist militant groups. Iran is the third largest threat that the United States must address in the next ten years. Iran has been very vocal recently about using its military, causing regional tensions to rise. North Korea continues to be a belligerent state that defiantly waves its military might on the world stage, making all global actors very nervous. The United States must continue to be aware of the North Korean threat, but assess it thoroughly and accurately when the Department of Defense distributes its scarce resources. Lastly, the United States must address these threats while rebalancing its focus to Asia. Developing a clear and strong set of policies to deal with Asia is absolutely essential because it will make clear what our expectations are of our allies. The United States must collaborate and foster a strong alliance with China in order to promote both nations' goals, which will be mutually beneficial. While developing a strong alliance with China, the United States must also clearly communicate to China that the US will not tolerate Chinese aggression towards US allies in the region. Additionally, the United States must set clear expectations for China regarding authoritarian regimes such as North Korea and Iran.

Current US Defense Strategy After the Cold War

At the end of the Cold War, the United States military faced a potentially devastating identity crisis. During the Cold War, the military primarily functioned to contain the USSR and prevent the spread of communism. The drastic collapse of the Soviet Union prevented the United States military from naturally growing into another role. Very suddenly, the United States became the sole global superpower with no major enemy to justify its military might. From 1984 to 1994, the United States decreased its military spending by 21%.¹ A new role for the United States military soon became clear when Iraq invaded Kuwait, prompting the United States to conduct Operation Desert Storm to expel Iraq. For the next decade the United States adopted a mandate that its military would be used to promote global stability through rebuffing rogue states and other threats. With this new mandate came increased spending on military operations.

On September 11, 2001, the United States military paradigm shifted from not only fighting rogue states, but also dangerous terrorist organizations. On October 7, 2001, the United States invaded Afghanistan to eliminate al-Qaeda. Approximately two years later, on March 20, 2003, the United States invaded Iraq in order to eliminate the creation of weapons of mass destruction. During this period the United States' "Two War" strategy was put to the test. Defense officials and politicians had long touted that the United States could fight two wars simultaneously, but it had never been tested. Both wars were portrayed as conflicts that could be easily won by the US's vastly superior conventional capabilities, however they became very prolonged as a result of insurgents in both nations implementing guerilla tactics. The US military, which had been developed to address conventional threats,

suddenly found a very new and frustrating problem. The Iraq and Afghanistan wars raise the question whether the United States military will be able to invade and occupy rogue states for a prolonged period of time in an efficient manner.

Currently, the United States military paradigm is changing again. The Obama Administration has announced that it will reduce the growth of military spending for the next decade and will focus on making the next fighting force a leaner and more efficient institution. Reductions in the growth of military spending may simply not be enough. The national deficit is one of the chief concerns of the American people, lawmakers, and it has even been called “the most significant threat to our national security” by Admiral Mullen,² the head of the Joint Chiefs of Staff. Within this paper, we will take a critical look at US strategic initiatives and find cost savings that go beyond the current plan proposed by President Obama and Defense Secretary Panetta. Cuts to the defense budget will not come easily, each unit of spending has key strategic implications tied to it that impact the future security of the United States.

The Obama Administration has also announced that it will be shifting its focus to encompass both the Middle East and the Asia-Pacific region. Threats such as al-Qaeda and the stabilization of Afghanistan will still be recognized as first priority threats. The Obama Administration wishes to “rebalance toward the Asia-Pacific region”³ because the region poses a mix of security and economic interests to the United States. The US will focus on strengthening alliances in this region in order to provide stability. Asia has thus far been a relatively stable region that has been a boon to global economic growth. Stability in Asia may lead to further deployments in the region being unnecessary. The Obama Administration states that one of the direct purposes of this strategic initiative is to maintain

order and stability in the region. The administration specifically cites China and its ambiguous strategic goals as a potential source of “friction” to stability.⁴ The Obama Administration also maintains the strategy of past administrations that the United States will continue to actively deter and defend the region from North Korean aggression. This paper will also critically examine the necessity of these policy goals and make appropriate policy recommendations on going forward in the Asian theatre.

Key Considerations for the Projection of Force

There are a wide variety of considerations that the United States must make when implementing its future defense strategy. These considerations encompass everything from our logistical constraints, political climate, and willpower, to our moral obligations as the global hegemon.

1. The United States must balance its obligation to maintain world order as the globe’s de-facto hegemon with its own capabilities. The United States cannot maintain order in all global hot-spots at once. If it did, it would overextend itself until it collapsed. The US must prioritize maintaining order in unstable regions that have key strategic interests to the United States. Defending economic interests overseas must be balanced with the cost of defensive operations. The United States can and should further leverage its military power by cooperating with allies towards solving strategic problems.
2. The United States military cannot invade nations unless it has the political willpower, financial, and military capabilities to sustain a prolonged

nation-building process. Recently, the United States has withdrawn from Iraq and is in the process of withdrawing from Afghanistan. Through these conflicts the United States has pushed its resources to the limits attempting to stabilize these countries. Therefore, the United States must find a strategy that does not utilize nation-building. Nation-building is so costly that it must only be used as a strategy of last resort.

3. The United States cannot afford to preempt threats that only possess a remote possibility of occurring. As resources become constrained, the United States defense strategy will need to actively determine the possibility of risks occurring and only address the ones that are likely of materializing. This means that the United States will need to engage in selective arbitrage of troop deployments overseas. The United States should only position troops in areas with a likelihood of instability.
4. If the United States has the option to help people at a minimal cost (strategic or fiscal) it should. The United States as the global hegemon has a moral responsibility to lend assistance when possible, so long as it does not jeopardize US interests or stress constraints. Lending assistance and aid whenever possible is not only a moral consideration but also a powerful public relations tool that helps to establish stability and cooperation with the US in the future. Through lending assistance, countries are more likely to cooperate with American initiatives. A prime example of this was Indonesia. After receiving aid following its horrific earthquake, it stepped up counterterrorism initiatives.

5. US defense strategy must be conducted in a sustainable manner. This paper works primarily off of a ten year timeframe, but US defense policy decisions are aimed at minimizing future costs and implications. By addressing certain problems now, we can minimize greater problems in the future.

Chapter 1. Asymmetric Threats | *By Dan Hollenbeck*

Chapter Summary

Key Policy Conclusions

The two greatest tangible asymmetric threats to the United States are non-state extremist terrorist groups such as al-Qaeda and the proliferation of weapons of mass destruction (WMD). The US must work to maintain its broad network that has successfully defended against these threats since 9/11.

Background

Non-State terrorist organizations like al-Qaeda pose an immediate threat to United States national security interests because violent extremist ideologies and far-reaching goals run counter to US interests. al-Qaeda and other like-minded groups are extremely volatile and pose a direct threat to the United States because they seek to attack the US homeland and other western targets.

The other tangible asymmetric threat that the US faces is weapons of mass destruction (WMD) proliferation. The greatest proliferation threats are non-state groups like al-Qaeda that have proven to be determined to acquire nuclear materials through repeated attempts. The other groups that pose potential WMD proliferation threats are countries such as North Korea, Russia, Pakistan and Iran.

Policy Considerations

The US defense needs to focus on two priority goals: maintaining an extensive military and defense network that is capable of defeating and shutting down the al-Qaeda network, and keeping WMD and nuclear capabilities out of the wrong hands.

Key Recommendations

- Maintain the highly mobile special operations forces and advanced ISR capabilities capable of shutting down the al-Qaeda network;
- Continue drone strikes to disrupt al-Qaeda operations;
- Counter proliferation of WMD through positive diplomatic relations with countries such as Russia, North Korea, Iran and Pakistan.

Asymmetric Threats

The two greatest tangible asymmetric threats to the United States are non-state extremist terrorist groups such as al-Qaeda and the proliferation of weapons of mass destruction (WMD). The US must work to maintain its broad network that has successfully defended against these threats since 9/11.

What kind of threat is al-Qaeda?

Non-state terrorist organizations such as al-Qaeda pose a direct threat to the US because they seek to attack with any means necessary any entity that does not share their specific views and extremist ideologies. These attacks include violent acts of terrorism directed at US citizens. The difficulty with defending against the threat of non-state actors is that they are not localized and they typically support a transnational terrorist network that is spread across the globe. Al-Qaeda works outside the conventional state system, which makes it highly mobile and adaptable. Its cells seek safe havens in low-profile locations that allow them the protection they need to operate and plan their attacks against the West. These safe havens are weak and failed states that have unstable governance such as Afghanistan, Pakistan, Yemen and Somalia. It is in these areas that al-Qaeda and like-minded groups are able to operate within the weak fissures of a country to establish bases and promote the global insurgency against the West.⁵ As much of the US focus in fighting al-Qaeda has been on Afghanistan and Pakistan, the al-Qaeda operation and ideology has begun to migrate and take root in new areas such as East Africa. Yemen and Somalia are currently key regions for al-Qaeda and the Somali-based terrorists that are connected to the insurgent group al-Shabab. These unstable regions in East Africa are becoming the next major operational

centers for al-Qaeda, where it can regroup after setbacks in Afghanistan and Pakistan.⁶ Thus, emerging areas of operation like Yemen and Somalia will need to be major areas of focus for the US defense against al-Qaeda.

As a global terrorist organization, al-Qaeda is less tangible than traditional state threats and poses unique challenges for US defense strategy. Its inherent asymmetric characteristics have proven capable of maintaining a broad operational network that is highly adaptable and elusive.⁷ Al-Qaeda and other like-minded groups are extremely volatile and pose a direct threat to the United States because they seek to attack the US homeland and other western targets. The most important concern in considering the threat that al-Qaeda poses is the protection of American citizens. A DoD release about US priorities for twenty-first century defense demonstrates the threat that al-Qaeda represents and the current strategies of the department to deter al-Qaeda efforts:

With the diffusion of destructive technology, these extremists have the potential to pose catastrophic threats that could directly affect our security and prosperity. For the foreseeable future, *the United States will continue to take an active approach to countering these threats* by monitoring the activities of non-state threats worldwide, working with allies and partners to establish control over ungoverned territories, and directly striking the most dangerous groups and individuals when necessary.⁸

WMD Proliferation

The other tangible asymmetric threat that the US faces is weapons of mass destruction (WMD) proliferation. The greatest proliferation threats are actions undertaken by non-state groups such as al-Qaeda that have proven to be determined to acquire nuclear materials through repeated attempts. If these groups were to acquire nuclear materials, they would greatly increase their strike potential and damage capabilities, which would pose a direct threat to US national security. The other groups that pose potential WMD

proliferation threats are countries such as North Korea, Russia, Pakistan, and Iran. All these countries present unique and distinguishable challenges in the proliferation conversation. North Korea poses a very direct threat of WMD proliferation because they have nuclear materials and technologies that could be used coercively against the US. North Korea is also a threat because it could easily trade its nuclear technology with other countries or groups unfriendly to US interests. Russia presents a different type of threat, as it has fully cooperated with the US to contain its nuclear material. However despite cooperation, the large quantity of nuclear material that Russia contains is inherently difficult to manage and the US must continue to ensure full containment. Pakistan contains less nuclear material than Russia, however it poses a greater threat to WMD proliferation because Pakistan maintains diplomatic relations with North Korea. Additionally, Pakistani nuclear scientist A. Q. Khan has historically traded nuclear materials and technologies to both North Korea and Iran. The US must continue to work to keep nuclear materials from landing in the wrong hands through dedicated counter-proliferation tactics.

Strategy Recommendation

The US defense needs to focus on two priority goals: maintaining an extensive military and defense network that is capable of defeating and shutting down the al-Qaeda network, and keeping WMD and nuclear capabilities out of the wrong hands. The US has built a broad network that has proven capable and effective in deterring al-Qaeda efforts and WMD proliferation since 9/11. This network is composed of a strong special operations force and advanced intelligence, surveillance, and reconnaissance (ISR) capabilities both in space and on the ground. The US must maintain these capacities to continue to deny al-

Qaeda the safe havens that it seeks to operate from, and also to deter the proliferation of WMD. The US should continue to build and support a network of operations that will diminish the ability for enemies to succeed in these efforts. To stop al-Qaeda, the US must continue with ISR operations from space and also from the ground that work to provide effective intelligence as to the locations that al-Qaeda is operating. The US defense should also continue to employ highly mobile special operations forces as well as continue drone strikes to further shut down al-Qaeda's operational network. In addition, the US must also continue to manage positive diplomatic relations with countries such as Russia, North Korea, Iran and Pakistan to effectively counter WMD proliferation.

To summarize, the recommendations are as follows:

- Maintain US defense network that is capable of shutting down al-Qaeda network, including highly mobile special operations forces and advanced ISR capabilities;
- Continue drone strikes to disrupt al-Qaeda operations;
- Counter proliferation of WMD through positive diplomatic relations with countries such as Russia, North Korea, Iran, and Pakistan.

Chapter 2. Cyber Warfare | By Jennifer Kang

Chapter Summary

Key Policy Conclusions

Cyber warfare is one of the most dangerous new threats to US national security, which is why the US needs to begin preparing immediately to defend against cyber attacks that are already occurring now and will continue to occur in the very near future.

Background

The most common players in cyber warfare are national governments, terrorists, spies, organized crime groups, political activists, and hackers, though practically anyone with access to a computer could be a potential threat. Any information that is stored using a computer is at risk of being stolen or destroyed, such as top secret correspondences or private financial information of the government, companies, or even everyday citizens. Cyber warfare also has the potential to disable hardware, as was the case in Iran when the Stuxnet virus destroyed nuclear centrifuges. This opens up the possibility that enemies could take down swaths of the US power grid or take control of computer-based weapons guidance systems and space satellites.

Policy Considerations

The anonymous nature of cyber attacks makes it extremely difficult to catch offenders and regulate cyber space. More alarmingly, many cyber attacks go unnoticed while hackers reap the benefits of access to top secret data. The US needs a comprehensive plan to deal with cyber attacks at all levels of society, and must begin researching ways of defending against attacks that can be put into place immediately. Because the task is so large, it will need to be a joint effort between the federal government, research universities, and technology companies. Furthermore, the US needs to work with the international community to draft up laws and guidelines regarding the defensive and offensive uses of cyber warfare, as well as regulations for dealing with offenders.

Key Recommendations

- Marshal more support from the federal government for universities and laboratories to conduct research on how best to defend against cyber attacks and recognize cyber attacks quickly;
- Increase coordination between the public and private sectors with regard to information sharing and the development of technologies that could help defend against cyber attacks;
- Host international conferences to develop rules and guidelines for what are or are not acceptable forms of cyber warfare.

Cyber Warfare

Warfare is rapidly moving toward cyber space, so the US military must start researching ways of defending national interests against this emerging threat now. This chapter will first outline the current threats that cyber warfare poses to national security. Next, it will give a rough picture of the US response to cyber threats and potential uses for cyber warfare thus far. Finally, it will conclude by recommending that the US should increase funding for research in this developing field, increase collaboration between the public and private sectors, and work with the international community to establish regulations and guidelines for cyber warfare.

Current Concerns About Cyber Security

James Clapper, Director of US National Intelligence, reported in the 2012 US Threat Assessment for the Intelligence Community that cyber security is one of the greatest threats that the US will face in the next few years. In the report, he stressed the difficulties of being able to quickly identify, categorize, and respond to a cyber attack, as well as the difficulties of securing networks, stating that “in both cases, US government engagement with private sector owners and operators of critical infrastructures is essential for mitigating these threats.”⁹ In other words, more tech companies are moving towards making mobile products and making use of cloud data storage, and although this makes user collaboration and data sharing easier, it also means that there will be a greater need for such companies to continually test and improve the security of their products and services.

The US Computer Emergency Readiness Team has outlined five major players in cyber warfare, though many more categories exist. These key actors are: “national

governments, terrorists, industrial spies, organized crime groups, hacktivists [people who hack for the purpose of political activism], and hackers.”¹⁰ What makes cyber warfare so difficult to defend against is that virtually anyone who owns a computer could be a potential threat, making it extremely difficult to trace the source of cyber attacks. Cyber warfare is especially dangerous for first, its potential to steal or destroy information, and second, its ability to potentially disable hardware.

First, in the 2012 threat assessment, Clapper identifies three key cyber threats to intelligence in the next two to three years: cyber espionage committed by various foreign intelligence services that is targeted at obtaining private and top-secret information, insider threats aimed at publicizing classified information as was the case in the wiki-leaks scandal, and espionage by specific states, most notably China and Russia.¹¹

Just about anything stored on a computer can be stolen, which is alarming given that we store more information on computers today than ever before. Anything communicated via the web is vulnerable to attack. According to the Online Trust Alliance, over 100,000 email accounts are hacked every day in the US.¹² In January 2012, an international hacker group known as Anonymous demonstrated the dangers of vulnerable email accounts by listening in, recording, and posting a 16 minute clip online of a conference call between the Federal Bureau of Investigation (FBI) and several international police forces that was devoted to discussing the actions of Anonymous. While further investigations have not yet tracked down the individuals responsible for the attack, the FBI reported that the hacker group gained information about the logistics of the conference call by hacking the private email of one of the officials involved in the conference. Even cell phones are vulnerable to attacks, meaning that hackers can intercept texts and eavesdrop on calls, track Internet

browsing on smart phones, and even find a user's geographical location.¹³ In other words, cyber attacks can and do affect all levels of our society, from the private emails and phone calls of everyday citizens, to the top secret exchanges between government officials.

For example, Congressman Mike Rogers, Chair of the House Intelligence Committee reported that there are over 100,000 attempted attacks everyday on just the Central Intelligence Agency computer network alone.¹⁴ Congressman Rogers also reported that many of these attacks have come from China, whose attacks on US government and private companies have grown exponentially and will continue to do so, and estimated that the potential value of stolen intellectual property could be as much as \$1 trillion a year.¹⁵ Thus, China could steal information about US-funded research and development, and gain advanced technologies without having to spend as much money on research.

China is not the only country to have used cyber warfare to its advantage. In August of 2008, Russia was accused of adding a cyber dimension to the escalating tensions with Georgia. Georgian websites, including government and news websites, were effectively shut down by requests for massive amounts of data that made sites unreachable, and anti-Georgian content was posted on websites. Internet security specialist Jose Nazario told PBS news that such cyber attacks are generally carried out by botnets, a network of computers "that have been infected with malicious software that then changes the control of the computer to an attacker in a remote location. They continually listen for commands from this attacker and act upon them, basically turning them into slaves or zombies at the attacker's command."¹⁶ Although US defense systems are admittedly stronger than Georgia's, it is not difficult to imagine that such an attack might someday be made on US

websites. In fact, this type of attack, also known as a denial of distributed services, was first used in an attack on Microsoft in 2001.

Second, not all cyber threats are virtual. Perhaps the most infamous use of a cyber weapon is the Stuxnet virus that began circulating in 2009, and has impacted thousands of computers in 155 countries since then. According to the *New York Times*, the Stuxnet virus “appears to have wiped out roughly a fifth of Iran’s nuclear centrifuges and helped delay, though not destroy, Tehran’s ability to make its first nuclear arms.” The worm was designed to cause nuclear centrifuges to spin out of control, while also recording and playing back a video of normal operations so that workers maintaining the plant would not suspect that the centrifuges were destroying themselves. The US or Israel has been suspected for creating the worm, though the team that planted the virus was able to cover its tracks well enough that it is still unknown exactly who was responsible.

In addition, cyber warfare has the potential to manipulate other weapons and missile technologies by attacking the computer systems that control them. It may soon be possible for hackers to attack US missile guidance systems, and change the destinations of such missiles. Unmanned aerial vehicles, also known as drones, that are armed or used for surveillance purposes are a key example of a technology that is vulnerable to cyber attacks. More US weapons systems are becoming dependent on technology that is controlled via computers, showing the danger that cyber attacks could pose in modern warfare.

There have already been concerns about China’s growing ability to attempt to hack into and interfere with NASA satellite systems in space. Dean Cheng, a research fellow at the Heritage Foundation in Washington, noted that if a hacker gained control of a satellite, they could manipulate surveillance cameras or essentially shut down the satellite by

changing the directions of the satellite's solar panels.¹⁷ It is also possible that a hacker might censor or manipulate the information being transmitted by a satellite. The US Air Force Space Command and the National Reconnaissance Office formed the joint Space Protection Program to try to analyze and protect against space threats. However, as more countries begin to test and probe satellites for weaknesses, it becomes increasingly difficult to determine who is responsible for satellite interference. Again, due to the secretive nature of cyber warfare, it is also difficult to determine whether various interference incidents were accidents or intentional attacks.

These are only some of the infinite ways that cyber attacks can be used to wreak havoc. Possible malicious uses might be anything, from shutting down crucial websites (as was the case when hackers shut down the website of the Tel Aviv Stock Exchange in Israel), to shutting down swaths of the US power grid, to taking control of computer-based military weapons. The US cannot afford to underestimate the devastation that cyber attacks could cause.

Current US Readiness for Cyber Warfare, and International Regulations

US Cyber Command (USCYBERCOM or CYBERCOM) was created in 2009 as a branch of the US Strategic Command. So far, CYBERCOM has been focused mainly on defense against cyber attacks rather than on developing offensive strategies. In 2010 CYBERCOM was in charge of maintaining 15,000 computer networks for all of 4,000 military bases, located in 88 different countries.¹⁸ According to the USSTRATCOM website, "USCYBERCOM improves DoD's capabilities to ensure resilient, reliable information and communication networks, counter cyberspace threats, and assure access to

cyberspace. The command works closely with interagency and international partners in executing the cyber mission.”¹⁹ The goals of CYBERCOM, as outlined above, are still overwhelming given that CYBERCOM is devoted to protecting against both domestic and foreign cyber attacks.

What is particularly worrisome is that our ability to detect cyber attacks is still very limited. Based on a statement made by Army General Keith B. Alexander, commander of CYBERCOM, the Department of Defense stated that, “for every company that recognizes it has been hacked...hundreds more don’t.”²⁰ Furthermore, the US is not currently able to guarantee a quick retaliation against those attacks that are detected. Only recently, in December of 2011, did the USCYBERCOM complete its first major attack simulation, showing that although USCYBERCOM is hard at work, its ability to defend US networks still has a long way to go.²¹

The DoD’s website also states that USCYBERCOM “when directed, conducts full-spectrum military cyberspace operations (in accordance with all applicable laws and regulations)”, which raises questions about US offensive strategy.²² First, as mentioned earlier, CYBERCOM seems to be more focused on defensive measures; however, when the US was preparing to lead strikes against Libya’s air-defense system in March 2011, cyber weapons were considered for this task. The US ultimately decided to hold off on an offensive cyber attack because such a move could pave the way for similar types of attacks by other countries, possibly on the US. As James Andrew Lewis of the Center for Strategic and International Studies put it, “We don’t want to be the ones who break the glass on this new kind of warfare.”²³

Second, thinking about cyber operations “in accordance with all applicable laws and regulations” raises the question of what kinds of domestic and international laws and regulations even exist that could be applied in such a case. Due to the impossibility of tracing all cyber attacks, conventional ways of catching vandals and criminals no longer apply, leaving wide open the question of how the world plans to deal with those who commit cyber crimes or attempt cyber attacks. In 2011, the White House released an International Strategy for Cyberspace in which it listed some proposed norms and noted that the development of an international policy based on norms agreed upon by different countries is one of the next steps that needs to be taken. However, this may prove difficult if countries view cyber warfare as a “secret weapon,” and if they believe that the benefits of offensive cyber maneuvers are great enough to lead to a disregard for international policy.

Strategy Recommendations

The longer the US waits to build up defense against cyber attacks, the more vulnerable it becomes. Massive amounts of data are collected and stored every day, and without a decent defense plan, all of that information is at risk. President Obama recently spoke of cyber warfare as a top priority for defense in 2012. What is needed first and foremost is a reliable way to divide the overwhelming problem of cyber warfare into manageable portions. While cuts will have to be made in many areas of the defense budget over the next ten years, cyber is one area where increased spending is needed. A few strategy recommendations are emphasized here as follows.

First, in addition to the newly established Cyber Command, the federal government will need to work with universities and research labs to address cyber security issues. The

US Defense Advanced Research Projects Agency has taken a huge step in the right direction by planning to increase research funding for cyber security issues by 50% over the next five years, seeking \$208 million to spend on cyber research in fiscal year 2012.²⁴

Second, in addition to increasing research, the federal government will need to work more closely with private tech companies in order to continually improve security, and develop faster ways to respond to incoming threats. Microsoft recently announced its experimentation with a real-time threat intelligence feed designed to help increase the effectiveness of a response to a cyber threat.²⁵ Google, Facebook, PayPal and other big name tech companies also started collaborating in late January 2012 to target email phishing.²⁶ More needs to be done to integrate these efforts with the government's cyber security strategy. In November 2011, a cyber security bill was proposed that would help to increase communication between the government and tech companies, who are often reluctant to share classified information with each other. Bruce Josten of the U.S. Chamber of Commerce stated that the bill "would knock down policy and legal barriers that have limited the healthy sharing of cyber threat information between and among elements of the public and private sectors."²⁷ Strengthening communication between the government and tech companies will be crucial to developing a defense plan, and to quickly developing a response to new cyber threats as they arise.

Third, the next important step is to hold a series of international conferences on cyber security as soon as possible, to try to come to an agreement between different states about acceptable uses of cyber warfare, and methods of regulating cyber attacks. Such conferences are necessary to help shape the future of cyber warfare. Furthermore, the ability

of the US and its allies to cooperate and build upon each other's discoveries is essential in the race to defend various networks against cyber attacks.

Chapter 3. Afghanistan and Pakistan | *By Meagan Winnie*

Chapter Summary

Key Policy Conclusions

As the withdrawal date for leaving Afghanistan nears, the top priority for the US will be to contain the threats coming from Afghanistan and Pakistan. In particular the US will need to work toward stabilizing both countries so that they no longer provide safe havens for terrorist organizations such as al Qaeda to plan and organize terrorist attacks against the US and our allies.

Background

Following the September 11th terrorist attacks, the US has been militarily involved in Afghanistan and Pakistan with the objective of uprooting terrorist organizations. As the US plans to withdraw from Afghanistan, it is imperative for the US to safeguard the gains it has made in securing the region. This will require long-term investment in the country, primarily by maintaining an extensive Special Operations Force to work alongside Afghan forces in disabling terrorist networks and combating terrorist threats before they arise. This will also require the US to maintain a relationship, however contentious and difficult, with Pakistan. As long as Pakistan continues to harbor al-Qaeda and the Taliban within its borders, Afghanistan's security will remain precarious, and the US will be at risk for another terrorist attack.

Policy Considerations

Securing Afghanistan and Pakistan, thereby preventing another terrorist attack against the US and our allies, will require three broad sets of policy considerations. First, the US will need to work toward stabilizing Afghanistan in terms of building up local Afghan forces and maintaining an agile Special Operations Force to help the Afghans secure their country. Then the US needs to consider Pakistan's interest in Afghanistan, particularly regarding the country's continued support of al-Qaeda, the Taliban, and other terrorist organizations, as a foreign policy tool. The US needs to make it clear to Pakistan that its reliance on terrorist organizations as a way of securing itself against India is actually a source of the country's insecurity. Finally, these two policy considerations need to be viewed from the objective of preventing another terrorist attack against the US. This will require the US to work unilaterally, if necessary, to disrupt terrorist networks along the Afghan-Pakistan border.

Key Recommendations

Afghanistan

- The US should continue to work toward training Afghan forces with the ultimate goal of handing over security responsibilities;

- The United States must continue to maintain a presence in Afghanistan well past 2014 in the form of American Special Operations Forces, in order to protect and maintain its advances in the region;
- In its new role, US military presence will become a much smaller part of overall US strategy, while diplomacy, economic development, and ISR and counterterrorism operations will become a much larger part of US strategy in Afghanistan;
- The US should encourage Afghanistan and Pakistan to participate in the Taliban talks.

Pakistan

- The US must continue to maintain a working relationship with Pakistan. While engagement with Pakistan is often frustrating, and at times dangerous, it is even more dangerous to cease engagement with Pakistan.
- The US should expand its non-military aid to Pakistan in order to enhance civilian capabilities.
- The US must encourage a normalization of Indo-Pakistani relations.
- The United States should continue conducting drone operations along the Afghan-Pakistan border, but it should significantly scale back its operations in order to decrease anti-American sentiment within Pakistan. More broadly, US ISR and counterterrorism should maintain a strong presence in Pakistan, which will include working unilaterally when necessary.

Afghanistan and Pakistan Strategy

As the United States plans to withdraw troops from Afghanistan by 2014, the top priority in Afghanistan and Pakistan will be to stabilize both countries by containing internal instabilities so that neither country is capable of providing safe havens for al-Qaeda, the Taliban, or other terrorist organizations which plan and organize attacks against the US and allies. While al-Qaeda's core leadership is less of a threat now than it was in 2001, its network of partners still presents a significant threat to US security. Linda Robinson, Adjunct Senior Fellow for US National Security and Foreign Policy argues that "if the United States turns its gaze elsewhere, there is a good chance the moribund factions will regenerate, so long as the forces that generate recruits remain."²⁸

Three broad sets of policy considerations are required to prevent terrorist organizations from finding safe heavens in Afghanistan and Pakistan. First, as the US is winding down its military presence in Afghanistan, it must focus on building up local Afghan forces and strengthening the Kabul government. Next, the US must consider Pakistan's interest in Afghanistan, while paying particular attention to the instability of the Pakistani state. As long as Pakistan remains unstable—meaning as long as the Pakistani military relies on its precarious relationship with terrorist organizations as a foreign policy tool—the feasibility of a stable Afghan state is highly unlikely. Finally these sets of broad policy considerations are key in denying al-Qaeda, the Taliban and other terrorist organizations a safe haven from which to launch a terror attack against the US.

Afghanistan, Taliban, and Al-Qaeda: Unfinished Business

The US has been militarily involved in Afghanistan since 2001 when it led an invasion against al-Qaeda following the September 11 terrorist attacks. Although the attacks quickly dislodged al-Qaeda and removed the Taliban from power, neither terrorist organization has been eliminated. Instead as the US turned its attention to Iraq, the Taliban and al-Qaeda found safe havens in Pakistan along the mountainous Afghan-Pakistan border. It is from this region and in particular the semi-autonomous Federally Administered Tribal Areas (FATA) in Pakistan²⁹ where al-Qaeda operatives have planned and organized terrorist attacks against the US, London, Madrid, Bali, Germany, and Islamabad.³⁰ To complicate matters, FATA is home to a myriad of Pakistani terrorist organizations, which also threaten the stability of Pakistan, as well as Afghanistan.

Al-Qaeda and the Taliban's staying power in the region is partly a result of success in cultivating supportive networks in an area generally inhospitable to outsiders.³¹ Al-Qaeda provides several types of assistance to Pakistani terrorist organizations in exchange for sanctuary. Al-Qaeda's leadership has established shuras (councils) in order to coordinate strategic priorities, campaigns, and tactics against Western allied forces such as launching suicide attacks, emplacing explosive devices, and helping to conduct ambushes and raids against coalition forces in Afghanistan. Al-Qaeda also provides training, propaganda, and indoctrination to various Pakistani terrorist organizations. However al-Qaeda and the Taliban's relationships with Pakistani terrorist organizations are complex. In 2010 General David H. Petraeus said that the different groups shared a symbiotic relationship, to the extent that "they support each other, they coordinate with each other, sometimes they compete with each other, [and] sometimes they even fight each other."³²

Shifting Attention to Afghanistan

In 2008 President Obama made Afghanistan the central focus of his administration by drawing troops out of Iraq and into Afghanistan. However, despite the military's success in Afghanistan, the Taliban and its collaborators still remain deeply rooted in the country, Afghan forces remain deeply suspicious and hostile to American troops, and the country's contentious border with Pakistan remains porous, thereby allowing terrorist organizations to travel freely between Afghanistan and Pakistan.

Afghan Stability: Transitioning and Cooperation with US Forces

Currently, the US has approximately 90,000 troops in Afghanistan. It is expected that 22,000 of these troops will leave by the fall of 2014.³³ As conventional forces gradually withdraw, the US will increasingly rely on Special Operations Forces—our most elite troops—in order to counter terrorist threats, as more responsibility for Afghanistan's security is transferred to Afghan forces. Relying on Special Operations forces will allow the US military's most qualified forces to prepare Afghan security forces to take responsibility for their country's security. As a result, the US will be able to move away from counter-insurgency operations, meaning the US will no longer be responsible for clearing large swaths of land controlled by insurgents while government agencies from Kabul rebuild local governments. These tasks will fall on the shoulders of Afghan forces, with help from the Special Operations forces and in particular the Army Special Forces. They will be responsible for both training Afghan forces while also carrying out counter-terrorism campaigns.

US Involvement in Afghanistan After 2014

In December 2009, President Barack Obama outlined the goal of US policy in Afghanistan, "...to disrupt, dismantle, and defeat al-Qaeda in Afghanistan and Pakistan, and to prevent its capacity to threaten America and our allies in the future."³⁴ To address this threat, the US revised its Afghanistan-Pakistan strategy in 2009 and offered two broad strategies; a fully restored counterinsurgency and a more limited counterterrorism strategy.³⁵ While the U.S. has disrupted and dismantled the al-Qaeda network in Afghanistan and Pakistan, these gains remain fragile. Moving ahead the US will need to plan to safeguard its advances in Afghanistan.

Counselor at the Center for Strategic and International Studies and former US Ambassador to the United Nations, Zalmay Khalilzad outlines three different future projections of US policy in Afghanistan after 2014.³⁶ The first option, which he calls *Immediate Departure and the Allocation of Resources*, would place the majority of reconstruction responsibilities into the hands of international institutions and the government of Kabul. In this option, the US would maintain basic counterterrorism operations but they would fall under significant restraints. This would increase the likelihood that Afghanistan's neighbors would increasingly come to determine Afghan policy, particularly as Pakistan and India vie for influence in the country. In this situation, it is highly likely that terrorist networks would reemerge.

Khalilzad's second option, *Phased Drawdown and Internalization of the Effort* would involve withdrawing all US forces from Afghanistan by 2014 thereby transferring security responsibility to Afghan leaders. While the US would work with its allies in order to secure Afghanistan, complete US disengagement is likely to exacerbate Afghanistan's problems, particularly if our allies see our exit as an opportunity to leave.

In the third option, *Sustained, Determined US Engagement*, the US would continue to maintain a high level of military and civilian engagement in Afghanistan until the government of Kabul is able to control its own borders. General John Allen has said that prior to the 2014 withdrawal date, his staff will help Afghan forces operate independently by assigning them US personnel to provide day-to-day advice on planning operations, as well as calling in artillery, close air support, and if necessary, US helicopters to evacuate the wounded.³⁷ During the transition period, the US will have to improve the capacity of the Afghan state to manage its own affairs by continuing counterinsurgency operations. However, over time, the mix of US forces on the ground will gradually shift away from infantry units trained to clear and hold areas of insurgents and toward advisers and so-called “enablers,” including helicopter units, logisticians and other support personnel to assist Afghan soldiers.³⁸ US Lieutenant General William Caldwell said that the Afghan army and police still lack many skills required to succeed in modern warfare, primarily planning and executing air and artillery support and logistics.³⁹ Defense Secretary Panetta has said that Afghan security forces will eventually “decide, obviously, patrols, tactics, [and] enemy targets,” but that “we’ll be there for support, we’ll be there for guidance, but they’re the one who will be in the lead and conduct the operations.”⁴⁰ It is essential that beyond the 2014 withdrawal date the US leave behind Special Operations Forces within Afghanistan. Without such a force, it is unlikely that the Kabul government will be able to counter threats from al-Qaeda, the Taliban, and other terrorist networks currently operating within Pakistan.

Even in the best-case scenario where the US makes significant progress on key priorities such as counterinsurgency, stabilizing Pakistan, working toward reconstruction, and continuing Afghan governance reforms, consolidating gains will require new forms of

engagement with Afghanistan for many years to come. Ultimately, the military will need to become a much smaller component of US strategy relative to diplomacy and economic involvement with Afghanistan.

The Taliban Talks

Since the Taliban's oust in 2001, its leadership has continued to insist that they are the rightful Afghan government.⁴¹ As such, they have until recently refused to talk to the Kabul government. Therefore, the mere possibility that the Taliban would entertain the idea of talking with the Afghan government is significant in and of itself. It might be an admission that they see the Kabul government as legitimate. Obviously, the most difficult aspect of these talks will be reaching a consensus. Nevertheless, these talks could prove to be crucial in improving relations among all parties. Reconciliation needs to be part of the solution.

At the moment, the degree to which Pakistan will be involved remains deeply contentious. After decades of Pakistani meddling in Afghan affairs, the Kabul government harbors suspicion toward Pakistan and believes that Pakistan is using these meetings to provide a counterweight to American efforts to negotiate with the Taliban.

The Government, Military, and Civilian Population in Pakistan

Pakistan's current problems are deeply historical. Imagined as a home for India's Muslim population, Pakistan has never been a secure state, alternating between civilian and military rule, with perpetual difficulties regarding separatist movements.⁴²

From its creation in 1947, Pakistan has had territorial disputes with India over Kashmir and a highly contested border along the Durand Line with Afghanistan. Without a clearly defined and secure border, Pakistan has always felt under siege from its neighbors and has historically relied on the military for protection. As a result, Pakistan has been governed directly or indirectly by the military since its inception.⁴³ Historically, when military leaders in Pakistan come into power, they suspend the constitution; Pakistan has had five since its independence, and implementing a presidential system.⁴⁴ After long periods of military rule, the civilian government often finds it difficult to reverse the policies implemented during military rule, thereby making it difficult to restore a parliamentary system.⁴⁵

Unfortunately, this pattern continues today. Although nearly four years have passed since General Pervez Musharraf was forced from office, his widely unpopular successor, President Asif Ali Zardari, remains incapable of keeping the military in check. South Asia expert Frederic Grare argues, “The main challenge for the civilian government is to gradually assert their predominance over the military.”⁴⁶

Power in Pakistan continues to reside with the military. General Ashfaq Parvez Kayani is often regarded as the most powerful man in Pakistan. Although General Kayani has begun to pursue a more aggressive approach toward fighting terrorist organizations within Pakistan, portions of the Pakistani military, particularly the Inter-Services Intelligence (ISI) continue to support the Taliban and various other Pakistani terrorist organizations.

Pakistan and the US Post-9/11

Prior to September 11, al-Qaeda operated through a network of Pakistani terrorist organizations. The Taliban recruited members from madrassas and mosques, often supported by various Pakistani political leaders.

The relationship between United States and Pakistan changed drastically after September 11. The US lifted nuclear and democracy-related sanctions, forgave more than \$1 billion in debt, and resurrected bilateral military and intelligence operations with Pakistan.⁴⁷ Immediately thereafter, the US demanded that Pakistan cease its support of the Taliban and al-Qaeda. In return, the US began a program of military and economic aid designed to induce Pakistan to cooperate in the fight against al-Qaeda and the Afghan Taliban, who found safe haven in Pakistan's tribal areas. Washington designated Pakistan a "major non-NATO ally," which afforded the Islamabad government expedited access to spare parts and other military supplies.⁴⁸ At the time Pakistan's military leader General Pervez Musharraf agreed to US demands, but he continued to walk a fine line between meeting the demands of the Bush Administration and providing support for the Taliban and al-Qaeda.

The Great Paradox: Afghan Security Remains Deeply Dependent on Pakistan

"Thus what bedevils the US-Pakistan relations is not pervasive distrust but rather a surplus of certitude: certitude that, for the foreseeable future, US and Pakistani strategic interests have only a small—and quickly vanishing—area of overlap."⁴⁹

Just as the Obama Administration expanded its military commitment in Afghanistan, it also deepened its dependence on Pakistan, at a time when Pakistani and US interests were quickly diverging.⁵⁰ This has created a deeply complex and paradoxical situation where the United States regards Pakistan as an ally in the fight against terrorism, yet remains at war with its proxies in Afghanistan.⁵¹ Christine Fair, professor in the Center for Peace and

Securities Studies at Georgetown University's Edmund A. Walsh School of Foreign Services has said:

How strange is it that the United States has leveraged itself to Pakistan for access to ground and air lines of control to fight a counterinsurgency effort in Afghanistan, when the very insurgents are supported by Pakistan and it is Pakistan that is most likely to determine the outcome of that fight, likely in a way that is injurious to US interests and investments?⁵²

Thus, Fair argues, what plagues the US and Pakistani relations is not distrust but rather “a surplus of certitude: certitude that, for the foreseeable future, US and Pakistani strategic interests have only a small—and quickly vanishing—area of overlap.”⁵³

The Pakistani Military

Pakistan has one of the largest armies in the world with over 600,000 active personnel. Pakistani Army Chief Ashfaq Parvez Kiyani says that the army has a full range of “counterinsurgency training facilities for low-conflict intensity.”⁵⁴ However, except for a very specialized weapons and equipment training program, no generalized foreign training is required.⁵⁵ Pakistan has used US aid to purchase helicopters, F-16s, aircraft-mounted armaments, and anti-ship and antimissile defense systems.⁵⁶ Director of the South Asia Center at the Atlantic Council of the United States and expert on the Pakistani military Shuja Nawaz, argues that the army has not yet made the decision to become a counterinsurgency force and instead seeks better equipment from the US in order to fight “low intensity” conflict with India. In fact Craig Cohen and Derek Chollet from the Center for Strategic and International Studies argue that “few of these weapons are likely to provide much help in rooting out al-Qaeda or the Taliban.”⁵⁷ Fair argues that this points to a much larger problem for the US—that is, “Pakistan’s army does not want to become a counterinsurgency force.”⁵⁸

Furthermore, al-Qaeda and the Taliban, responsible for the majority of attacks against the US and coalition forces in Afghanistan, are suspected of being a “strategic arm of Pakistan’s Inter-Service Intelligence Agency.”⁵⁹ Although constitutionally accountable to the Prime Minister, most ISI officers come from the army which is where their loyalties and interests continue to lie. Therefore, while the Pakistani army and ISI are more willing to go after terrorist organizations within their borders than they have been in the past, they continue to form alliances with terrorist groups to hedge against India’s growing power and influence in the region. This puts Pakistan in a precarious situation. On the one hand, it provides relative security to terrorist organizations. On the other hand, Pakistan also has to make sure that none of these terrorist organizations threaten Pakistani interests. Not surprisingly, Pakistan’s interests don’t always align with the interests of terrorist organizations, as security forces, the army, and the police have increasingly become targets for the terrorist organizations that the military often supports. In October 2009, militants attacked the army headquarters in Rawalpindi and held forty people hostage for over twenty hours.⁶⁰

Not only is Pakistan’s policy of selectively supporting terrorist organizations within its borders making it more difficult for the US to accomplish its objectives in Afghanistan, it also threatens the very stability of the Pakistani state. As such, it is imperative for Pakistan’s civilian government and military to realize that using terrorist organizations as a political tool in their overall security vis-à-vis India and Afghanistan has serious security repercussions for the Pakistani state.⁶¹ While Pakistan sees this strategy as beneficial in the short-term, it is preventing the country from achieving long-term stability.

Pakistan's Relationship with India

Pakistan's continued ambivalence toward al-Qaeda, the Taliban, and various other terrorist organizations within its own borders is the state's attempt to counter India's growing power and influence in South Asia and broadly speaking in the international community. Put more simply, Pakistan will not, under any circumstance, accept Indian hegemony in the region. Pakistan has several worries. First, it worries that India is trying to meddle in its domestic affairs. In particular, Pakistan is concerned that ethnic Tajiks and other members of the former Northern Alliance in the Afghan government are cooperating with New Delhi in trying to foment a separatist movement within the province of Baluchistan. Secondly, Pakistan worries that India is using Afghanistan as a way to snatch the disputed region of Kashmir, thereby trying to encircle Pakistan. Pakistan's perceived security threats, which are deeply historical, are an immense challenge for US policy.

Keeping this context in mind, while the US is trying to garner Pakistan's support and cooperation in fighting terrorism, it has simultaneously been bolstering India as the regional hegemon and an emerging global power. As long as India's prominence in South Asia and the international community continues to rise, Pakistan's reliance upon terrorist organizations, the only tool it has to hedge against Indian hegemony (militarily India is far superior), will continue. Without some normalization of Indian and Pakistani relations, the US will continue to come up against Pakistan's regional insecurities. In a 2009 interview with PBS, President Asif Ali Zardari said that the Pakistani army had begun to move troops away from the Indian border and toward the country's tribal regions. However, Talat Masood, a retired lieutenant general of the Pakistani army, said that the shift was merely

tactical. He argues that for a genuine strategic shift, Pakistan needs to stop seeing India as its primary threat, which would require a resolution to the longstanding conflict in Kashmir.

It is imperative for the US to try to normalize relations between India and Pakistan. This will not be an easy task. India and Pakistan share a long and bitter history. Nevertheless it is crucial for the US to facilitate an open dialogue between the two countries because as long as the Pakistani state sees itself as insecure in relation to India, it will continue to use terrorist organizations as its most valuable foreign policy tool.

Pakistan's Nuclear Arsenal

India tested five nuclear devices on May 11, 1998. Shortly thereafter, on May 28, 1998, Pakistan, despite receiving international warning, tested six devices thereby signaling nuclear parity.⁶² Although exactly what was tested remains up for debate, a nuclear-backed India and Pakistan has clearly altered the landscape of South Asia and alternatively, our relationship with Pakistan. In particular the, “nuclearization of South Asia” has stabilized conflicts at the higher end of the spectrum (making conventional warfare unlikely) however it has also destabilized conflict at the lower end of the spectrum (making proxy wars in Afghanistan and Kashmir much more attractive). Furthermore, the authors of “Pakistan: Can the United States Secure an Insecure State” argue, “all aspects of Pakistan’s nuclear weapons arsenal—size and posture, doctrine for use, and prospects for future expansion—are driven overwhelmingly by the country’s security concerns about India.”⁶³

Therefore, despite concerns that al-Qaeda, the Taliban, or another terrorist organization working within Pakistan will seize control over the country’s nuclear arsenal or that someone within the nuclear establishment will transfer nuclear weapons to terrorist

organizations, it is unlikely that Pakistan will lose control over its nuclear arsenal. It is among Pakistan's top national interests to secure the survival of its nuclear arsenal. Within Pakistan, nuclear weapons are seen as a guarantee to the country's survival as well as an instrument to increase Pakistan's standing internationally as a state possessing nuclear weapons. This requires that Pakistan maintain a well-organized system with significant oversight to protect its arsenal, which is believed to consist of at least 60 nuclear warheads, and possibly as many as 120, from internal and external threats.⁶⁴ Control over Pakistan's nuclear arsenal was formalized in 2000 with the creation of the National Command Authority (NCA).⁶⁵ The NCA is the highest level of decision-making concerned with Pakistan's nuclear affairs. The NCA is always headed by the current Pakistani President and also includes the prime minister and the army chief of staff. However the Strategic Plans Division (SPD), run by the army, is responsible for implementing Pakistan's nuclear weapons program. In practice the relationship between the President and the army form the basis of Pakistan's nuclear policy and management.⁶⁶

Nevertheless the US should be concerned about Pakistan's nuclear arsenals; after all, Pakistan is an unstable state. It is estimated that Washington has spent between \$50 to \$100 million toward programs designed to provide assistance in safely storing and transporting nuclear materials as well as providing technology transfers that allow Islamabad to purchase sensors and other technologies from US firms to better equip its nuclear sites.⁶⁷

Counterinsurgency in Pakistan: Drones, ISR, and Special Operation Forces

The US should continue its drone operations along Pakistan and Afghanistan's tribal regions in order to prohibit terrorist organizations such as al-Qaeda from launching terrorist

attacks against the US. Although drone operations are deeply unpopular in Pakistan, the potential benefits of the program outweigh the danger caused by the unpopularity of the program. During the brief cease in drone strikes November 2011, after US forces accidentally killed two dozen Pakistani soldiers, it is believed that al-Qaeda, the Taliban, and other terrorist organizations were able to regroup and reorganize. This underscores the importance not only of maintaining drone operations but also more broadly, of maintaining ISR and counterterrorism efforts in the region. However the US will need to be extremely cautious in the extent to which it relies on these strikes. Deeply unpopular in Pakistan, each drone strike carries the cost of undermining our long-term objectives in stabilizing Pakistan.⁶⁸

While US policy in assisting Pakistan in eliminating terrorist bases in FATA thus far has emphasized providing counterinsurgency training to the paramilitary Frontier Corps and development assistance to the people in the region, the Pakistani army is unreliable.⁶⁹ Until the Pakistani government and military demonstrates its willingness to act aggressively against terrorist organizations, the US may find it necessary to conduct unilateral strikes on targets in the country's tribal area, which would mean having a well equipped and well prepared ISR response on hand at all times.

Engagement with Pakistan is Difficult But Essential

“Pakistan is part of the problem in the region, it must also be part of the solution. A flawed and strained engagement with Pakistan is better than disengagement. We have completely disengaged in the past. That disengagement failed and brings us where we are today. Thus, our engagement requires a combination of patience with understanding in Pakistan's national interests, and a clear-eyed assessment about what is in ours.”⁷⁰

In an ideal situation, Pakistan would be at peace with its neighbors. However, given the country's tumultuous past and current problems, it is likely that Pakistan will continue to

be politically unstable, engage in dangerous attempts to alter the territorial status quo with India, interfere in Afghanistan, and rely on terrorist organizations as a foreign policy tool.⁷¹ Nevertheless, it would be dangerous for the US to withdraw its support, as the Pakistani state is ill-equipped to deal with its external threats, even if its leadership made the decision to do so. Its armed forces are not properly trained, the military has little interest in counterinsurgency operations, Pakistan's police are poorly trained and ill-equipped, and the country lacks a competent domestic intelligence agency.⁷²

However, the situation in Pakistan isn't as hopeless as it may seem. Opinion polls show that Pakistanis prefer civilian rule to military rule. Whereas US-Pakistani interests often diverge, this is one area where our interests overlap, and should thus be exploited. Pakistan currently ranks among the largest recipients of US military aid,⁷³ but US aid to Pakistan has primarily focused on military aid. The US needs to expand non-military assistance to help the Pakistani government gain the necessary capabilities to consolidate popular support among the Pakistani population. In other words, we should continue to demonstrate to Pakistan that our support for democratic institutions is unwavering and that we support civilian rule over military rule.⁷⁴ As such, the U.S. should shift gears toward investment in building a civilian government in Pakistan. Funding should be used to enhance civilian capabilities through investments in the police and rule of law, the parliament, and other measures of human development.⁷⁵

Policy Recommendations

Afghanistan

- The US should continue to work toward training Afghan forces and gradually handing over control.

- The United States will continue to maintain a presence in Afghanistan well past 2014 under the guise of American Special Operations Forces, in order to protect and maintain its advances in the region.
- In its new role, US military presence will become a much smaller part of overall US strategy, while diplomacy, economic development, and ISR and counterterrorism operations will become a larger part of US strategy in Afghanistan.
- The US should encourage Afghanistan and Pakistan to participate in the Taliban talks.

Pakistan

- The US must continue to maintain a working relationship with Pakistan. While engagement with Pakistan is often frustrating, and at times dangerous, it is even more dangerous to cease engagement with Pakistan.
- The US should expand its non-military aid to Pakistan in order to enhance civilian capabilities.
- The US must encourage a normalization of Indo-Pakistani relations.
- The United States should continue conducting drone operations along the Afghan-Pakistan border, but it should significantly scale back its operations in order to decrease anti-American sentiment within Pakistan. More broadly, US ISR and counterterrorism should maintain a strong presence in Pakistan, which will include working unilaterally when necessary.

Chapter 4. Iran | *By Jennifer Kang*

Chapter Summary

Key Policy Conclusions

The threat that Iran poses to the national security of the United States stems from their nuclear enrichment program and the possibility that they may be in the process of developing a nuclear bomb. If they gained a nuclear bomb, Iran would be more likely to take aggressive action against the United States and its allies by supporting terrorist groups, attacking Israel, or closing the Strait of Hormuz. The US needs to prepare now to defend against Iran's growing ballistic missile capability, and needs to be prepared to reopen the Strait of Hormuz if the Iranians try to close it.

Background

It is currently unknown whether Iran is building or is planning to build a nuclear bomb, but the fact that they have increased their nuclear enrichment to 20% and moved some of their enrichment facilities underground has drawn suspicion. Iran has been known to support terrorist groups such as al-Qaeda, Hamas, and Hezbollah, and these groups would likely grow stronger if Iran were to obtain a nuclear bomb. Iran also has a large supply of ballistic missiles, and may be in the process of developing long range missiles that could reach the US. Finally, the US and the European Union have attempted to impose sanctions on Iran in hopes of weakening its ability to fund a nuclear weapons program, but Iran has responded by threatening to close the Strait of Hormuz, through which nearly a fifth of the world's oil passes each day.

Policy Considerations

Economic sanctions may not have as drastic an effect on Iran, because Iran still has business ties with some countries, such as India. Many have also argued that economic pressure does not work on rogue states, which often use negotiations as a way to gain time to continue work on weapons programs. Yet the problem with using military force to deter Iran is that it is only likely to encourage them to build a nuclear bomb faster. In response to the nuclear threat from Iran, the US needs to continue to work with the international community to impose sanctions, while also finding opportunities to engage Iran in negotiations. The US also needs to maintain sufficient anti-ballistic missile capabilities counter Iran's ballistic missile capabilities, and must make sure that the US navy is prepared to re-open the Strait of Hormuz if needed.

Key Recommendations

- Continue to work with the international community to impose economic sanctions on Iran;
- Open dialogue with Iranian officials over their nuclear enrichment program;

- Use military intervention as a last resort, but be prepared to deploy the US Navy to open the Strait of Hormuz if necessary;
- Ensure adequate anti-ballistic missile capabilities to respond if Iran develops a long range ballistic missile;
- Reassure Israel that the US takes the threat from Iran seriously, and continue to try to persuade Israel not to attack Iran on its own.

Iran

When making cuts to the US defense budget, it is important to consider Iran and the threat that it poses to US national security. This chapter will analyze the current and possible future actions of Iran in order to present a recommendation for how the Department of Defense (DoD) should prepare itself.⁷⁶ It will begin with a discussion of the possible threats that Iran poses for the US and the international community at large via Iran's nuclear enrichment program, alliance with terrorist groups, and weapons capabilities. Next, this chapter will discuss current US strategy and relations with Iran in order to give recommendations for how the United States should proceed from here.

Current Concerns

One immediate concern is that Iran's nuclear enrichment program could lead to the development of a nuclear bomb and the subsequent strengthening of terrorist groups that Iran is affiliated with, which would take a severe toll on stability in the Middle East. A second, more long-term concern is Iran's vast supply of ballistic missiles. Third, another immediate concern is Iran's threats to shut down the Strait of Hormuz, which would drastically affect numerous countries that depend on the Strait for oil.

First, Iran's nuclear program is dangerous because if Iran obtains a nuclear weapon, it will have more confidence to act aggressively towards the US and its allies by following through on its threats to close the Strait of Hormuz, possibly attacking Israel, or supporting terrorist groups. It is still unknown, however, whether or not Iran is actually building or planning to build nuclear weapons at all. Secretary of Defense Leon Panetta has stated that if the Iranians were to start building nuclear weapons, that would be a "red line" that the US

cannot allow Iran to cross, but what this “red line” looks like is still undecided.⁷⁷ As of mid-January, the International Atomic Energy Agency (IAEA) reported that Iran had begun to enrich uranium up to 20%. James Clapper, Director of National Intelligence, stated that “enrichment of uranium to a 90 percent level would be a pretty good indicator of their seriousness” to begin building a bomb, though some analysts already consider 20% enrichment to be a significant step towards the development of weapons-grade uranium.⁷⁸

In November 2011, the IAEA reported that Iran was already researching and designing ways to develop nuclear weapons. The additional movement of Iranian nuclear facilities underground in the mountainous region of Qom caused the world to view Iran’s nuclear program with even more suspicion.⁷⁹ Although Iran claims that its nuclear program is purely and peacefully focused on meeting Iran’s growing energy needs, which is allowed under the Nuclear Proliferation Treaty that Iran signed in 1968, Iran’s high levels of uranium enrichment mean it could “break out” with nuclear weapons in no time at all should it choose to do so. Defense Secretary Panetta has predicted that if Iran were to decide to pursue the development of nuclear weapons, it could take them as little as a year to build the bomb, and another year or two to actually make it deliverable.

If it builds a nuclear bomb, Iran would be much more likely to strengthen its support for aggressive terrorist groups, including al-Qaeda. In early February 2012, it was reported that Iran may have helped to release a group of al-Qaeda inner leaders that had been held under house arrest for nearly a decade. A recent article in *Foreign Affairs* magazine stated that Iran and al-Qaeda are united by their hatred of the US, despite their religious differences, and argued that Iran agreed to host a few al-Qaeda leaders as a way to keep al-

Qaeda from attacking them. Iran may also try to use al-Qaeda to attack the US or Israel if a conflict arises.⁸⁰

In addition, Iran has ties with the Lebanese Hezbollah who have 50,000 rockets, some of which are fully capable of reaching Israel and the Palestinian Hamas. According to the *New York Times*, Iran has provided as much as \$200 million a year in financial support for Hezbollah, and has helped teach the militant group how to aim rockets and organize their army and intelligence.⁸¹ Given Hezbollah's strong stance against Israel, it is possible that Hezbollah may also come to Iran's aid if Israel and the US were to attack Iran. If Iran gained a nuclear bomb, its support for these terrorist groups would cause Israel to build upon its existing weapons program in an act of self-defense, and would create intense instability in the Middle East. If Israel and Iran were to go to war, the US would be drawn into the conflict at some point because of its duty to protect Israel as an ally. In short, as John Bolton from the American Enterprise Institute stated at a Committee on Foreign Affairs in June 2011, Iran's nuclear weapons program would be relatively small compared to that of the US, but this means that:

[Iran's] nuclear weapons will not really be military, but will instead be weapons of terrorism, a threat not to military targets but to our innocent civilians. Iran's extensive record of funding and arming international terrorists, and itself engaging in terrorism, should be warning enough that its leaders are fully capable of nuclear terrorism as well.⁸²

Not only could terrorist organizations in the Middle East benefit, but if Iran builds the bomb, Bolton argues that it may also lead to collaboration with North Korea and Syria to encourage further proliferation and avoid international pressures.

Second, Iran has already benefited from cooperation with North Korea in the development of its large supply of ballistic missiles. The 2010 Annual Threat Assessment

from Director of National Intelligence Donald Blair reported that “Iran already has the largest inventory of ballistic missiles in the Middle East and it continues to expand the scale, reach and sophistication of its ballistic missile forces—many of which are inherently capable of carrying a nuclear payload.”⁸³ A 2011 report stated that Iran had started to produce anti-ship cruise missiles as well.⁸⁴ Iran is currently in possession of “a few hundred” short-range SCUD missiles purchased from North Korea, medium and intermediate-range ballistic Shabab missiles, and is purportedly developing an ICBM called the Shabab-6.⁸⁵ While current Iranian missiles can travel up to 1,200 miles and are able to reach areas in the Middle East and Europe, an Israeli official warned the US in early 2012 that Iran is trying to build a missile that could travel about 6,000 miles and could reach the US, though US officials were skeptical.⁸⁶

What is most worrying about Iran’s build-up of conventional missiles, according to an article from the Council of Foreign Affairs, is that although the US has strong anti-ballistic missile systems, these systems do not differentiate between conventional and nuclear weapons, meaning that Iran could potentially use conventional weapons to “exhaust the missile defense of the US and its allies, leaving those countries vulnerable to follow-on attacks with nuclear weapons.”⁸⁷ Thus, the US might not be capable of handling the Iranian conflict or providing enough security to stop nuclear proliferation in the Middle East on its own.

Third, the US must also be prepared to respond if Iran follows through on its threat to block off the Strait of Hormuz in response to increasingly harsh economic sanctions from the US and the international community. Roughly 20-35% of the world’s oil travels through the Strait of Hormuz each day. In a report for the Council on Foreign Relations, Robert

McNally suggested that closing the Strait of Hormuz could lead to a disruption of nearly 17 million barrels of oil per day, making it the largest disruption in oil transportation in the past century.⁸⁸ This could cause a huge disruption in the economies of countries that depend on the Strait of Hormuz for oil, especially since just threatening to close the Strait has already caused a rise in oil prices.

The Iranian Navy has been performing military exercises to demonstrate its preparedness to follow through on its threats, and it has been reported that they have upgraded their torpedoes, though *NPR* reported that Iranian ships and aircrafts are still much less advanced compared to US military technologies.⁸⁹ Iran is also believed to possess up to 5,000 mines and may decide to scatter these mines throughout the Strait, in addition to their many small naval vessels, some of which may be used for suicide missions and are capable of carrying cruise missiles, that they could use to “swarm” larger US vessels. According to *Bloomberg Businessweek*, Iran also has increased its supply of small, fast, aircrafts that may be used in a suicide attack against US ships, increased the number of cruise missiles in the Strait, and doubled its rather minimal submarine fleet from five submarines to about ten. However, there is doubt that Iran would be able to close the Strait long enough for it to be an effective bargaining chip, especially since closing the Strait of Hormuz would hurt Iran’s own trade. It is more likely that Iran will just try to cause instability in the region without a full closure of the Strait. Even so, Defense Secretary Panetta has labeled the act of closing the Strait of Hormuz another “red line” that Iran would not be allowed to cross.

Current US Strategy

Current US strategy has been to impose increasingly harsh sanctions on Iran with the help of other countries in the international community. In late January 2012, the European Union, which makes up about one fifth of Iran's oil exports, decided to ban imports of Iranian oil, to put pressure on Iran's central bank and make it more costly for Iran to continue funding its nuclear program. President Obama remarked in an extended interview with *TIME* magazine:

Because of effective diplomacy, unprecedented pressure with respect to sanctions, our ability to get countries like Russia and China—that had previously balked at any serious pressure on Iran—to work with us, Iran now faces a unified world community, Iran is isolated, its standing in the region is diminished. It is feeling enormous economic pressure...⁹⁰

President Obama also stated during the interview that he is not against Iran having peaceful nuclear power as long as it follows the guidelines of the Non-Proliferation Treaty. In late January 2012, the UN sent IAEA officials to Iran to begin negotiations. Although some IAEA officials doubted that the meeting produced any significant breakthroughs, the news media decided to focus on the positive by stressing the willingness of both the IAEA and Iran to resume talks and meet again in the near future after having had a “good” meeting in January.⁹¹

The two dominant responses to the current situation are that the US must continue to work with the international community to give sanctions the best chance of success, leaving military options “on the table” but only as a last resort, or alternatively, that the US must use military force in order to pressure Iran into complying.

The reasoning behind the use of military force is that economic sanctions may not be effective at all in dealing with “rogue” states. As John Bolton pointed out at the Committee on Foreign Affairs in June 2011, “It is worth remembering that North Korea is today the

most heavily sanctioned nation on the planet, and it has detonated two nuclear devices and continues to pursue aggressively its ballistic missile program.”⁹² Thus, Iran may follow North Korea’s example and use talks as a way to buy more time while it continues to develop nuclear weapons. However, there is reason to believe that Iran is feeling the pinch of sanctions, given that a recent Gallup poll stated that nearly two-thirds of Iranians reported feeling threatened by sanctions.⁹³ In addition, the continued weakening of the Syrian regime also brings with it the weakening of the Iranian-Syrian alliance, further isolating Iran. According to the *New York Times*:

The departure of Mr. Assad ...also could deprive Iran of its main means of projecting power in the Middle East. If Mr. Assad were to fall, Tehran would lose its conduit for providing military, financial and logistical support to Hezbollah in Lebanon and Hamas in Gaza.⁹⁴

To take advantage of this, many officials, including the Israeli Army Chief, argue that military should be part of a “‘triple-track’ strategy of diplomacy, economic sanctions and ‘credible, visible preparations for a military option of last resort.’”⁹⁵

First, if Iran started building nuclear weapons, one response would be to try to wipe out Iran’s nuclear facilities. According to *CNN*, “General Martin Dempsey chairman of the Joint Chiefs was asked if the US could ‘take out’ Iran’s nuclear capability. General Dempsey responded by saying, ‘well I certainly want them to believe that’s the case.’”⁹⁶ Although this is also a goal of Israel, *TIME* magazine suggests that it is unlikely to be successful given that Iran’s nuclear facilities are spread throughout the country and some are well-hidden under rocky terrain.⁹⁷ This would be a job for the US Air Force Massive Ordnance Penetrator bomb meant to be delivered by B-2 stealth bombers; however, there is uncertainty that this bomb would be effective on some of Iran’s key nuclear sites given their geographical location.⁹⁸

Second, the US is aware that in addition to containing Iran's nuclear program, it must be prepared to respond if Iran chooses to use its ballistic missile capabilities. Israel Aerospace Industries and the US Boeing corporation are working together to produce an Israeli anti-ballistic missile interceptor called Arrow-3, and the US has already contributed over \$100 million in financial support for the project.⁹⁹ In 2009, President Obama decided not to pursue a missile defense system in Poland or the Czech Republic that would have been designed to counter long-range missiles from Iran, based on the argument that Iran was developing short to mid range ballistic missiles. Instead, the US decided to pursue the development of Standard Missile-3 (SM-3) to protect against medium to long range missiles as part of the Aegis Ballistic Missile Defense System designed to protect against short to medium range ballistic missiles.¹⁰⁰ The Pentagon had reported in 2009 that the SM-3 had intercepted 84% of missiles when tested, though a subsequent review of the test results showed that the SM-3 actually had a successful interception rate of around 10% to 20%.¹⁰¹ This is alarming given a recent warning from an Israeli official that Iran may be trying to test a long-range missile that would be able to reach the US. That said, the US army also has Patriot missiles which are long-range and can intercept ballistic missiles. Patriot missiles had a 70% success rate in Saudi Arabia and a 40% success rate in Israel during the first Gulf War.¹⁰²

Third, the military would be necessary in order to quickly prevent a global recession if the Strait of Hormuz is shut down, with some sources saying that the US would most likely be able to re-open the strait after about a week. If Iran decides to shut down the Strait of Hormuz, the US would need to employ its Special Ops Forces, as well as the Navy to try to reopen the passageway. Defense Secretary Panetta has stated that "we are not making any

special steps at this point in order to deal with the situation. Why? Because, frankly, we are fully prepared to deal with that situation now.”¹⁰³ The US recently stationed another 15,000 troops in nearby Kuwait in mid-January 2012, though these troops may be meant to ensure general stability in the region, especially with regards to Iraq. The US also currently has two carrier strike groups in the region that have passed through the Strait of Hormuz multiple times as a quiet but tough reminder of US military strength. These carrier strike groups contain surveillance equipment, missiles, guided missile destroyers, machine guns, and F-18 fighter jets that could be used to bomb Iran’s “small boats” if necessary. Furthermore, Vice Admiral Mark Fox, commander of the U.S. 5th Fleet has stated that if Iran were to lay mines in the Strait of Hormuz, it would be considered an act of war. The US and UK each have four mine-sweeper ships in the Gulf region, and the US Navy has mentioned that it may choose to use highly trained dolphins to detect the presence of bombs.

How Should the US Proceed From Here?

Like General Dempsey, many officials have made vague statements with regards to a possible military plan in or around Iran, or have been reluctant to mention any details of such a plan, most likely because they want to hold off on using the military in case it undermines efforts to impose sanctions. On the other hand, the reasoning behind the reluctance to use military force is that threatening Iran with military power or with sanctions that are too harsh may only encourage it to accelerate its nuclear weapons program. Given Iran’s hostile stance towards the US, this outcome is the more likely one. That does not mean that the US should not prepare itself in case Iran cuts off the Strait of Hormuz; rather, this approach would just make military preparation less visible.

In other words, the US needs to have enough military back-up to ensure its safety without exacerbating the conflict. This means that the US needs to make sure that it has adequate anti-ballistic missile capabilities to defend against Iran's growing supply of ballistic missiles, and must make sure that the US navy is ready and can be quickly deployed to reopen the Strait of Hormuz as fast as possible to avoid a global recession if the Iranians choose to close the Strait. Thus, the US should continue to increase sanctions on Iran while taking every opportunity to hold negotiations, and should continue to pursue a diplomatic strategy as much as possible. The US must also continue to enlist the help of western allies, other countries in the region, and Asian oil consumers in putting sanctions on Iran and in preparing for a possible conflict in the Strait of Hormuz, since closing the Strait affects all countries that depend on the Strait for oil (not just the US). Finally, the US must continue to reassure Israel that the US takes the threat from Iran seriously, and must continue to try to persuade Israel not to attack Iran on its own.

Chapter 5. China | *By Dan Hollenbeck*

Chapter Summary

Key Policy Conclusions

China is of increasing consequence to United States defense strategy. To understand the threat that China represents to the national security of the United States, it is essential to: understand China's position as a rising international state actor, assess its current military strategy, evaluate its full range of military capabilities, consider the current relationship between China and the US regarding Taiwan, and weigh its interests in the South China Sea.

Background

China has risen quickly as a powerful international state actor, both militarily and economically. The PRC government is currently investing in a modernization of its military forces that will greatly increase China's capabilities and power projection over the next ten years and beyond. The modernization and development of China's military must clearly be a strategic focus for US defense plans.

Policy Considerations

As China moves to modernize its military, the US must work to recognize China's political, economic, and military objectives and further assist China in becoming a responsible global actor. The United States will need to continue to invest in resources to improve its military, however diplomatic strategies set forth will likely dictate the US defense strategy towards China. In direct response to the moderate threat that China currently poses, the US should aim to establish a positive military-to-military relationship with China. The US should also maintain the current level of regional presence, with highly mobile forces afloat and available for support in the Pacific to aid the cooperative relationship.

Key Recommendations

- Develop and support a positive military-to-military relationship with China;
- Use diplomatic cooperation to establish a positive multilateral relationship with the PRC government;
- Maintain forces in the Pacific with capability to intervene in potential regional conflicts such as Taiwan and the South China Sea.

What Kind of Threat is China?

China is a crucial focus for the United States defense strategy. China has risen quickly as a powerful international state actor, both militarily and economically. To understand the threat that China represents to the national security of the United States, it will be essential to understand China's position as a rising global actor, assess its current military strategy, evaluate its full range of military capabilities, consider the current relationship between China and the US regarding Taiwan, and weigh its interests in the South China Sea. In full consideration of these factors and capabilities, the United States should strive to maintain and build a positive strategic relationship with the Chinese government. At a January 2011 diplomatic summit, US President Barack Obama and the People's Republic of China (PRC) President Hu Jintao jointly affirmed that a "healthy, stable, and reliable military to military relationship is an essential part of [their] shared vision for a positive, cooperative, and comprehensive US China relationship."¹⁰⁴ As acknowledged by both presidents, both governments should strive to use diplomatic cooperation to work towards a healthy multilateral relationship. Although China has recently increased its military capability, the US currently has the military assets and technology to match and contain those potential threats.¹⁰⁵ Naturally, the United States will need to continue to invest in resources to improve its military, however the diplomatic strategies set forth will likely dictate the US defense strategy towards China. In direct response to the moderate threat that China currently poses, the US should proactively aim to establish a positive military-to-military relationship with China. The US should maintain the current level of regional presence with highly mobile forces afloat and available for support in the Pacific to aid the cooperative relationship.

Understanding China as a growing power

China's increasing international involvement is a defining trend that will likely continue well into the twenty-first century. China has sustained steady economic growth that has boosted the country to become one of the major international actors in today's global society, now boasting the world's second-largest economy.¹⁰⁶ China's robust economic infrastructure has provided the platform for international companies to invest heavily in the profitable Chinese economy. This foreign investment has resulted in attempts by the United States and many other international governments to pursue positive relationships with China in order to protect inherent economic interests. Beyond economic implications, China's recent success has further enabled the PRC government to invest in a complete military modernization program.

China's military strategy

As China situates itself in its new position within the top tier of the international community, it is critical for the United States to assess China's current strategic priorities and goals. According to the 2011 Annual Report to Congress, China plans to take advantage of the next ten years to expand in "economic capacity, military might, and diplomacy... PRC Defense Minister Liang Guanglie asserted that 'making the country prosperous and making the armed forces strong are two major cornerstones for realizing the great rejuvenation of the Chinese nation.'" ¹⁰⁷ The modernization and development of China's military will clearly be a strategic focus in the next ten years and will directly affect United States' own defense plans. China's aims to increase its national power are based on naval,

ground, and air objectives that operate on the strategic guideline known as, “active defense.” Essentially, this guiding principle results in a military strategy that is broadly defensive, yet entailing military operations that have offensive functionality and capabilities. As China moves to modernize its military, the US must work to recognize China’s political, economic, and military objectives in order to further assist in guiding China to become a responsible global actor.

Naval warfare is the primary cornerstone of China’s military strategy, operating on the strategic concept of “offshore defense.” This framework prepares the People’s Liberation Army (PLA) Navy for three types of missions: “keeping the enemy within limits and resisting invasion from the sea; protecting the nation’s territorial sovereignty; and, safeguarding the motherland’s unity and maritime rights.”¹⁰⁸ These three overarching missions are focused on allowing for the protection of China’s economic and political interests through strategic naval positioning. This emphasis will be especially relevant in the coming decade, as China’s naval modernization will be focused on growing to counter United States forces in East Asian waters.

Ground warfare is the second component to the Chinese military strategy that operates under the “active defense” concept. PLA Ground forces are currently transitioning from immobile defensive strategies to offensively-oriented, unit-based strategies that are equipped to operate on China’s borders.¹⁰⁹ These ground force transitions pose less of an immediate threat to the national security of the United States, however they will be important to monitor in the coming years as they may impact regional power projection in East Asia.

The other branch of Chinese military that operates with the “active defense” strategy is the PLA Air Force. This force is also expanding under the current model, and is undergoing a strategic transition that focuses on the ability to operate in offshore missions. This strategic shift will likely play a role similar to the naval priorities, growing to counter the United States presence in East Asia.

Military Capabilities

The PRC government is currently investing in a modernization of its military forces that will greatly increase China’s capability and power projection over the next ten years and beyond. Consistent with its current military strategies and structure, the PRC’s increasing capabilities can be categorized into navy, air, and ground forces. These capability developments are broadly focused on long term “anti access and area denial” (A2AD) operations that are capable of countering enemy forces, as well as a primary short-term focus that aims to increase regional defense capabilities. These capabilities are intended to deny enemy implementation of many types of modern warfare and include technology that deters adversary forces from deploying and operating within a defined region—specifically the Western Pacific. A2AD is primarily focused on building offensive capabilities in information advantage and the ability to attack at long range.¹¹⁰ The major concern for the US is that China could potentially use A2AD capabilities against the US and other East Asian countries as a strategic deterrent in the Western Pacific region.

The recent military developments have had the most direct impact on the PLA Naval force capabilities. As of 2011, the PLA Navy had 75 principal surface combatants, over 60 submarines, 55 medium and large amphibious ships, and 85 missile-equipped small

combatants.¹¹¹ Recent transformations have also resulted in ships equipped with advanced air-defense systems with ranges exceeding 185km. The PLA Navy is improving its intelligence, surveillance and reconnaissance (ISR) capabilities with over the horizon (OTH) radar that allows surveillance and reconnaissance in the Western Pacific region to support long-range strikes. China has also expanded its force of nuclear powered attack submarines (SSN) with two Type 093 SSNs in service currently and five Type 095 SSNs to be incorporated in the next few years.¹¹²

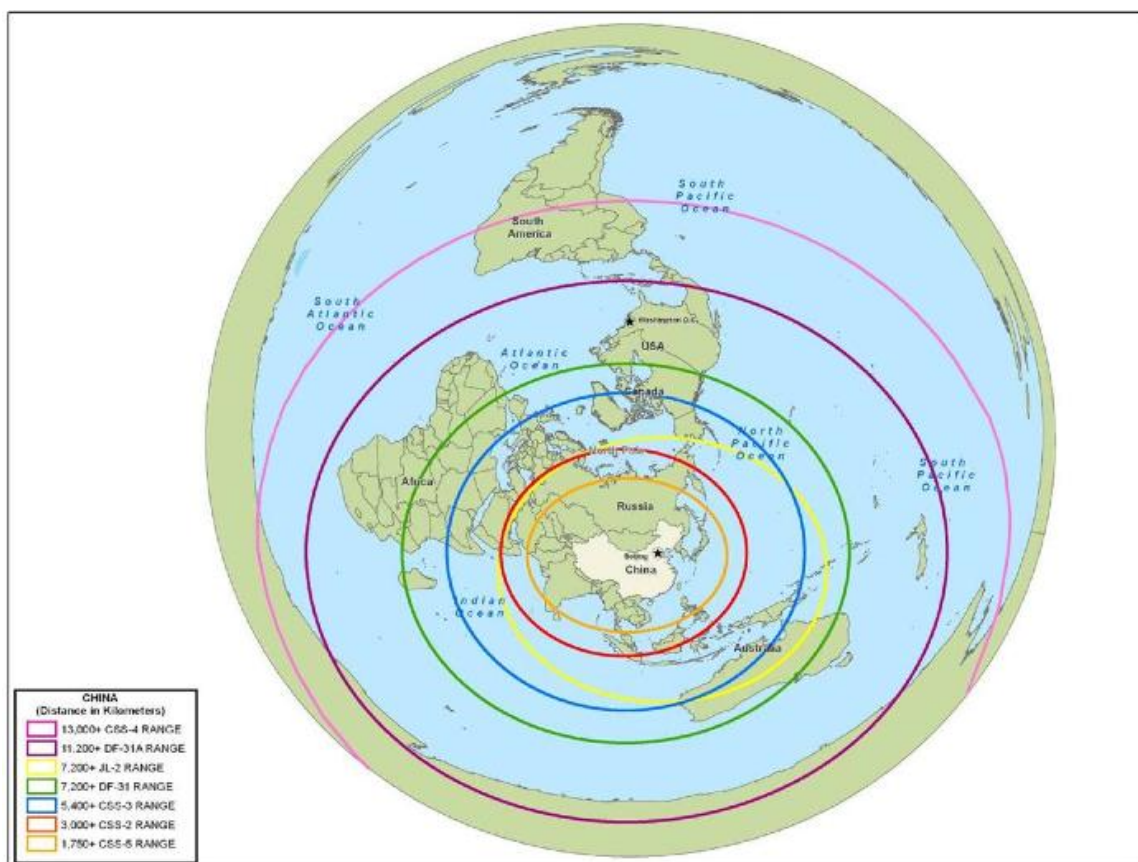
China's Air Defense Forces have also increased in capability in recent years. Currently, it has 490 combat aircraft based within unrefueled operational range of Taiwan and has the potential airfield capacity to expand beyond that number.¹¹³ China is currently testing a next generation fighter (J-20) that combines advanced technology and stealth attributes, as well as upgrading its B-6 bomber fleet to carry new long-range cruise missiles.¹¹⁴

China's PLA Ground Forces have increased in capability in recent years as its ground force gradually modernizes. The Ground Force modernization efforts include the development of the Type 99 third-generation main battle tank, a new-generation amphibious assault vehicle, and multiple rocket launch systems.¹¹⁵ Much of the ground force capability is dedicated to improvements in joint operations that are focused on operations along China's periphery.

Significant effort has also increased the capability of China's missile program, with developments on both ballistic and cruise missiles. It is testing new offensive missiles, adding additional missile units, improving old missile systems, and developing counter ballistic missile defense capability.¹¹⁶ China's current missile systems have the capabilities

to strike a range of regional targets in East Asia, as well as potential long-distance targets such as the continental United States. The PLA currently possesses an array of cruise missiles that have a range greater than 185km. These cruise missiles include: the DH-10 land attack cruise missile (LACM); the YJ-62 anti ship cruise missile (ASCM); the SS-N-22/SUNBURN supersonic ASCM; and the SS-N-27B/SIZZLER supersonic ASCM. Additionally, China has developed its ballistic missile program. The PLA has deployed over 1,000 short-range ballistic missiles (SRBM) within range of Taiwan. China is also developing the DF-21D, which is an anti-ship ballistic missile (ASBM) that has a range that exceeds 1,500km. China has modernized its nuclear capabilities by adding the CSS-10 Mod 1 and 2 propellants that have a range exceeding 1,200km, which can reach most locations in the continental United States.¹¹⁷

Another related Chinese capability for consideration in setting US strategy is China's nuclear power. China's current nuclear arsenal consists of approximately 55-65 intercontinental ballistic missiles (ICBMs).¹¹⁸ These large arsenals of missiles combined with technologies that counter other missile defense systems provide China with a solid nuclear force and a strategic deterrent to United States. The following image portrays the range of nuclear capabilities that China can project across the globe.



Medium and Intercontinental Range Ballistic Missiles. China is capable of targeting its nuclear forces throughout the region and most of the world, including the continental United States. Newer systems, such as the DF-31, DF-31A, and JL-2, will give China a more survivable nuclear force.

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While nuclear developments should be monitored closely, the primary capability concerns for US defense strategy are China's advancing A2AD capabilities, as well as possible asymmetric space and cyber threats which are addressed in a separate chapter of this report.

Taiwan

China's relationship with Taiwan poses the most immediate threat of engagement counter to United States defense interests. Much of the PLA's military modernization has been motivated by China's deep focus on Taiwan. The PRC government in Beijing is arming against the potential that Taiwan might move towards independence from mainland China. According to the 2011 Annual Report to Congress, "the PRC has not taken steps to

reduce its military forces facing Taiwan. China has continued to develop a wide range of weapons and capabilities designed to provide credible military options in a Taiwan contingency.”¹²⁰ As United States forces would undoubtedly intervene in a cross-strait conflict, China has made moves to militarily counter the probable US support for Taiwan. The Taiwan conflict is the combination of a three-way relationship between the United States, China, and Taiwan. China has much lower overall military capability than the United States, however they are working to move ahead of Taiwan to position themselves as the more powerful actor between the two sides. As China’s forces modernize, the possibility of a US intervention is the primary deterrent from PLA aggression towards Taiwan. Beijing likely views that this aggressive military modernization effort to improve capabilities in the direction of Taiwan would deter Taiwan from seeking independence.

In the three-way relationship between the US, Taiwan, and China, the United States has played the intervening mediator supporting peaceful interactions across the Taiwan Strait. The United States has helped to support peace and stability in the Taiwan Strait, consistent with the Taiwan Relations Act, by providing defense services that enable Taiwan to maintain a sufficient self-defense capability.¹²¹

Despite the threat posed by the situation of potential moves towards Taiwan’s independence and China’s resultant military buildup, the current level of threat to the United States has decreased. The Report to Congress concluded that “since the election of Taiwan President Ma Ying-jeou in March 2008, China and Taiwan have embarked on a period of improved economic and political ties... The United States welcomes and encourages this trend as a means to reduce tensions and bridge differences between the two sides.”¹²² Recently, there has been little dispute between the two sides about military or political

issues, and a focus on economic improvement seems to be the way forward for both nations. It will be important for the US Armed Forces to maintain the capability to intervene in conflict in the case that China does use aggressive force aimed at Taiwan. However, the potential for China to make this move is decreasing, as cross-strait relations have improved, Taiwan is not currently moving towards secession, and China supports the “active defense” military strategy.

South China Sea

China’s involvement in creating tension in the South China Sea is another threat to the United States defense interests. The South China Sea is a region of high interest due to the presence of some of the world’s largest oil and gas reserves. Additionally, nearly 50 percent of global merchant traffic passes through the sea.¹²³ China is currently attempting to assert greater control over territorial waters in the South China Sea and is in disputes with Vietnam and the Philippines over access to oil and natural gas in the region. The following quote from the 2011 Annual Report to Congress demonstrates China’s power projection in the South China Sea:

Beijing appears eager to strengthen its claim to the disputed region over the long-term. This includes legal efforts as well as the deployment of more capable naval and civilian law enforcement ships. A more robust presence would position China for force projection, blockade, and surveillance operations to influence the critical sea lanes in the region.¹²⁴

This territorial dispute involves surrounding nations, such as Vietnam, the Philippines, Malaysia, Brunei, and Taiwan that all claim access to the sea. The tension in the region is rising due to the US increasing its presence in the region. According to a BBC article

published in December 2011, the US will base a full Marine task force in northern Australia. This move is a direct attempt to challenge China's ambition in the South China Sea.¹²⁵

The US must make sure that China does not use military means to assert control in the South China Sea and also preserve the sea as open water to all nations. In response to the threat of China claiming the South China Sea, it will be crucial that the US have a diplomatic plan to dissuade China from using force in the region. The US should support amicable military-to-military contacts with China that support deterrence of conflict in the region. It will also be important that the US maintain troops that are equipped to deter China from using force in the area, such as the full Marine task force in northern Australia.

Strategy Recommendation

- Develop and support a positive military-to-military relationship with China;
- Use diplomatic cooperation to establish a healthy multilateral relationship with the PRC government;
- Maintain forces in the Pacific with capability to intervene in potential regional conflicts in Taiwan and the South China Sea.

Chapter 6. North Korea | *By Stefan Kaehler*

Chapter Summary

Background

Currently the United States spends \$1 billion annually to maintain a troop deployment of 28,500 troops in South Korea and \$3.9 billion annually to maintain troop deployments in Japan. Current troop deployments in South Korea serve little to no purpose except to signify US support for South Korea. In a conventional standoff, South Korea could defeat North Korea without US assistance. Worthy of note is the possibility that North Korea may have four to six nuclear weapons. In the event of a North Korean nuclear strike, US troop deployments will serve no purpose. While negotiations with North Korea so far have had little results, halting negotiations has prompted North Korea to restart its nuclear program.

Policy Considerations

The United States should gradually reduce troop deployments in South Korea and in Japan in order to cut defense spending. South Korean politicians will view this move negatively. The United States during these troop drawdowns must assure South Korea that in the event of a military conflict between North Korea and the South, that the Republic of Korea still has the full military support of the United States. The United States should leave a small force in South Korea to signify its strong commitment to maintaining regional and South Korean security.

The United States should pursue a strategy aimed at normalizing diplomatic relations between North Korea and the United States. The goal of diplomatic relations should be North Korean disarmament of nuclear weapons. The United States should try to partner with regional powers such as China when approaching talks.

In the event of war on the peninsula, the US can deploy troops from Guam and Japan to the South Korean peninsula to help reinforce South Korean troops. Bases in Guam and Japan will also have to be used to rally and supply an American military force that is capable of defeating the North Korean regime regardless if US troops remain in South Korea or not.

Key Recommendations

- Gradually draw down troop levels in South Korea to 1,000 troops by 2015;
- Transfer UPCON strategic command responsibilities to South Korea as planned;
- Initiate diplomatic dialogue with North Korea with the aim of normalizing diplomatic relations;
- Offer food aid to North Korea as incentive to open diplomatic relations.

North Korea

US Strategy Thus Far

Currently the United States has approximately 28,500 troops deployed in South Korea.¹²⁶ The cost of maintaining this force is approximately \$1.72 billion dollars. South Korea per the 2009 Special Measures Agreement paid \$743 million dollars or 42% of this expense in 2011.¹²⁷ Therefore, the United States pays \$1 billion dollars annually to maintain this troop deployment. During the 2009 negotiations, the US tried to get South Korea to pay for 50% of the cost of the troop deployment but was unsuccessful. South Korea will increase the share of the costs it absorbs, proportional to inflation, up through 2013. With the Obama Administration's new doctrine of cutting defense spending, it is important that we examine the US troops deployed to South Korea and evaluate the necessity of keeping them deployed there. Furthermore, troops deployed in Japan could be used during a crisis on the Korean peninsula to aid forces in South Korea, giving rise to the possibility of increased cuts. This paper will also examine those 53,000 troops stationed in Japan which cost the US taxpayers about \$3.9 billion,¹²⁸ and evaluate their importance in countering the North Korean threat. Japan pays \$2.2 billion dollars annually to assist with the costs of this troop deployment.¹²⁹

The primary purpose of the US troop deployment along the Korean Demilitarized Zone (DMZ) is to deter North Korean aggression. North Korea cannot easily attack the South without provoking hostilities with the United States. If North Korea invades the South with a conventional force, US troops will be fighting alongside South Korean troops to repel the North Korean invasion. Additionally, the United States will use its current force on the peninsula to hold off North Korean aggressors long enough to rally a force from Japan and

counter-attack against North Korea. Regardless of the size of the force, US troops provide ample deterrence because the North Korean regime understands that any large-scale conventional attack on South Korea will prompt action by the US leading to the end of the North Korean regime as we know it. Current US troop deployments along the DMZ serve no purpose in the event of a nuclear strike. The United States has several options in the nuclear scenario; the most probable is that it will launch nuclear weapons at Pyongyang. It is possible that if this scenario were to occur, that these troops could be used in an invasion of North Korea, however South Korea has clearly expressed that it has no wish to unify the peninsula through occupying North Korea.¹³⁰ US troops also serve to strengthen the US-South Korean alliance; signifying US support of our South Korean allies. The US troop deployment along the DMZ signifies that the US is invested in resolving the Korea conflict and will not leave South Korea to deal with the North on its own.

Negotiations With North Korea

Negotiations with North Korea have often been difficult, fruitless, and discouraging. The objective of negotiations with North Korea has been to facilitate North Korea's disarmament of its nuclear weapons. Thus far, the United States has been unsuccessful at achieving this goal. North Korea has made its nuclear ambitions clear and intends to use its nuclear capabilities as leverage when negotiating with the international community. To date, North Korea is the only state to withdraw from the UN Nonproliferation Treaty, which came into effect in 1970.¹³¹

The United States began informal diplomatic relations with North Korea in 1992 when the United States Undersecretary of State Arnold Kanter met with Kim Yong-Sun, a

senior North Korean official.¹³² At this time, North Korea's economic and political assistance from the former USSR had evaporated and it needed to find new support. North Korea targeted both South Korea and the United States to become its new benefactor. South Korea has willingly supplied food to the North with few conditions until recently, because it hoped to further develop a dialogue with North Korea. South Korea supplied North Korea with approximately 400,000 metric tons of food a year from 2001 through 2009. Since 1995, South Korea has supplied approximately 26% of food aid received by North Korea.¹³³ This dramatic and forced change in North Korean policy also came with Kim Jong-Il's succession to the head of the North Korean leadership. However, it is important to note that these negotiations were not driven primarily by Kim Jong-Il. Rather Kim Il-Sung was very emphatic in expressing that nuclear power and capabilities were not the answer to making a sustainable North Korea.¹³⁴

In 1994 the US and North Korea signed the Agreed Framework in which North Korea agreed to shut down its nuclear power plants in return for two light water reactor power plants from the US. The light water power plants from the United States would produce less weapons grade uranium, decreasing the projected nuclear threat from North Korea. In addition to the nonproliferation measures in the treaty, the Agreed Framework also called for the normalization of economic relations between the United States and North Korea, making it one of the most significant breakthroughs in North Korean-US relations.¹³⁵ The Agreed Framework was a result of negotiations between Kim Il-Sung and former President Jimmy Carter. However, shortly after the signing of the agreement, Kim Il-Sung died, seriously jeopardizing the agreement by casting doubts on whether his son Kim Jong-Il would carry out the necessary steps per the agreement. As a result of the Agreed

Framework, North Korea's plutonium program halted, however North Korea ignored other measures in the treaty and continued its uranium enrichment program. Changes in the US congress caused the United States to not fully fund the oil supply measures it had agreed to, and not lift economic sanctions. The agreement completely broke down by 2002 and North Korea resumed its nuclear weapons program.¹³⁶

The Bush Administration's policies regarding North Korea caused a dramatic shift in US-North Korea relations. Towards the beginning of President Bush's first term, his administration sought to isolate North Korea diplomatically and economically. The Bush Administration essentially served North Korea an ultimatum: there would be continued diplomatic and economic isolation until all nuclear weapons facilities were dismantled (although the Bush Administration did participate in regional six-party talks with North Korea). The Bush Administration coupled this with continued encouragement for North Korean regime change. These Bush Administration policies did little to prompt North Korea to disarm its nuclear weapons. Policies aimed at isolation made it easier for North Korea to keep its people cut off from the outside world. Additionally, aggressive US posturing such as President Bush's "Axis of Evil" speech and emphasis of preemptive action was used by North Korea's propaganda agencies and prompted the North Korean military to prepare for invasion.¹³⁷ Aggressive US action at this time may have further prompted aggressive North Korean posturing and showcasing of nuclear capabilities in an effort to deter the US and South Korea from invading.

In 2007, the Six-Party Talks prompted by China began making significant progress. As a result, North Korea agreed to dismantle the Yongbyon nuclear facility and give detailed information on its nuclear programs in return for reopening of bilateral talks with the United

States. The United States also agreed to remove North Korea from the list of states that sponsor terrorism. Further progress was not made because Kim Jong-Il had a stroke and the talks paused.¹³⁸ Currently, North Korea is continuing the development of nuclear weapons and the international community is unclear how Kim Jong-Il's successor, Kim Jong-Un, will cooperate with the international community.

Threats

The North Korean Nuclear Capabilities

North Korea's nuclear ambitions date back to the 1950s when Kim Il-Sung envisioned a self-reliant North Korea. Kim Il-Sung titled North Korea's policy of self-reliance "Juche." Kim Il-Sung viewed the development of nuclear weapons as a valuable asset to the North Korean Regime.¹³⁹ Nuclear weapons serve several purposes to the Kim family. Firstly, nuclear capabilities allow the Kim family to defend their authority by legitimizing their rule amongst their own people and serving as a deterrent to invasions from the US or South Korea. Second, North Korea can use nuclear weapons to draw attention to the North, and as a bargaining chip for aid. Third, nuclear technology can be exported to other players (whether they are terrorist organizations or rogue states) who wish to develop nuclear weapons in return for needed money.

The global intelligence community is uncertain regarding North Korea's specific nuclear capabilities, however intelligence analysts are fairly certain that North Korea does possess nuclear weapons. In order to produce nuclear weapons, North Korea needs either one of two types of fuels: plutonium-239 or highly enriched uranium. Plutonium-239 can be created using nuclear reactors that North Korea possessed, meaning that North Korea

possessed the capabilities for producing a plutonium-based nuclear weapon.¹⁴⁰ Currently, Congressional Research Service reports estimate that North Korea possesses 30 to 50 kg of plutonium that can be used for nuclear weapons. Approximately 5 to 6 kg of this plutonium has already been used in weapons tests. Assuming that this plutonium stockpile exists and that it has been used to produce nuclear weapons, North Korea could currently possess six nuclear weapons. Evidence for a North Korean nuclear program was further substantiated in 2006 and 2009 when North Korea conducted two separate underground nuclear tests.

Currently, North Korea has constructed and showcased to US nuclear scientists a new ultramodern uranium enrichment facility at the Yongbyon nuclear site. The facility is very large, containing 2,000 centrifuges with a capacity of 8,000 kg SWU/ year.¹⁴¹ North Korea claims that the facility's purpose is to supply fuel to a light water reactor that it is building. Plutonium from the light water reactor could be used to build nuclear weapons. However, what is more disconcerting is that the plant could be altered to produce 40 kg of highly enriched uranium per year, which can be used for nuclear weapons. The IAEA also believes that North Korea possesses secret uranium enrichment facilities that the global intelligence community has been unable to detect. Uranium enrichment facilities are harder to detect with aerial surveillance than plutonium facilities, creating uncertainty in the intelligence community.¹⁴²

The existence of clandestine uranium enrichment programs has been indicated by two events. In 2007 North Korea provided US scientists with aluminum tubing that it claimed was being used for multiple purposes—not just to produce highly enriched uranium. However, scientists “found traces of enriched uranium on the tubing.”¹⁴³ Traces of highly

enriched uranium were also found on documents submitted by North Korea as part of their “nuclear declaration.”

North Korea has proliferated its nuclear technology in the past to states in the Middle East, including Iran and Syria. North Korea has sold ballistic missile parts to Iran and has helped Syria construct a nuclear reactor.¹⁴⁴ Pyongyang will probably continue attempting to sell nuclear technology in order continue financing the present regime. However, it is unlikely that Pyongyang will risk selling actual nuclear weapons or fuel rods as it is highly risky, North Korea has a very small stockpile that it doesn't want to deplete, and if another actor (state or organization) conducted a nuclear strike with North Korean supplied nuclear weapons it would have devastating implications for the DPRK. North Korea may sell nuclear material if the state is on the brink of collapse or complete starvation in an effort to survive. Currently there are several UN regulations in place to prevent the proliferation of nuclear weapons from North Korea. Additionally, the United States is the leader of the Proliferation Security Initiative, which is a global effort to prevent the proliferation of nuclear weapons, however China does not participate in the initiative. The United States must partner with important regional actors such as China and Russia to enforce nonproliferation measures in the region.

North Korean Conventional Warfare Capabilities

At first glance North Korea has daunting military capabilities. North Korea has a standing army of over 1,170,000 troops. Approximately 1,000,000 of these troops are in the army, 60,000 of these troops are in the navy, and 110,000 of these troops are in the air force. North Korea's standing army vastly outnumbers South Korea's army of 674,000. North

Korea also outnumbered the South in military equipment. It has 3,500 Storm Tiger tanks compared to the South's 2,300 K1 and K1/A1 tanks. North Korea has 8,500 artillery compared to the South's 5,100. Additionally, North Korea also has 80 surface-to-surface launchers; four times the amount that the South has. In the last decade, North Korea has increased its surface-to-air missile (SAM) holdings to 179 SA-2 models, 133 SA-3s, and 38 SA-5s. North Korea's navy also significantly outnumbered the South's. North Korea has 420 warships compared to the South's 120. Additionally, it has 260 landing vessels and 50 submarines. 22 of North Korea's submarines are the SSK model and 28 the SSI. Overall North Korea's submarine holdings have decreased by a net of 5 since 2000.¹⁴⁵ Finally, North Korea considers most of its male population as a reserve force, giving them a 7,700,700 troop reserve that they could theoretically call on in a time of war.¹⁴⁶

Upon a closer look, North Korea's military capabilities are not so threatening. North Korea's MBT force is superior to South Korea's due to its size, however this advantage is somewhat negated by South Korea's superior tank quality. North Korea's armed forces have significantly more manpower than South Korea, however South Korea's active duty and reserve forces have vastly superior training and equipment compared to North Korea.¹⁴⁷ North Korea has 7.7 million troops in reserve, however it is unlikely that the North Korean government would even be able to feed this reserve force. North Korea has a larger air force when manpower is examined, however once again manpower is not the most important factor, especially when examining air power because it is highly equipment- and training-dependent. The North Korean air force has inferior equipment and training compared to the South Korean air force. Out of the DPRK's 620 combat aircraft, it only has 35 semi-modern MiG 29 A/S fighters. The DPRK's MiG 29s would certainly lose in an air battle against

South Korea's 59 F-15K advanced fighters and its 164 modern F-16C/Ds. North Korea's air inferiority is further compounded by its inferior surface-to-air missile technology. North Korea may have a large amount of surface-to-air missile batteries, but many of them are old and have very limited range. DPRK anti-air technology would be further effectively mitigated by counter measures and air-to-air missile capabilities built into South Korean and US planes. Furthermore, South Korean air supremacy can be further ensured by South Korea's surface-to-air missile technologies. South Korea has Hawk and Patriot missile systems that could easily offset the DPRK's air force. North Korea has inferior naval capabilities in comparison to the ROK, however it has superior conventional submarine capabilities.¹⁴⁸ Submarines could be used for the deployment of Special Forces, to attack South Korean ships, and to lay mines.

We can safely evaluate that in a conventional standoff, South Korea would win overwhelmingly due to its superior equipment and force training. North Korea's greatest strength and weakness is its force size. Besides other logistical considerations, feeding a several million-man force during wartime is a challenging task. For North Korean military planners, this task is even more difficult because the country has been struggling with famines since the early 1990s. According to the World Food Program, 3.5 million out of North Korea's population of 24 million face urgent food needs. Additionally, one third of North Korea's population is stunted due to malnutrition.¹⁴⁹ North Korea does not produce enough food to sustain itself during wartime. Assuming that South Korea maintains air superiority based on our earlier conventional warfare projections, if there was a war between the North and South, South Korea could easily win by bombing North Korean food production and North Korean supply lines. Additionally, South Korea could use its air force

and naval forces to blockade North Korea from receiving food aid. North Korea could potentially receive food from its northern border with China, however that is contingent upon Chinese intervention, which changes the forecasted scenario dramatically. We can expect South Korea to exploit North Korea's food supply weakness in an armed engagement, and simply starve out the North Korean military.

The real threat that North Korea poses is in the form of asymmetric threats. In an armed conflict, North Korea could use its approximately 80,000 Special Forces troops and landing craft¹⁵⁰ to attack South Korea in unfortified areas south of the DMZ and Seoul. North Korea's special forces are considered highly capable and have fanatical devotion to North Korea. In 1996, a North Korean submarine containing a 26-man Special Forces team ran aground in South Korea. Of the 26-man team, 23 committed suicide in order to evade capture, two evaded a 16,000 ROK troop force for 49 days before being found and killed, and one was able to escape back to North Korea.¹⁵¹ North Korean Special Forces could be used to hit targets with strategic importance such as artillery or communication lines. North Korean Special Forces could also utilize weapons of mass destruction such as biological and chemical weapons to kill South Koreans and more importantly spur chaos and fear. Chemical and biological weapons could also be fired using North Korea's numerous artillery batteries along the DMZ. In a wartime scenario, North Korea's use of these asymmetric weapons is highly probable. In the event that North Korea and South Korea did go to war, North Korean special operations forces would probably attack first in order to utilize the element of surprise. North Korean Special Forces would also probably be deployed widely across South Korea and in small groups in order to help them avoid detection. Currently, the 28,500 US troops that are stationed in South Korea are too few to

have any significant impact in combating this threat, therefore it is the responsibility of the South Koreans to engage in counter special forces measures.

Chinese involvement in a conventional war on the peninsula would certainly make the conflict much more complicated. If China were to get involved in full-scale conventional warfare on the side of North Korea, the United States would have to rally a massive force to counter-balance China. China is unlikely to commit its military resources to supporting North Korea directly because it would risk a war with the United States, and China cannot afford a war with the United States because of the strong economic ties between the two countries. Additionally, China has little economic incentive to support North Korea in a full-blown war between North Korea and China's regional trading partners.

US Strategy Regarding North Korea Going Forward

Currently, the North Korean threat does not warrant keeping a large ground force in South Korea. Both a war between North Korea and the South and a nuclear strike by North Korea on the South are highly improbable. If North Korea engages South Korea in a conventional war, South Korea will easily be able to hold off North Korea on its own giving the US enough time to rally a sizable enough invasion force to remove the North Korean regime. The North Korean regime understands this and probably will not attack South Korea. If North Korea decided to launch a preemptive nuclear strike on the South, it can expect a proportionate nuclear response from the United States, effectively deterring this action as well. In both situations, the deployment of US troops is unnecessary and will have an insignificant impact on the outcome of the conflict.

The United States ought to draw down troop levels on the Korean Peninsula. The US can save about \$1 billion dollars annually by removing troops completely off the peninsula. The United States should leave a token force of approximately 1,000 troops and remove the rest of its forces by 2015 as the responsibilities for wartime strategic command are shifted from the US to the ROK.¹⁵² By maintaining a 1000 man troop deployment in South Korea, the US can still indicate to its South Korean allies that it stands with them in dealing with the North Korean threat, and simultaneously realize significant cost savings. The United States can realize further cost savings by drawing down troop levels in Japan. The United States ought to withdraw 30,000 troops from Japan in order to save an estimated \$2.5 billion dollars.¹⁵³

The United States should maintain diplomatic relations with North Korea and strive to normalize diplomatic relations. From 2000 to 2008, it became apparently clear that isolating North Korea diplomatically is extremely counterproductive to achieving the United States' goals of nuclear disarmament. Additionally, by providing food aid to North Korea, the United States can further create disincentives for belligerent North Korean aggression. North Korean aggression must be minimized as much as possible because it can lead to a destructive, large-scale conventional war which will have both a grave human and economic cost.

In the event of war on the peninsula, the US can deploy troops from Guam and Japan to the South Korean peninsula to help reinforce South Korean troops. Bases in Guam and Japan will also have to be used to rally and supply an American military force that is capable of defeating the North Korean regime, regardless if US troops remain in South Korea or not.

Chapter 7. Alliances | *By Zhenni Thomas*

Chapter Summary

Key Policy Conclusions

The stability and security of the United States is dependent on other international actors. The military allies of the US are the ones that help most to ensure its safety. Strong allies are especially important when the United States' national security is suddenly threatened, and those times are often hard to predict. However, in the wake of budget cuts that will inevitably affect the US's spending on its alliances, it is a vital to determine which alliances are most needed and increase cooperation among those while also not neglecting the other alliances.

Policy Considerations

As the United States clearly needs to shift its military attention from the Atlantic Ocean and Europe to the Pacific Ocean and Asia, it requires a deeper level of cooperation in the latter region and less of it in the former. Nevertheless, NATO, the main overall alliance between the US and Europe, cannot be abandoned. It is in the interest of the US to look for savings in this alliance, but such a policy is not supported by other NATO members. The challenge is to find a balance between the long-standing tradition of supporting the NATO members and the current economic and political situation that requires the United States to shift its forces (military and consequently economic) toward Asia. However, doing so creates another challenge for the United States: the relationship with its major economic partner, China, which can become a potential rival in the Asia-Pacific region and perhaps the world at large.

Key Recommendations

- The United States has to find an appropriate way to negotiate its military involvement with NATO. It is vital for US national security and also for its military budget, which has limited economic resources, to realize that the money cannot be spent where it is least needed but simply most expected. This task force encourages appropriate diplomatic actions take place in US-NATO negotiations.
- Spending on alliances has to be measured according to a rational risk assessment. In so doing, it is most important to be realistic and avoid making decisions that are based on unfounded fears. Some of the top priority areas of military assistance are located in places that are not officially allied with the US, such as Israel. It is vital for US security to support this country. Other regions of increased allied cooperation should include Pacific Ocean areas such as Australia and the Philippines.

Alliances

At present, the United States leads a global alliance system that consists of more than 60 countries. All together, the US and its military defense partners account for almost 80 percent of global GDP and more than 80 percent of total global military spending.¹⁵⁴ However, in the context of inevitable budget cuts it is also necessary to reanalyze the real role of the United States' military ties with some countries, as well as to consider whether the world's largest spending on military alliances (by far) is efficient. In order to analyze the defense and security relations of the United States with its friends, we intend to examine the capabilities of its major allies. We will also conclude which of its alliances can help the United States to contain the threats defined in the earlier chapters.

North Atlantic Treaty Organization (NATO)

Formed in 1949, NATO at present consists of 28 European and North American members. The organization has been the backbone of American security. However, as the center of gravity of American military defense has shifted eastwards, it is now clear where the United States needs its forces and money most. As the Pentagon plans to withdraw two combat brigades from Germany, the Obama administration has to make it clear with the Atlantic allies that the United States military's new efforts to refocus on the Asia-Pacific region and to sustain its role in the Middle East will not mean disregarding Europe. Nevertheless, in order to meet the tight budget needs, those choices have to be made. Historically, the number of American NATO troops fell from 277,342 during the Cold War to 40,000 in 2011. The withdrawal announced by Secretary of Defense Leon Panetta will bring this number down to 30,000, which is the same as the number of soldiers that we have

stationed in South Korea. Considering that at present some of the NATO allies are cutting their spending as well, objectively, it does not have to be the sole responsibility of the United States to maintain its troops to secure Europe from things that it no longer regards as particular threats, such as Ukraine and Russia.

NATO is the most capable military alliance in the world. NATO-led operations in Libya proved the capability and strength of NATO forces, and also demonstrated the need for critical technology such as unmanned aircraft supplied by the United States. NATO began operations in Libya on March 31, 2011, with the stated aim of protecting civilians from the military of their longtime leader Moammar Ghaddafi. The mission consisted of an arms embargo, a no-fly zone, aerial interdiction, and other actions. NATO conducted 21,662 sorties, including 8,140 strike sorties.¹⁵⁵ Such examples clearly show that NATO's effectiveness can allow the United States to trust its alliance capabilities in Europe and seek troop and spending reductions in that area. As Defense Secretary Panetta states, a US Army battalion will rotate twice a year to Europe for training, while two Army heavy brigades will be removed from European basing. The U.S. Army presence in Europe will still be the largest in the world outside of the United States. The approximate troop reduction is going to be from 47,000 soldiers to 37,000, leaving a total of around 80,000 when including Air Force, Navy and Marine troops.

We believe that troop reduction can go further as there are no obvious direct regional threats to either NATO allies or to the United States projected in the next ten years. As the United States intends to draw troops out of Afghanistan by 2014, the reliance on NATO should decrease to some extent. On the other hand, the threat of Iran requires us to stay engaged in the alliance, as we may have to rely on them in case of war with Iran. We

recommend that the NATO troops in Europe be reduced by 20,000 instead of the proposed 10,000.¹⁵⁶

The United States, Australia, and New Zealand Security Treaty (ANZUS)

Formed in 1951, the alliance binds Australia and New Zealand and, separately, Australia and the United States to cooperate in defense affairs in the Pacific Ocean. Australia is a resolute ally of the United States that is committed to enhancing global and regional security. It is the largest non-NATO contributor of forces to coalition efforts in Afghanistan and throughout the Pacific. Australia and the United States operate several joint defense facilities in Australia. In response to the terrorist attacks of 11 September 2001, the treaty was invoked by Australia for the first time.¹⁵⁷ Joint cooperation of the United States and Australia is aimed against terrorism and the proliferation of weapons of mass destruction. Australia itself is a signatory to the Nuclear Non-Proliferation Treaty and does not have nuclear weapons. Having been an honored ally of the United States for a long time, cooperation has become more important now than ever. With the emergence of new potential threats in the Pacific Ocean, the United States has engaged in even deeper mutual military assistance with Australia. On Nov. 16, 2011, President Barack Obama and Prime Minister Julia Gillard of Australia announced plans for the first sustained American military presence in Australia. This small but significant step symbolizes Australian and American collaboration to counterbalance a rising China. The United States is not going to build new bases on the Australian continent, but instead will use existing Australian facilities. An estimated 200 to 250 US Marines will arrive in 2012 for the purpose of rotational presence with the eventual goal to bring the number up to 2,500.¹⁵⁸ Such steps are essential for

ensuring security and maintaining valuable military assistance in the Pacific Ocean. Undeniably, considering the threats that exist in Pacific Asia, investments in this kind of cooperation are vital and should not be reduced until stability is ensured and all potential threats are eliminated.

Other alliances in the Asia-Pacific Region

The United States has a number of military alliances in the Asia-Pacific region, including Japan, South Korea, Singapore, the Philippines, and others. Broadly, the U.S. military in the Asia-Pacific region enjoys freedom of action, numerous reliable partners, and ready access forces at a number of locations (e.g., Hawaii, Guam, and Japan). In the wake of current events and projected events in the region, some of these alliances gain whole new levels of importance.

We believe that South Korea has strong capabilities to mitigate most threats coming from North Korea. As it was already stated earlier in this report, we believe that the amount of troops can be significantly reduced in South Korea as we found the capacity of its military to be extremely high.

In the Philippines, The United States has about 600 troops, many of them assisting in countering terrorist groups in the southern island of Mindanao. Even though the United States and the Philippines look for deeper cooperation, the two parties have not yet stated any plans for a major buildup or a reopening of permanent bases. The US Military is touchy subject in the Philippines, and a source of discontent for China. However, because of the latter it would be beneficial for the United States to secure the Philippines as a strong ally and to establish bases there in order to maintain security in relation to China.

Singapore is the other long-standing ally of the United States. Just like other Pacific Asian allies, Singapore can be valuable to help maintain the security of the United States.

Another Pacific neighbor of the United States, Japan, is part of a trilateral cooperation between the US, Australia, and Japan, which was established to promote stability and security in the Asia-Pacific region. With 28,000 troops stationed in Japan, the United States has secured Japan as one of its closest allies in the world. Despite some recent deliberation related to US basing realignment in Japan, the military relationship and the overall alliance remain strong. The US and Japan continue to share similar security interests; therefore continued collaboration is vital to address challenges that include the DPRK, humanitarian assistance and disaster relief, and support for freedom of action in the maritime domain as well as in space and cyberspace. A major realignment of elements includes relocating two US air bases from urbanized to rural areas, co-locating US and Japanese command and control capabilities, deploying US missile defense capabilities to Japan in conjunction with their own deployments, and improving operational coordination between US and Japanese forces. However, the United States still needs to ensure that the relationship is strong and impregnable. Therefore, it would not be beneficial for the United States' security to seek cuts in its military relationship with Japan.

The cooperation of the United States and the People's Republic of China has been increasingly deeply integrated, first and foremost economically. China's rise will largely define the Asia-Pacific environment in the twenty-first century. A strong relationship between the United States and China is important to avoid misperception and miscommunication between the two, while it expands opportunities for cooperation where their security interests overlap. China suspended bilateral military relations after the US sold

arms to Taiwan in January 2010, but restarted them later in fall of 2010. Increasing cooperation with China is also vital for responding to any kind of threats from North Korea. Based on the research earlier in this report, we believe that the United States can rely on China to help prevent instability that may arise in North Korea.

The Inter-American Treaty of Reciprocal Assistance (Rio Treaty)

The members of this treaty consist of the United States and most of the Central American, South American, and Caribbean Countries. The central principle of the treaty is that an attack against one is to be considered as an attack against all of the members. The treaty was initially created in 1947 and came into force in 1948. However, at several times it proved to be ineffective. Based on the Rio Treaty, we can rely on this cooperation to ensure the necessary level of stability in the region.

North American Aerospace Defense Command (NORAD)

NORAD is a joint organization of Canada and the United States that provides airspace warning, air sovereignty, and defense for the two countries. One of the closest allies of the United States, Canada, has always been one of its most dependable partners. It is capable of effective cooperation with the United States, as happened during the 9/11 attacks. Cooperation with Canada should always be regarded as one of America's most important alliances.

Israel

Some of the unofficial allies of the United States, like Israel, play no less important roles in its security. Israel is one of a few friends the United States has in the Middle East—the region that represents a huge challenge to global military strategy, energy, and other core aspects of the global and US security. It is also important to understand the situation that Israel faces in terms of its own security. For this country, the support of the United States is absolutely vital for its existence. It would be hard to argue against how critical these mutual ties are for both parties. The recent statement of Secretary Panetta that “Israel can count on three enduring pillars of U.S. policy in the region, all of which contribute directly to the safety and prosperity of the Israeli people: first, the unshakeable commitment of the United States to Israel’s security, second, the broader commitment to regional stability, and third, the determination to prevent Iran from acquiring nuclear weapons,”¹⁵⁹ describes the basic discourse of how the two countries benefit from this cooperation. Being developed both technologically and economically, and with the support of the United States, Israel is capable of preventing severe outcomes that may come from many sources in the Middle East. Iran’s nuclear development and overall aggression, Yemen’s terrorism threat, Hezbollah and Hamas, and still unknown consequences of the Arab Spring—all of these bear vital connections to US security. The Israeli army has 187,000 active personnel, 565,000 in reserve personnel and around 3,000,000 total available and fit for military service (males and females 17-49 years old).¹⁶⁰ Israel maintains dozens of F-16s and F-15s, some of which were customized with long-range fuel tanks. Additionally, Israel possesses military pilotless planes that can reach the Persian Gulf, provide surveillance, and be used for aerial refueling, which is likely to be a critical aspect of any Iran mission. Israel has also purchased additional Dolphin submarines that are capable of firing nuclear missiles. The United States

sold Israel a number of 100 GBU-28 laser-guided “bunker-buster” bombs, which are designed to penetrate hardened targets or targets buried deep underground. Recently the Obama administration approved also more than \$200 million for the Iron Dome rocket defense system, in addition to the military financial assistance that the United States historically provides to Israel. This increased aid already has saved the lives of Israeli civilians facing rocket barrages from Gaza. Secretary Panetta also stated that “the United States will ensure that Israel continues to enjoy unquestioned air superiority by delivering to [them] the advanced fifth-generation fighter aircraft, the F-35 joint strike fighter.”¹⁶¹

Strategy Recommendations Conclusion

Based on the overview of existing military alliances that the United States has throughout the world, this report concludes that there are certain areas where less investment would still allow the US to maintain strategic military partnerships with other nations. However, there are also cases where neglecting to cooperate to a necessary extent could result in deadly consequences. To summarize, the findings are as follows:

- Reduce the number of US NATO troops in Europe;
- Reduce the number of troops in South Korea;
- Maintain the same level of cooperation framed by the Rio Treaty;
- Increase cooperation with Asia-Pacific allies (Australia, Japan, Philippines);
- Increase transparency in cooperation with China;
- Maintain strong ties with Canada under NORAD;
- Maintain support of Israel.

Chapter 8. Base Realignment and Closure | *By Dan Hollenbeck*

Chapter Summary

Key Policy Conclusions

As the US military strategically realigns away from Europe and turns towards Asia, it must shift its base structure to reflect the realignment and maximize its resources.

Background

History demonstrates that BRACs do not result in immediate short-term budget savings, however the BRAC will generate budget savings in the long-term and posture the US military for successful defense.

Policy Considerations

The base realignment and closure (BRAC) is necessary for the US to maintain a base structure that best reflects and supports its current defense strategies. Although current budget concerns are increasingly important, the US needs to follow through on this BRAC to ensure long-term savings and equip itself with an adequate base structure for the defense interests of the future.

Key Recommendations

- Conducting a BRAC is necessary to maintain base structure that reflects current defense strategies;
- Remove two of the four US Army combat brigades out of Europe;
- Look for basing opportunities towards Asia;
- Recognize the importance of long-term savings.

Base Realignment and Closure

As the US military strategically realigns away from Europe and turns towards Asia, it must shift its base structure to reflect the realignment and maximize use of resources. The base realignment and closure (BRAC) is necessary for the US to maintain a base structure that best reflects and supports its current defense strategies. History demonstrates that BRACs do not result in immediate short-term budget savings, however the BRAC will generate budget savings in the long-term and posture the US military for successful defense. The following table contains data from the Government Accountability Office's testimony before the House Armed Services Committee in 2007. The table demonstrates that the previous five BRACs cost resources in the short term but then generated savings as time went on.

Summary of Significant Recent BRAC Actions			
<i>Closure Round</i>	<i>Total Actions</i>	<i>Cost to Implement</i>	<i>Net Annual Recurring Savings</i>
1988	43	\$2.7 billion	\$900 million
1991	75	\$5.2 billion	\$2 billion
1993	163	\$7.6 billion	\$2.6 billion
1995	106	\$6.5 billion	\$1.7 billion
2005	812	\$35 billion	\$4 billion

DoD should follow through on President Obama's current plan to remove two of the four US Army combat brigades based in Europe and look at opportunities to realign towards Asia. Although the immediate budget concerns are pressing, the US needs to follow through on this BRAC to ensure long-term savings and equip itself with an adequate base structure for the defense interests of the future.

Notes

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4. Ibid.

5. Task Force 2011. *Countering Al-Qaeda's Ideology Re-Assessing U.S. Policy Ten Years After 9/11* (University of Washington, Henry M. Jackson School of International Studies, March 2011), 96.

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SECTION II: BUDGET

Introduction | *By Marcus Sweetser*

American history offers many political and economic lessons, but looking back over the nation's more than two hundred years, one central, constant theme emerges: sound national finances have proved to be indispensable to the country's military strength. Without the former, it is difficult over an extended period of time to sustain the latter. Generations of leaders have come to recognize that if the country chronically lives beyond its means or misallocates its financial resources, it risks eroding its economic base and jeopardizes its ability to fund national security requirements. These considerations are particularly vital today, when terrorists seek to create turmoil in American society and destroy the crucial economic infrastructure and institutions that underpin US prosperity and stability.¹⁶²

The past decade has indeed been an extraordinary time in American national security policy. The nation is winding down two of the longest conflicts in its history, after more than 6000 American lives lost, as well as cumulative costs approaching \$1.4 trillion to date. At the same time, operations in Iraq and Afghanistan represent the only period in the nation's history that taxes were cut while going to war. And for reasons which will be explored in this section of our report, it is now legitimate to view the economy as a national security threat. A heavily debt-laden, over-obligated, revenue-squeezed government, highly dependent on foreign capital, creates major security vulnerabilities.¹⁶³

America's military leaders today find themselves at a crossroads. US national security threats present real risks which will require resources in the new century; yet unrestrained military spending is no longer possible as the nation faces huge deficits and unhealthy levels of accumulated debt, alongside a fragile economic recovery. Budgetary demands and the costs of

protecting America's national security will clash unless a long-term strategy can be found for meeting both priorities. At the heart of this dilemma, leaders face choices that are as much about the nation's identity as it is about money and security: what is the military for, and what role are Americans to play in the world of the twenty-first century?

Chapter 9. US Federal Debt | *By Jessica Beers*

Chapter Summary

Key Policy Conclusions

A weak economy, fiscal instability, and inflexible policy options feed political unrest and weaken the physical and political base upon which military strength depends, making the weakening international position of the US more of a concern to security than it would otherwise be. Economic and fiscal stability are highly necessary in order for true and dependable national defense to be realized, and they depend greatly on a balanced budget. Hence, the federal budget must be brought closer to balance, and all spending critically evaluated and reformed in order to do so. Since all departments have a stock in maintaining overall economic strength and stability, the Department of Defense must participate in carrying this burden.

Background

US national debt is over \$15 trillion. In 2011, federal outlays of \$3.6 trillion and revenue of \$2.3 trillion resulted in the fourth annual deficit reaching over \$1 trillion: it was \$1.3 trillion in all. Consequently, the federal debt has surged to 67 percent of gross domestic product—the highest percentage since World War II. Deficit spending is increasing at such a rate that in June of 2011, the Congressional Budget Office projected that federal debt will reach at least 82 percent of GDP in 2020 and could be more likely to reach closer to 100 percent. Such a large federal debt may lead to higher interest rates, more borrowing from abroad, and less domestic investment, which in turn lowers output and increasingly restricts policymakers' ability to use tax, spending, and monetary policies to respond to unexpected challenges.

Policy Considerations

Governments relying solely on revenue hopes and dreams have never balanced a budget, and no matter the state of revenue (which has historically maintained an average of 18 percent of GDP), spending has almost always exceeded it. Taxes cannot keep up with the projected growth in the rate of spending and the increasing debt service that comes with it. There will come a point when taxes will not suffice and spending will outgrow it by unsustainable rates, at which time the austerity required will present a very grave threat to the nation. Though tax revenue cannot be disregarded, focus should be placed on cutting out inefficiencies now rather than on justifying debt by revenue.

Key Recommendations

The federal government must work toward a balanced budget. It can do so in the near term by halting budget *increases* and working towards efficient spending and a more manageable debt level of 60 percent of GDP over the next decade. If outlay growth is limited to 1 or 2 percent each year, the budget can be balanced within the next decade and debt can be more realistically addressed. This means that entitlements will need to be reformed, programs and departments that are not legitimate functions of the federal government will need to be cut, and wasting funds will

need to be stopped and treated as unacceptable. Doing so may be difficult, but will be well worth every effort possible as the wellbeing of the nation depends on the resolution of the current federal deficit crisis.

US Federal Debt

Current Situation

The Chairman of the Joint Chiefs of Staff, Admiral Mike Mullen, justly put the US fiscal position into perspective, saying that “the most significant threat to [US] national security is [its] debt. The ability of the United States to keep [its] country secure over time depends on restoring fiscal restraint today... The government will not be able to protect those in need or invest to achieve [the] nation’s long-term potential growth if Washington squanders taxpayer dollars on duplicative programs with no measurable results.” Debt, Mullen says, “is the single biggest threat to [US] national security.”¹⁶⁴

The budget outlook, for both the coming decade and beyond, is frightening. Currently, US national debt accrued is over \$15 trillion. In 2011, federal outlays of \$3.6 trillion supported by total revenue of \$2.3 trillion resulted in an annual deficit of \$1.3 trillion. That concludes the fourth year that the US deficit has reached over \$1 trillion and is the largest budget deficit (as a share of the economy) since 1945. Consequently, the amount of federal debt held by the public has surged. \$15 trillion translates to 67% of gross domestic product (GDP)—the highest percentage since World War II. The current deficit trend is increasing at such a colossal rate that in June of 2011, the CBO projected that, even with the expiration of temporary tax provisions this year, the growing reach of the alternative minimum tax (more as a result of inflation than of expiring provisions, according to the CBO), the tax provisions of the recent health care legislation, and austerity that would bring all discretionary spending to the lowest percentage of GDP since before WWII, federal debt will reach over 82% of GDP in 2020 (shown in the CBO’s Extended-Baseline Scenario). According to the more likely Alternative Fiscal Scenario that assumes that current laws and provisions remain generally unchanged, current tax policies

are essentially maintained, and long-term tax adjustments are made to return revenues back to the historic average of 18% of GDP, debt will have reached roughly 100% of GDP by 2020, and almost 200% by 2035. Again, given the president's new budget proposal and legislative behavior in Congress, this is the most probable projection.

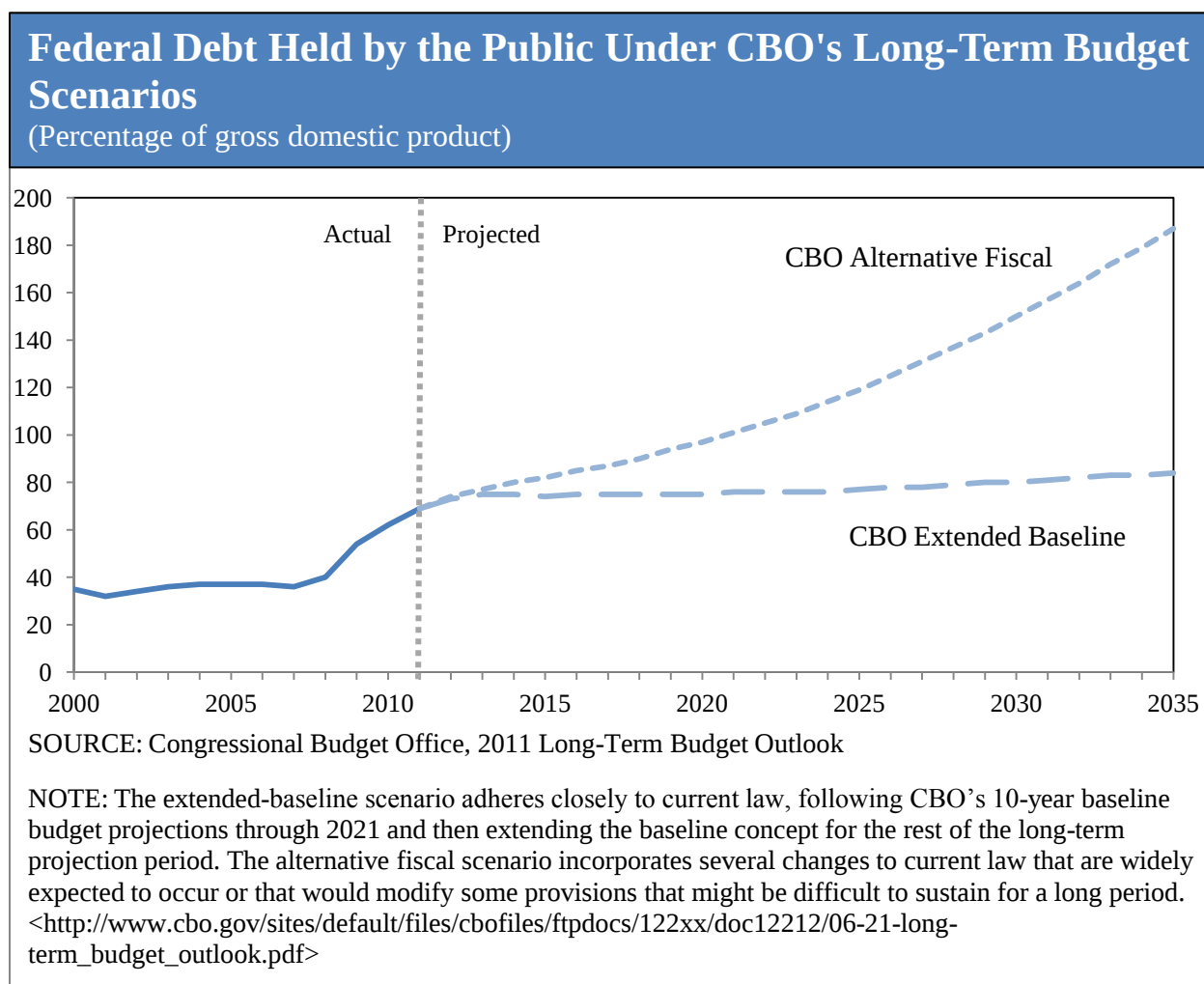


Figure 1¹⁶⁵

Revenue

Not only would such extreme scenarios be highly unpalatable politically, but—all political obstacles aside—also highly optimistic. As the CBO has admitted, “its projections in most of this report understate the severity of the long-term budget problem because they do not

incorporate the negative effects that additional federal debt would have on the economy, nor do they include the impact of higher tax rates on people's incentives to work and save.”¹⁶⁶

It is debatable as to whether or not tax revenue can be increased sufficiently beyond the historical average of 18% and therefore realize the Extended-Baseline Scenario. Historically, revenue has only passed 20% of GDP a few brief times, and raising tax rates is not proven to be causal to those upturns.

In response to economic depression and war, Hoover hiked the top income tax rate from 24% to 63%, and under Roosevelt the top rate was again raised—first to 79% and later to 90%. There it stayed until the early sixties. Yet at the same time, revenue danced around 15% GDP. By looking at the data, we can see that historically, altering the marginal income tax rate has had little to no effect on revenue as a fraction of GDP. In fact, some of the highest points for revenue occurred under some of the lowest tax rates. It is true that revenue reacts to tax rates. However, the relation is just as likely to be inverse as it is direct. The same follows for the average marginal tax rate, Social Security and Medicare tax rates, the effective corporate tax rate, and the capital gains tax rate.

This is not to say that it is completely impossible to somehow raise tax revenue from the current 15% of GDP to a more budget-friendly 21% as in 2000. However, the chances of federal action coordinating efforts well enough to get the tax rate combination right, compounded by the fact that there is little known about what that perfect combination might be, makes increasing tax revenue through tax rates a very undependable possibility.

The political and economic improbability of controlling debt strictly via increased tax revenue means that debt is likely to rise much higher than 82% of GDP by the end of the decade if spending is not curbed. The debt, as well as the political challenge that austerity presents,

cannot be mitigated by simply allowing temporary tax cuts and provisions to expire while leaving the rest up to inflation. Somehow the budget needs to be balanced before interest rates, threatening to more than triple over the next ten years, rob all budgets of needed revenue while a drop in investment throws the US economy into a dire state of no return.

Cut Spending to Balance the Budget

There is still hope. The data rather clearly indicates that the most certain way of cutting deficits is cutting government spending. A series of influential papers by Harvard University economist Alberto Alesina and various co-authors found decisive evidence that successful consolidations rely almost exclusively on spending reductions, while unsuccessful consolidations seek to close 50% or more of the gap with tax increases.¹⁶⁷ Even more interesting is a recent study by the International Monetary Fund that found support for the principle that cuts, particularly to entitlement programs, are key to resolving unsustainable deficit spending.¹⁶⁸

Cutting spending to its lowest since before World War II sounds difficult, but if we look back as recent as the Bill Clinton era, the combination of a GOP Congress and Bill Clinton in the White House led to a four-year period of government spending growing by an average of just 2.9% annually, which slightly accelerated an actual decrease in the spending-to-GDP ratio that had been going for almost ten years. International evidence further proves that spending cuts can do the job. New Zealand got rid of a big budget deficit in the 1990s with a five-year spending freeze. Canada also wiped out its red ink that decade with a five-year stint where spending grew by an average of only 1% per year. And Ireland slashed its deficit in the late 1980s by 10 percentage points of GDP with a four-year spending freeze. On the flip side, recently worsening experience in Europe shows that heavy tax burdens are not a reliable recipe for fiscal balance.

There are two possible reasons why tax increases fail to achieve sustained debt reduction. First, they increase the risk that an economy will experience a double-dip recession. Second, they illustrate that the offending government is unwilling to take a tough stand against escalating spending and would instead seek justification for overspending and increasing debt. Indeed, US federal outlays have almost always been much higher than revenue no matter the revenue's size—at least since before World War II. In fact, they have always increased. Empirically, it would seem that Milton Friedman was correct many years ago when he famously warned that, “in the long run government will spend whatever the tax system will raise, plus as much more as it can get away with.” This never seemed truer than it does today, judging by the new, seemingly oblivious budget proposal and future spending agendas which come at a time when revenue can barely hold at 15% of GDP. Ultimately, a welfare state that cannot shrink in a recession will likely never shrink, which means that to enact high taxes today would provide only an ominous foreshadow of even higher rates and deficits to come—not a balanced budget. Higher taxes have never balanced any budget. It would be commendable to reform tax policies in order to increase efficiency and decrease corruption, but no revenue increase can justify an increase in federal spending over the next ten critical years.

It is a constantly and rapidly growing ratio of spending-to-GDP within an economy worth over \$15 trillion that makes up the US deficit—a deficit which has created a US debt equal to that of the whole US GDP its self. Maintaining a status quo of constant increase in the ratio of spending-to-GDP is a misleading and dangerous way to account for future outlays. The debate is not about how much to cut out of the current budget as a percent of GDP, but rather how to balance the budget. This means that the focus must be on decreasing future growth in outlays to balance spending with revenue, and to avoid additional debt with its threat of increasing interest.

The debate is how to decrease the deficit, not the spending-to-GDP ratio. Spending simply needs to grow at a lower rate than revenue which should not be such a daunting task considering that revenue will still increase substantially over the next ten years regardless of tax cut extensions. According to the CBO's alternative scenario that assumes tax cut extensions, revenue should increase by an average of 7.3% annually over the next 10 years due purely to inflation and economic improvement.¹⁶⁹

There is no reason why the current budget cannot sustain a temporary freeze in order to lower the current debt-to-GDP ratio to a more manageable level. With inflation projected to be about 2% over the same period, this is an ideal environment for some long-overdue fiscal discipline. Fiscal policy and tax reform specialist and economist Dan Mitchel estimates that, based off of CBO revenue and outlay projections, if spending is simply capped at the current level with a hard freeze, the budget will, in fact, balance by 2016, and would allow government to truly focus on decreasing debt. If outlays are limited to 1% annual growth the budget will balance in 2017. And if there is 2% annual spending growth, letting the budget keep pace with inflation, the budget will balance by 2020.

In terms of just how low the debt level needs to go, most economists consider lowering US debt back down to 60% of GDP over the next decade to be a minimally prudent aim. Then the government can gradually lower the debt level to a point of fiscal flexibility that the US has previously benefited from for most of the post-World War II period. The 60% debt-to-GDP ratio has become an internationally recognized standard, as both the IMF benchmark target and part of the requirements of the EU's Maastricht Treaty. This target should be sufficient for the US to reassure global credit markets in the medium-term, while offering a stable and reasonable framework for deficit reduction plans. While this would require a very large political effort, it

would be enough to stabilize the debt at a reasonable level so that it does not grow faster than the economy.

Some outlays, such as the majority of mandatory spending, must grow in order to accommodate for population growth and increased life expectancy, so the only way to maintain such a freeze on the budget is to reallocate funds to a framework focused more on efficiency and prioritization rather than careless yearly budget increases. If outlay growth is limited to 1% or 2% each year, entitlements will need to be reformed, programs and departments that are not legitimate functions of the federal government will need to be cut, and departments that are wasting funds will have to be limited. Doing so may be difficult, but also well worth every effort possible for, as the National Commission on Fiscal Reform and Responsibility wrote in its recent report, “America cannot be great if we go broke.”

The History of Debt as a National Security Threat

One need not search so far as the over-indebtedness, overextension, military and welfare deficit spending, and political and economic failure of the Roman Republic to recognize that national security and military strength have always depended greatly upon a nation’s economic success and fiscal policy decisions. Looking back throughout both capitalist and mercantilist history, it is easy to see that international security, strong war recovery, and military strength of a nation have depended greatly on economic strength, stability, and flexibility.

In the capitalist world, frequency of wars and vulnerability to attack and defeat has been greater at times of economic peril and high levels of national deficit spending. Indeed, the greatest war in world history, World War II, occurred at a time when the world economy was at its lowest and countries were accruing massive debts, with some printing heaps of money in

order to service the debt. But the Great Depression, which originated in the US, was not the only loose footing off of which the greatest war in history began. The Great War (World War I) had produced an economic outcome disastrous for all excepting Japan and the US. Heavy war reparations imposed on Germany were not only insufficient to fuel recovery for the region, but they greatly indebted and damaged a Germany which might have become France's, and others' development partner. This very likely explains the swift fall of Poland, France, and even Belgium and the Netherlands during World War II. During World War I, Germany had devised a plan to invade France by passing through the Belgian and Dutch neutral states but later chose not to invade with the simple motive of avoiding confrontation with, and preserving, the strong economy upon which Germany depended greatly.¹⁷⁰ Before, and during World War I, Dutch debt was at a low point while the government worked to cut deficit spending after war with Belgium. After the first war, however, these neutral states' economies suffered greatly because of ally war strategy that had compromised valuable trade routes, and the inescapable Great Depression that followed. The Dutch may not have had war debts and damage from invasion, but the international nature of their economy rendered them economically weak and unstable by the time World War II began. Dutch debt had reached well above 110% of GDP.¹⁷¹ The Netherlands had again intended to remain neutral, but the country was overrun in no more than five days after the bombing of Rotterdam, which before had been a valuable trade hub.

After the two world wars and the Great Depression—times when war frequency and susceptibility to military defeat were associated with weak economies and large deficits—the Soviet Union collapsed arguably because of an economic inability to simultaneously hold onto its interests, fight a final failing war in Afghanistan, and win an arms race with its US rival. It is of little surprise that the USSR lost the war against this little country, not so much because of the

international opposition directly involved, but because of its fixation on continually increasing spending within its already capable military sectors. Ironically, the Soviet Union's obsession with military spending likely led to its complete collapse.

Ever since the end of World War II and the Cold War, the US has held a key hegemonic place in the global order of security and trade. Through the formation of international institutions and alliance systems, the US has been the hegemonic presence that has allowed and nurtured economic growth, development, and increased international security. It did so through both superior military and economic strength. However, without the latter, it is difficult over an extended period of time to sustain the former, and long-term recovery after conflicts becomes a much more difficult road. Economic strength and preparation allowed the US to come out of each conflict stronger and better off.

Overall, history attests to the increased vulnerability to war, the inability to finance military conflicts, and the poor post-war recovery of countries lacking economic strength, stability, and fiscal flexibility. Increased vulnerability to military conflict and security threats is not, however, always of an international nature. In the mercantilist world, Great Britain saw its national debt rise from £16.7 million in 1697 to £132.6 million in 1763 caused by enormous war expenditure increases during the Nine Years' war and the Seven Years' war.¹⁷² In spite of tax revenue almost tripling to £8.6 million during that time, it simply could not keep pace with the growth of expenditure that increased to 14% of GDP in 1760 and debt was rapidly accrued.¹⁷³ Britain's stronger tax base and the Bank of England's dependency on England's commercial prosperity enabled the government to borrow more extensively at lower rates than its French rival. This served to smooth out the fiscal burden, but the high levels of military expenditure, heavy taxation, and debt can also be analyzed as having "crowded out" private investment and

thus become detrimental to the performance of the economy in the long run.¹⁷⁴ In a mercantilist world order, this was arguably unavoidable since overseas commerce needed to be protected militarily. However, it seems that the treatment gravely compromised the patient. Britain would not enjoy the gains from these conflicts for long since the war had left a European military fiscal crisis in its wake¹⁷⁵ leaving the belligerents to service their massive debts with little investment backing. Considering the British antagonism towards tax increases, it only made political sense to put the burden on the colonies. American colonies, thrown into a prolonged postwar recession, were provoked into opposition to the unsustainable, increasing tax rates and thus to imperial control. This would only be the beginning of the long, but swift break-up of the great hegemonic British Empire under increasingly massive debt that reached above 200% of GDP at times. The United Kingdom is by no means an unstable nation today, but it saved itself in response to fiscal threats only by cutting spending down to an average of 25% of GDP and surrendering its international footholds rather than fighting for them. The country simply did not have the funds to back such a military campaign forever.

Britain was not the only nation hurt by its debt accrued during the American Revolutionary War. France, in its aid to the American colonies and previous wars, faced its fundamental inadequacy in state financial resources by amassing a large debt during that decade.¹⁷⁶ Amidst repeated wars and defeats, attempts were made to equalize the economic burden across classes, provinces and localities which lead the situation to become so desperate that the finance minister informed Louis XVI that no fiscal remedies could be found without a complete overhaul of the society and administrative system of the Ancien Régime. This lead to the outbreak of the French Revolution within France's own borders and the violent militant threats to fundamental securities that came with it.¹⁷⁷

Every country is different as is every situation and crisis. However, it is very clear that massive national debt poses a grave security threat to military strength, political and social stability, economic stability, and the standard of living for the everyday citizen. When taxes need to increase drastically, not to guarantee improved public goods, but instead to pay for those of past generations, citizens rightfully fail to see the incentive to contribute to revenue, and government endeavors lose legitimacy. Polarity increases (as do filibusters), exacerbated by rising tax rates as well as increasingly and inevitably necessary austerity, and the economy dwindles while the nation's power and flexibility to react to economic crisis simultaneously diminishes.

Large budget deficits and growing debt specifically reduce national savings, lead to higher interest rates, more borrowing from abroad, and less domestic investment—which in turn lowers output. However, as the director of the Congressional Budget Office (CBO) clearly defined in his testimony before the house budget committee in June 2011, rising levels of debt have negative consequences beyond those that are incorporated in estimated effects on output. One is found in the implications of higher interest payments on that debt, which would eventually require either higher taxes or a draconian reduction in government benefits and services. Rising debt increasingly restricts policymakers' ability to use tax and spending policies to respond to unexpected challenges, such as conventional security threats, natural disasters, and economic downturns or financial crises. As a result, the effects of such unforeseen developments on the economy and people's well-being could be worse. In fact, the rise of such massive debt only increases the probability of a sudden fiscal crisis, during which investors would lose confidence in the government's ability to manage its budget and the government would thereby lose its ability to borrow at affordable rates. Such a crisis would confront policymakers with

extremely difficult choices along with the temptation to over-inflate the currency as has previously been done in such circumstances (such a reaction would only decrease investment and output further). To restore investors' confidence, policymakers would need to enact austere spending cuts or tax increases more drastic and painful than those that would have been necessary had the adjustments come sooner.

Political unrest, a weak economic stance, and fiscal instability and inflexibility only weaken the base upon which military strength depends and makes the weakening international position of the US more of a concern to security than it needs to be. Economic and fiscal stability are highly necessary in order for true and dependable national defense to be realized.

Conclusion

Considering the dire US budgetary outlook, how US deficit spending is reduced will depend in part on how well the economy does over the next few years. More critical, though, will be the fiscal policy choices made by lawmakers within the next year and decade, to ensure that the US moves towards a balanced budget and long-term national security. While in essence cuts are what need to happen, the situation does not require nearly as draconian measures as is often suggested. The government simply needs to budget and it can do so by merely halting budget increases and working towards efficiency. It must focus on cutting out any inefficiencies rather than get distracted by revenue dreams and forecasts. Tax revenue, if only for its distracting nature, cannot be considered a solution to debt but rather the limit to spending. In the endeavor to budget, all centralized spending must be critically evaluated and improved upon in order to ensure the nation's future security. All departments have a stock in maintaining overall economic strength and stability since it is upon this strength that they all depend. Thus, the Department of

Defense must participate in carrying this burden. As Admiral Mike Mullen stated, “the most significant threat to [US] national security is [its] debt,” and “any serious attempt to reduce the deficit will require deliberate, planned reductions in both domestic and defense spending.”

Chapter 10. The Defense Budget, In Perspective | By Marcus Sweetser

Chapter Summary

Key Policy Conclusions

US national security threats present real risks which will require resources in the new century, yet unrestrained military spending is no longer possible. Defense represents over 20% of the federal budget and, therefore, to achieve any credible deficit plan, reasonable reductions can be expected. Decisions about the future of the defense budget have major strategic impacts that go beyond dollars and cents: what is the nation's military for, and what role are Americans to play in the world of the twenty-first century?

Background

This report approaches the defense budget from a broad perspective. Like all sectors of government, defense spending should be executed with the greatest efficiency and accountability possible. The underlying philosophy is one of economizing where feasible, but not risking the excellence that US military forces display on the international stage. Attempts to cut back on military increases are admittedly difficult in a complex world, yet unchecked defense budgets do not necessarily make America safer. Spending money wisely does.

Policy Considerations

Preparing for defense reductions beyond the President's 2013 budget request is consistent with the country's history of fiscal prudence following a decade of war. The country cannot spend its way out of risk, and as the nation seeks to tighten its fiscal belt, the challenge is to determine how US security is best managed into the foreseeable future. Defense capabilities should be designed and tailored to meet acceptable levels of risk in the world after the United States missions in Iraq and Afghanistan conclude.

Key Recommendations

In the following budget analysis, responsible measures have been taken to analyze and recommend policy options in various scenarios, should there be a need for steeper defense reductions. The budget assessment herein demonstrates that by 2021 defense spending could be consistent with the level required by sequestration, without embracing a drastic one-year reduction or proportional across-the-board military cuts. Taken together, our recommendations could achieve at least \$658 billion in savings over the next ten years, while ensuring the US military remains the most globally superior force on the planet.

Sound Strategy Trumps Statistics

The US has spent decades building up the best military in the history of the planet. America's dominance in military force and capability has helped prevent a major-power war for almost seventy years while supporting an open trade system from which the world's prosperity has grown more than any period before it. So making national budgetary decisions with huge strategic impacts cannot be done as an arithmetic exercise.¹⁷⁸ A defense policy that is budget-driven also doesn't achieve much. Statistics and budget numbers can be used by hawks and doves alike to justify either side of the aisle, and they have a tendency to obscure the real question that must be asked when considering defense policy: what is America's twenty-first century national security strategy, and does the US military have the resources needed to achieve it?

In the coming debate over America's national security budget and long-term defense strategy, sweeping statistical arguments will be made about whether US military spending is high or low. Regardless of one's views on this broad question, the national discourse would benefit more from specifics about strategy and policy implications of potential budget changes.

Starting with the broad question, many who wish to defend the magnitude of Pentagon spending often point out that in recent decades its share of the nation's economy (GDP) is modest by historical standards. During the 1960s, national defense spending was typically 8% to 9% of gross domestic product; in the 1970s it declined to just under 5% of GDP; during the Reagan buildup of the 1980s, it reached 6% of GDP before declining somewhat as the Cold War ended. In the 1990s, it decreased from roughly 5% to around 3%. In 2010, the Pentagon accounted for about 4.5% of GDP. Similarly, US defense spending is also now just over 20% of federal budget outlays, in comparison to nearly half in the 1960s.¹⁷⁹

By contrast, those who criticize the Pentagon budget often note that it constitutes more than all other global military spending combined, and exceeds the cold war inflation-adjusted average by over 50 %, once war costs are included. Or they might note that military spending dwarfs the size of the United States diplomatic, foreign assistance and homeland security levels. Taxpayers spend about 12 dollars on national defense for every dollar spent on diplomacy. When seen in this light, current levels of military spending (including wartime supplemental budgets) seem excessively high, if hardly low.¹⁸⁰

How can these broad arguments be simultaneously valid but reach polar opposite conclusions? It suggests that the broad historical or international figures, without context, are not in-and-of themselves conclusive. The reality is that while it is hard to view defense spending as modest or the military as chronically underfunded by any measure, it is also hard to declare that a military asked to do so much in so many parts of the world is blatantly excessive.¹⁸¹ To make useful policy recommendations, including those aimed at reducing defense spending, we must look deeper, and with more specificity, at different elements of the defense budgets, and align this with security needs based on examinations of likely threats and missions.

A word is warranted about the use of these statistical figures to influence public perception or policy proposals. First, the increasingly popular idea that the Department of Defense be guaranteed a budget equal to at least 5 % of the nation's gross domestic product is not a sound policy, because it would amount to conferring quasi-entitlement status upon the nation's military establishment. In ten or fifteen years, if the country can ensure its security within a smaller budget, it would be a good thing. It would help to stabilize the country's fiscal situation and thus its long-term economic health. In the short term, defense spending will likely remain around 4% to 5 % of GDP, but that is a practical consequence of the threats we face and

the military strategy we choose to pursue. There should not be an arbitrary, immutable federal budget principle about defense in relation to GDP.¹⁸²

Second, there are those that question why US defense spending, at this moment in history, remains so high compared with other nations. Looking at the major conflict scenarios of defense planners, the lead spenders are Iran, North Korea, Venezuela, Cuba, and Syria. Yet all of their defense allocations are still very modest, as are the working budgets of groups such as al-Qaeda, which measure in the tens or hundreds of thousands a year, at most (National Commission on Terrorist Attacks Upon the United States, Commission Report 2004). When US alliances are figured in, the alliance system accounts for about 75% to 85 % of global military spending (depending on which partnerships are included). For some this information is enough to conclude that US defense spending is not only large but exorbitant and unnecessary, especially in an era of large US budget and trade deficits.¹⁸³

An important reason for the high United States defense spending is its large number of overseas interests and allies. The United States has many actual and potential military obligations. Moreover, because distant theaters require a substantial effort to deploy US forces, it adds to the difficulty of potential missions and costs more. An international apples-to-apples budget comparison is limited in its usefulness, since potential enemies generally are fighting on or near their home country. Another important explanation for the internationally disproportionate US defense budget is that the United States seeks a major qualitative advantage in military capability. We aren't interested in a fair fight. From strictly an international budget analysis, we can indeed state that US military spending is very high. Yet the strategic advantage it confers on the United States over other countries is not something to regret or discard. The sheer number of strategic commitments around the world necessitates an amply-funded national

security budget.¹⁸⁴

That said, the Pentagon can and should look for measures to save costs. Like all parts of government, defense spending should be executed with the greatest efficiency and accountability possible. The underlying philosophy should be one of economizing where feasible, but not risking the excellence that US military forces display on the international stage. That won't be easy. It will involve tough choices. But for any credible deficit reduction plan, defense must be on the table. The level of reduction to be expected, even if after rooting out a substantial amount of waste at the Pentagon, will require considerations about which capabilities can be done without in the future. Attempts to cut back on military increases are difficult in a dangerous world, but the reality is that unrestrained defense spending is no longer possible—and it doesn't necessarily make America safer. Spending defense money wisely does.

Reasonable Reductions, Responsible Risks

In February, President Obama released a defense budget proposal charting the country's military future over the next five years, which has begun a serious national dialogue about the nation's budget challenges and military strategy. Sequestration, by the same token, looms over the industry at large—a process that would force drastic across-the-board defense reductions unless Congress passes a plan to substantially reduce the deficit over the coming decade. With the US borrowing nearly 40 cents for every dollar it spends and military appropriations now representing over 20% of the federal budget, reductions are to be expected. While military planners attempt to find savings at the margins, steeper cuts would necessitate decisions about how the American military should be structured and what it should and should not do in the world.

Beyond that broad point, the Obama plan may not actually produce enough savings to meet the budget goals set out in the Budget Control Act, which mandate \$489 billion in ten-year savings— leaving aside the possibility of sequestration, which would be an irresponsible approach to setting defense policy. This task force explores additional policy options military leaders will face if reductions beyond the Obama plan are required, from weapons systems to procurement and R&D reform to compensation. Under the proposals of this task force, by 2021 defense spending levels would be consistent with sequestration requirements; however reductions would be achieved gradually (rather than a drastic one-year cut) and with strategic implications in mind (rather than unintelligently imposing across-the-board cuts).

Reasonable Reductions, Responsible Risks

DoD Budget, Future Projections (\$ Billions of Current Dollars)										
	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021
CBO Projection	553	570	586	598	610	621	632	644	655	667
President's Budget	553	525	534	546	556	567	577	588	598	609
Sequestration	553	491	501	511	522	535	548	561	575	589
Task Force	553	519	508	524	535	546	557	568	579	589

Total Reductions Compared to CBO Baseline (\$ Billions of Current Dollars)											
	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	TOTAL
President's Budget	-	45	52	52	54	54	55	56	57	58	483
Sequestration	-	79	85	87	88	86	84	83	80	78	750
Task Force	-	51	78	74	75	75	75	76	76	78	658

Year-to-Year Nominal Increase (\$ Billions of Current Dollars and % Change)											
	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	TOTAL
CBO Projection	-	17	16	12	12	11	11	12	11	12	137
President's Budget	-	-28	9	12	10	11	10	11	10	11	79
Sequestration	-	-62	10	10	11	13	13	13	14	14	59
Task Force	-	-34	-11	16	11	11	11	11	11	10	59
CBO Projection	-	7.55%	2.81%	2.05%	2.01%	1.80%	1.77%	1.90%	1.71%	1.83%	-
President's Budget	-	-0.94%	1.71%	2.25%	1.83%	1.98%	1.76%	1.91%	1.70%	1.84%	-
Sequestration	-	-7.36%	2.04%	2.00%	2.15%	2.49%	2.43%	2.37%	2.50%	2.43%	-
Task Force	-	-2.08%	-2.12%	3.15%	2.10%	2.06%	2.01%	1.97%	1.94%	1.73%	-

NOTE: By making more reductions sooner, sequestration enables larger yearly increases FY2015-FY2021

Figure ii

The Past Decade of Defense Spending

Although reductions should be made in coming years, the nation is still wealthy by any measure, and will be able to provide national security to meet all of the challenges ahead. The United States will continue to be the world's foremost military power well into the foreseeable future. The Pentagon maintains an overseas concentration of 190,000 troops and 115,000 civilian employees inside 909 military facilities in forty-six countries and territories.¹⁸⁵ US military research and development spending alone is more than China's entire defense budget, which is the second-largest in the world.¹⁸⁶ The immensely superior technological advantages and strategic forward deployments of the United States will continue to far outmatch any potential adversary, even as responsible reductions are made to the defense budget.

This is especially true given the fact that over the past decade-and-a-half the nation experienced a buildup in military spending, in which defense budgets grew with few fiscal constraints. As the US funded two major operations in Iraq and Afghanistan, defense spending increased 170% in real terms to a peak 2010 budget of \$721 billion. Average annual increases over that time were roughly 7% each year. That rate of growth slowed after 2008, due to the onset of the financial crisis and growing concerns over the nation's debt, yet the Department of Defense budget is still more than twice the size of what it was at the turn of the century.

As the nation winds down two long wars in the Middle East it has a window of opportunity to establish a sound financial strategy for the future. With a reduced role in Iraq and Afghanistan, the US does not need to continue increasing military budgets at the same rate. After every major conflict the US military has experienced significant budget drawdowns. Following Vietnam, Korea, and the Cold War, peak budgets gradually declined by 20% to 25%. A similar trend is likely to begin as the US attempts to balance its present military and economic security needs. In

fact, 2011 marked the first year since 1996 that the DoD budget was reduced (by a modest amount), in addition to the passage of the Budget Control Act imposing limits on the defense budget over the next decade.

In general, if budget reductions are to be made, they are better made sooner rather than later. A dollar saved today is worth more than a dollar saved tomorrow. At the same time, it is impossible to make deep cuts to the military without incurring some additional risks. There are risks whenever changes are made to the military budget. But the country cannot spend its way out of risk, and as the nation seeks to tighten its fiscal belt, the challenge is to determine how US security is best managed into the foreseeable future. The bottom line is that the US must define its strategy for the force of the future while ensuring the nation will have the resources over the long term to protect the country and fulfill its missions.

The Future of the Defense Budget

The Pentagon's fiscal 2013 budget request continues the downward slope in defense spending that began in 2011, before leveling off at 2008 spending levels. The request is consistent with the Budget Control Act's requirement for \$489 billion in savings over the next ten years, using the CBO's forecast of defense spending as a baseline. In real terms, the next fiscal year would be the tightest, with an actual decrease of \$5 billion from the previous year, compared to nominal increases under 2% every year thereafter. It would result in a 2013 base budget of \$525 billion, and an additional \$88.5 in overseas contingency operations funds.

There is a qualitative difference between budget "cuts" reducing spending from one year to the next, and budget "savings" achieved by lowering projections. The oft-cited defense reduction figures of \$259 billion over five years and \$487 billion over ten years are generously inflated

(especially within the realm of public perception) because most all of the savings are achieved by reducing projected increases. The baseline CBO projections, from which savings are calculated, expected a \$40 billion increase in 2013 (or an increase of 7.5%). Therefore, nearly 70% of the reductions claimed by the Pentagon are achieved simply by not increasing the budget in fiscal 2013. Going further, if the US were to maintain spending at 2012 levels, neither increasing nor decreasing defense by one penny over the next ten years, the country will have saved at least \$800 billion, when using the CBO as a baseline. A distinction needs to be made between savings that are achieved by lowering projections, versus cuts in real terms from one year to the next.

Five-Year Savings in Pentagon's FY2013 Budget Request	
<i>Category</i>	<i>5-Year Savings (\$ Billions)</i>
Reduced Active End Strength (Down 103k): Army (72k), Marine Corps (20k), Navy (6.2k), Air Force (4.2k)	50
Reduced Force Structure: Army eliminating minimum of 8 BCTs, USMC eliminating 6 combat battalions, 4 TACAIR squadrons, Air Force eliminating 7 TACAIR squadrons, 27 C-5A's, 65 C-130's and 38 C-27's, Navy retiring 7 older cruisers and 2 Landing Ship Docks	
Reduced Reserve End Strength (Down 22k): Navy Reserve (9.1k), Air Force National Guard/Reserve (7.4k), Army National Guard/Reserve (5k)	
Procurement Terminations: Global Hawk Block, C-27J Joint Cargo Aircraft, HMMWV, Defense Weather Satellite System, C-130 Avionics Modernization Program, Medium Range Maritime UAS	9.6
Procurement Restructuring: F-35 Joint Strike Fighter (\$15.1), Ground Combat Vehicle (\$1.3), Family of Medium Tactical Vehicles, Joint Air-to-Ground Missile, P-8A Poseidon, E-2D Advanced Hawkeye, Rephased Aircraft Procurement MV-22 Osprey, Delay Ohio Class Replacement-SSBN (\$4.3)	41.8
Reduced Shipbuilding	13.1
Tricare: Increase enrollment fees & co-pays	12.9
Lower Raises Starting 2015	16.5
Limit Civilian Pay	10.4
Contract Reform	5.3

Department of the Air Force	6.6
Department of the Army	18.5
Department of the Navy	5.7
Reduce Combat Command Support	1.5
Reduce DoD Administrative Overhead	10.7
SOURCE: DoD Comptroller, FY2013 Budget Request Overview	

Figure iii

The budget proposal from the Pentagon reflects that the Army and Marine Corps will shrink by 72,000 and 20,000 troops respectively—a 5.5% reduction in end strength over the next five years as it winds two operations in the Middle East. All of the services will slow or terminate planned weapons procurement programs, many of which are over-budget and under-performing. The rate of military pay raises would slow in 2015, along with additional Tricare fees and pharmaceutical co-pays (pay and benefits have increased by 90% since 2001 and now make up one-third of the DoD budget). Taken together, efficiencies represent 25% of savings, force structure and procurement adjustments achieve roughly 50% of all savings, and compensation reforms account for just over 10% of total reductions. The defense budget would then be increased by an average of roughly 2% every year following fiscal year 2013.

The Pentagon's budget does not, however, consider additional reductions that could be triggered by the Budget Control Act, apparently assuming that Congress will intervene to prevent sequestration. The BCA included a "sequestration" provision that requires additional across-the-board defense cuts to take effect in January if Congress does not pass a plan to reduce the national deficit. Congressional failure would automatically trigger a 2013 national security budget of \$492 billion or less (an immediate \$66 billion cut), and require that national security spending be below \$589 billion in fiscal 2021.

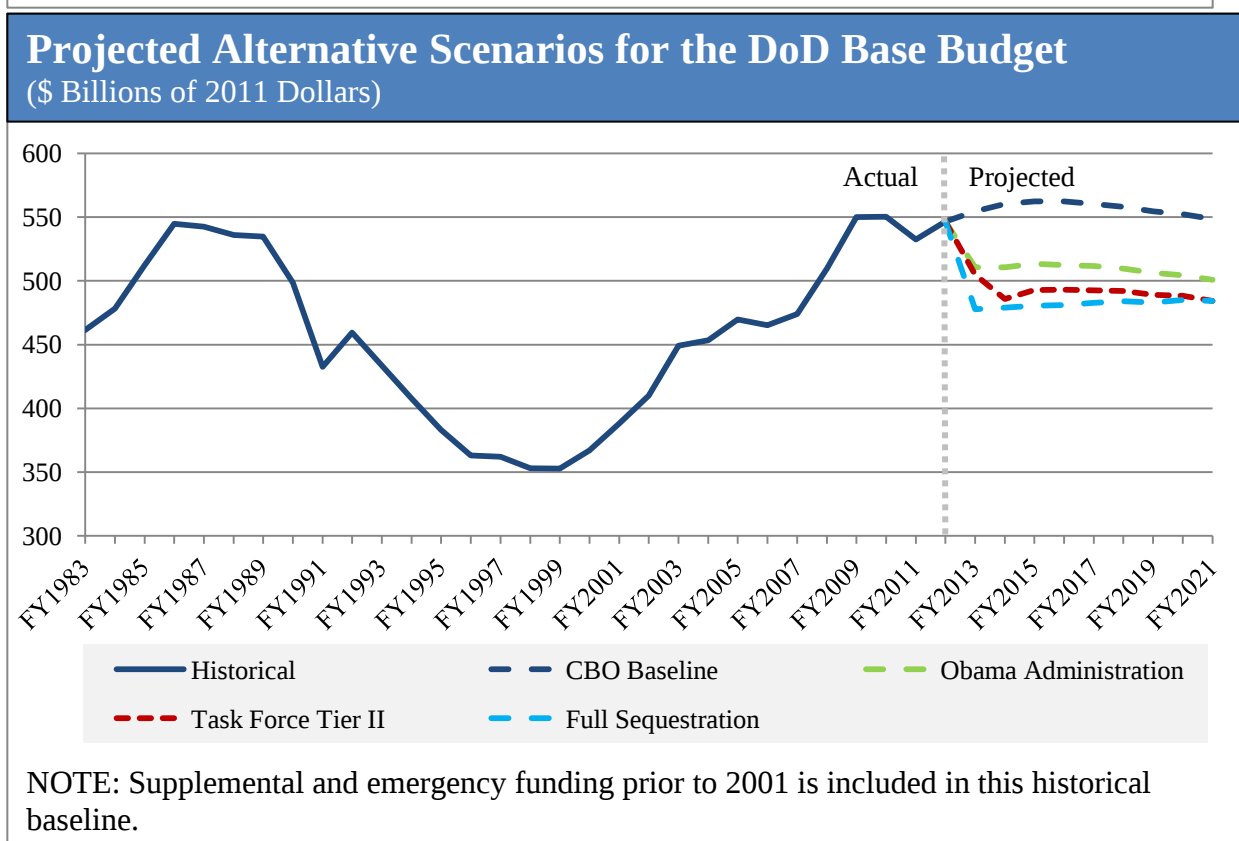
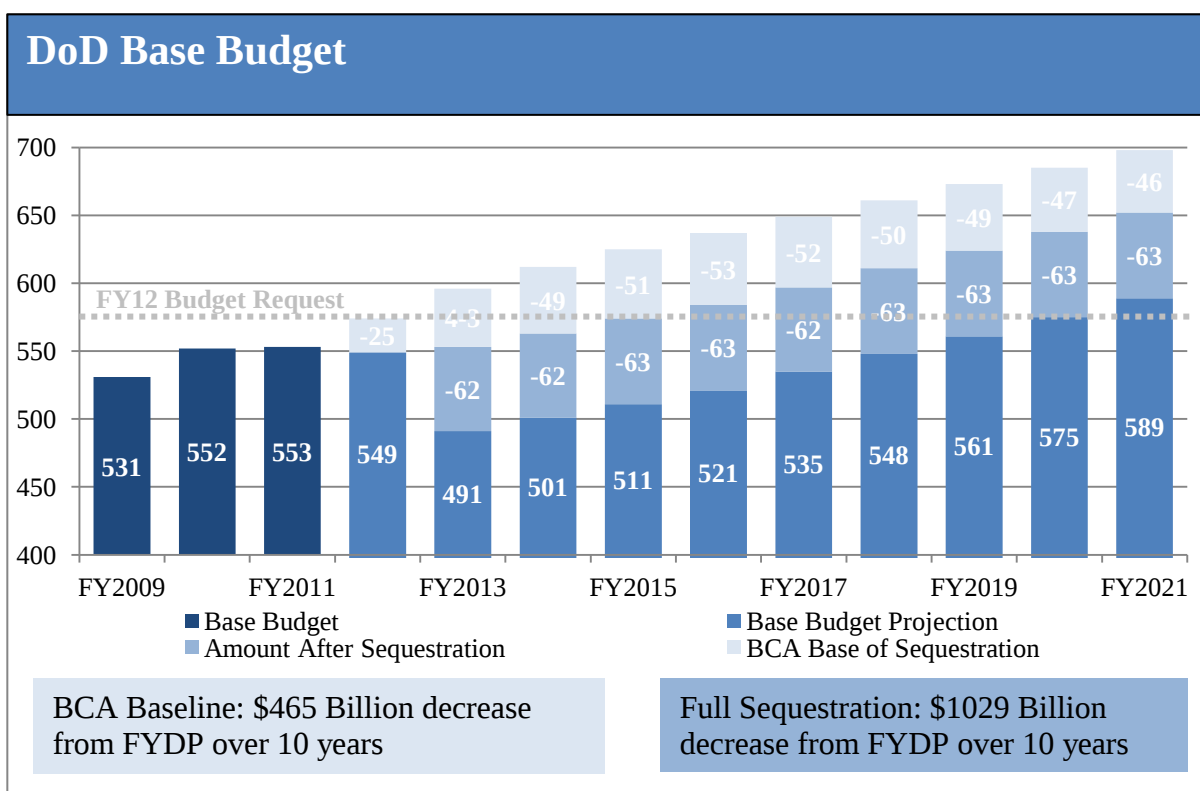


Figure iv

The Pentagon's preparation for sequestration is to flatly deny that the possibility can take place. However the possibility of sequestration is creating a huge shadow of doubt over defense industries, their workers and the military. What will happen if sequestration is not averted and the Pentagon must cope with finding \$750 billion in cuts over the next ten years? It would leave the military without a workable strategy, and no clear road map for making the deep cuts that would be required.

While military leaders should be more proactive in preparing for the possibility of sequestration, the implementation of sequestration is not an intelligent way to cut defense spending. The two alarming features of sequestration are first, its sheer magnitude, and second, the mechanism. A sudden real cut of \$66 billion over the next year alone would lead to a misalignment between budgets and strategy, unacceptable levels of risk, or underfunding of missions that are critical to national interests. Moreover, the process of sequestration indiscriminately makes proportional cuts from all military accounts, without regard for prioritization or assessments of national risks to fully fund what is most important.

This task force explores the policy options that military leaders will face in a sequestration scenario, from the weapons systems to procurement and R&D reform to compensation. It is clear that in order to reach the level of cuts required by sequestration, reductions will need to be spread over a longer amount of time to allow defense planners to make strategic decisions that gradually flatten spending through a disciplined process, rather than a drastic one-year cut. More specifics on each of the sections of the defense budget will be explained in the following chapters of this report.

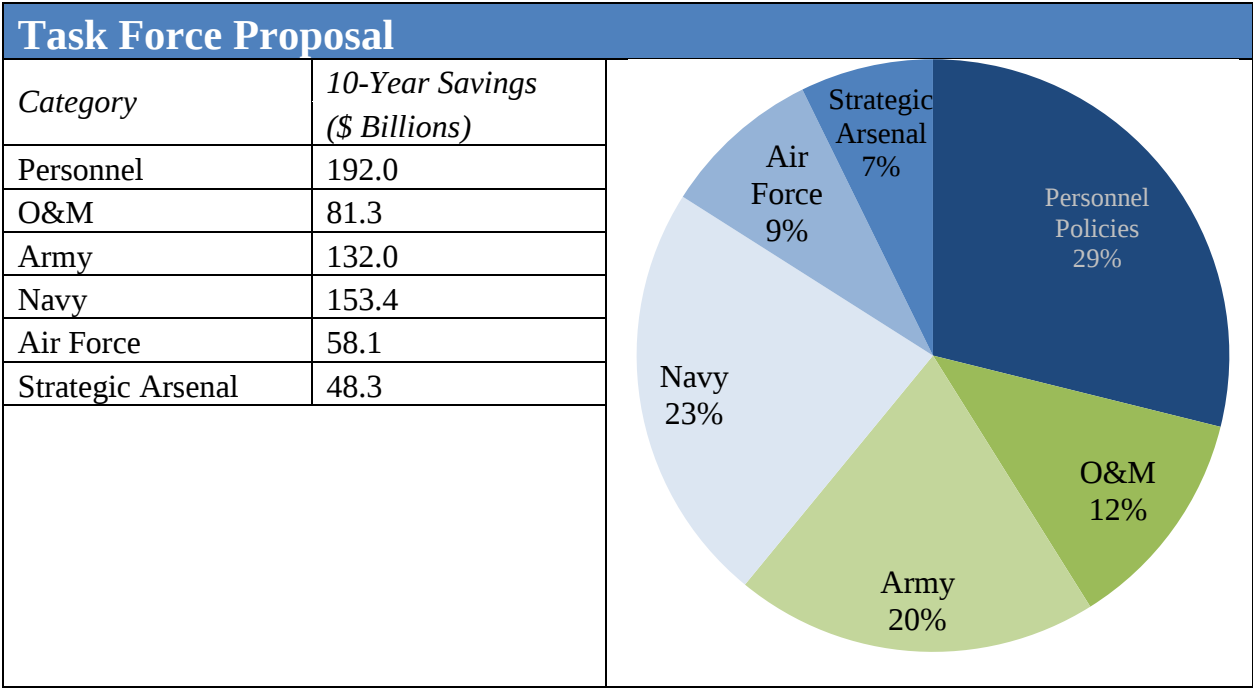


Figure v

Conclusion

Defense represents over 20% of the federal budget and therefore, in coming years, reasonable reductions must be expected. The US must be responsible with how it handles military reforms that have major strategic impacts. Decisions go beyond dollars and cents—they strike at the heart of what the nation’s military is for, and what role Americans are to play in the world of the twenty-first century.

As a task force, we have taken prudent measures to analyze and recommend policy options in various scenarios, should steeper defense reductions be required. This report documents a number of defense reforms that ensure the US military remains the most globally superior force on the planet, while responsibly addressing a deficit crisis that jeopardizes the nation’s long-term sustainability. All things considered, the reductions suggested herein are

consistent with the country's history of fiscal prudence following a decade of war. Defense capabilities should be designed and tailored to meet acceptable levels of risk in the world after our missions in Iraq and Afghanistan conclude. After every major conflict, the US military has experienced significant budget draw downs by reassessing military threats and strategy. Following Vietnam and the Cold War, peak budgets gradually declined by 20% to 25%.

This task force has worked to offer an aggressive, fair, and balanced set of options to address the serious fiscal and national security threats we now face. The task force plan, as a whole, would in fact allow national security costs to decline in coming years, meeting the broader goals of sequestration without embracing a draconian one-year reduction or across-the-board cuts. These proposals are not intended to be a single, take-it-or-leave-it package. Every feature is legitimately debatable and should be, because defense reform will be achieved incrementally. Some may fundamentally disagree with the specific suggestions here. Others will see them as too modest in scale or scope. But they are motivated by the above underlying philosophy—a recognized need for fiscal prudence, combined with awareness of the nation's national security requirements for the complexities of the world today. Perhaps most importantly, this task force report demonstrates that, at a time of intense political posturing, a diverse group can craft a comprehensive and viable roadmap to tackle some of the nation's most serious economic and national security challenges. Our leaders have the same responsibility to level with Americans about the choices we now face: instead of shrinking from what's politically unpopular today, enlisting the American people who will rise to the challenge of securing the future.

Chapter 11. Auditing the Department of Defense | By Gregory Johnsen

Chapter Summary

Key Policy Conclusions

A clean audit of the entire Department of Defense will not come without significant costs and changes to the way the department does business, but these are more than outweighed by the legitimacy it will earn the DoD's operations. In times of tight budgets, proving to taxpayers and Congress that the DoD is a careful steward of funds is every bit as critical to the department's success as personnel or weapons systems.

Background

In 1990 Congress passed the Chief Financial Officers Act, putting into place a requirement that the DoD produce private sector style financial statements capable of an unqualified opinion in audit, yet 22 years later the department has still failed to achieve that mission. The Comptroller estimates that it will cost \$9.928 billion over the next five years to comply with the act, and some critics question whether the process will really result in more prudent financial management, or simply tangle the department in extra red tape. Some aspects of profit-driven, private sector financial reporting may be neither applicable nor useful to a public agency like the DoD. The department must craft and execute a sensible strategy to comply with the act, while maximizing the benefits an audit can bring to DoD's operations.

Policy Considerations

DoD should not fight the requirement to pass an audit, but rather embrace it as an opportunity to enhance efficiency of its operations and engender confidence in the department's stewardship of finances. Part of this process will involve negotiating with Congress over certain aspects of the audit such as legacy asset valuation, where the cost-benefit of compliance may not pencil out. By and large, the current phased approach laid out in the Financial Improvement Audit Readiness (FIAR) Plan is sound because it prioritizes the most useful and important audit preparation work first. Now DoD must back up the plan with credible allocations of staff and resources to get the job done. Further delay of an audit beyond the current 2017 deadline would cast serious doubt on the competence of DoD's financial management, at a time when large defense budgets are already viewed warily by many.

Key Recommendations

- Proceed full speed with the five-stage (or "wave") approach to audit preparedness, while conferring with Congressional leadership about the importance of legacy asset valuation;
- Instruct every DoD employee in the benefits an audit will bring to the department;
- Push useful financial information gleaned from an audit back down through the ranks, and also to the general public, in order to broadly distribute the benefits of the task;
- Conduct a competency assessment to clarify the staff requirements necessary to complete an audit and build the workforce necessary to finally get the job done.

Financial Management in the DoD

Having examined the broad fiscal challenges faced by policymakers in the U.S. and the role of defense spending in that larger picture, this chapter narrows the focus to examine how funding is managed within DoD. A key component of this task is addressing the widespread concerns over accountability and auditing of defense spending. The past few decades have seen increasing scrutiny of the roughly \$700 billion spent by DoD every year, and not without justification. Managing funds wisely within the department becomes increasingly important when faced with shrinking budgets, and it also reassures Congress and the American public that every dollar given to DoD is money well-spent. In that regard, prudent financial management is every bit as critical to the future of the DoD as personnel and weapons systems.

Why Audit the DoD?

Just as important as understanding the big picture of DoD spending is to understand the millions and millions of individual transactions that make it up, yet this is no small feat. Indeed, the DoD is one of the most complex organizations in the world, obligating \$2-3 billion in spending every day,¹⁸⁷ and employing over three million people in nearly every corner of the globe (more than both Wal-Mart at 2.1 million and McDonald's at 1.7 million).¹⁸⁸ Nevertheless, these facts do not excuse the DoD from scrutiny, for large private sector corporations like Wal-Mart and McDonald's are held to very high standards of accounting and auditability by federal regulators and shareholders alike. While not a private sector organization with an obligation to maximize profit, the DoD does bear a great responsibility to act as a careful steward of public funds. The DoD should not shy away from scrutiny of its expenditures, but rather embrace it as a path toward more efficient allocation of increasingly scarce resources.

The focus of much of the scrutiny is the fact that DoD continually fails to produce financial documentation capable of receiving an unqualified opinion via independent audit. The 1990 Chief Financial Officers (CFO) Act put into place a requirement that federal agencies produce private sector style financial statements which could win unqualified opinions from auditors.¹⁸⁹ The requirements have been deepened by further legislation including the 1994 Government Management Reform Act, and frequent updates to OMB Circular A-123 which describe how agencies should go about complying with these and other accountability laws.¹⁹⁰ So far DoD has failed to comply with the financial auditing legislation, in spite of having had 22 years to do so. Some smaller components of DoD such as the Army Corps of Engineers, Civil Works are now able to pass unqualified audits, yet the bulk of the department is nowhere close.¹⁹¹ Secretary Panetta hopes to produce a Statement of Budgetary Resources by 2014, leading to a full audit by 2017.

The DoD will benefit from an audit in many different ways. Perhaps first and foremost is the credibility a clean audit will lend to the department. Former Defense Secretary Robert Gates recognized this quite clearly when he noted that “DoD cannot expect America’s elected representatives to approve budget increases each year unless we are doing everything possible to make every dollar count.”¹⁹² Perceptions of good financial stewardship do matter in a world of competitive federal funding, and DoD must face up to this reality and recognize it as one of the benefits of securing a clean audit. An unqualified audit of the department will send the right signal to wary taxpayers and Congressional leaders, deflecting criticism and securing the mission-critical funds the department needs to provide for the common defense.

Other benefits of an audit are not to be discounted either. The core essence of an audit is of course to make sure that financial information is completely, thoroughly, and reliably

recorded. This is important for catching fraud, waste, and abuse, but former acting DoD Comptroller Douglas A. Brook also notes that the process of preparing for an audit can “drive improvements in financial management systems, policies and processes to produce more accurate and timely financial information.”¹⁹³ Better financial information will in turn allow for better decisions to be made. It’s difficult to make an informed decision about whether to maintain, expand, or cut a weapons program without having some understanding of its true costs first. Just as military personnel need good intelligence to make their decisions, DoD civilian managers need quality financial information to perform their duties.

Lastly, some observers point out the possibility that auditing DoD’s books could have a net financial benefit for the department, however such a scenario seems unlikely. The idea is that if enough savings can be found from conducting an audit, they may pay for the costs involved in undergoing the audit. For example, the Defense Contract Audit Agency (DCAA) reported in 2011 a return of about \$5.80 for every taxpayer dollar invested, so clearly the benefits of the audit work done by DCAA exceeded the costs.¹⁹⁴ Unfortunately, while the lucrative defense contracts audited by the DCAA are ripe for savings, an overall audit of the DoD as a whole is much less likely to yield a positive return in strictly pecuniary terms. This does not negate the value of the nonpecuniary benefits already mentioned, but it does suggest some sensitivity to cost-benefit calculus is necessary in creating an audit strategy.

The attempt to comply with audit requirements has significantly burdened the DoD. The Comptroller’s latest Financial Improvement and Audit Readiness (FIAR) Plan Status Report from November of 2011 estimates the total compliance cost of achieving an audit to be \$9.928 billion from FY2012 to FY2017.¹⁹⁵ This effort includes improving processes and controls, hiring independent public accounting firms (IPAs) to carry out examinations and audits, deployment of

new financial systems, and more. While there are many benefits of a DoD-wide audit, such great costs should not be taken lightly.

It is doubtful that the full, private-sector style audit required by the 1990 CFO Act would yield benefits in excess of the costs to realize them. The underlying motivation for the effort to audit DoD is a desire to cut waste and improve the legitimacy of DoD's financial management practices—not necessarily specifically to have it produce private-sector style financial reports.

Defense analyst Christopher Hanks argues:

Unlike profit-seeking businesses in a competitive marketplace whose ability to attract capital depends on their production of auditable financial statements, Defense's business activities are publicly funded, nonprofit government operations that rely on annual appropriations from Congress. And Congress' decisions about those activities never will depend on the kind of financial information that the CFO Act calls for.¹⁹⁶

Of particular concern are the legacy asset valuations required to comply with the CFO Act and produce an auditable balance sheet. The term “legacy asset valuation” describes the attempt to determine the current dollar value of legacy equipment such as aircraft or weaponry procured long ago. The May 2011 FIAR report rightfully argues that the cost to carry out valuation of all DoD's legacy assets, estimated at \$455 million, probably dramatically exceeds benefits.¹⁹⁷ Valuing fixed assets is generally important for determining fair market value in case of resale, for mortgage purposes, and in determining profits—none of which are likely to apply to DoD's legacy assets. Auditing the DoD must be done in a manner that is mindful of the usefulness of the information that is produced, with a clear awareness of the costs and benefits involved in the process. Taxpayers have every right to reassurance that their contributions to the DoD coffers are well-spent, but the full mandate of the CFO Act is a bit excessive in some areas such as legacy asset valuation.

A Positive Vision for the DoD Audit

Preparing for a full audit of the DoD is an outstanding opportunity to boost public confidence in the department, improve financial management practices, and find new efficiencies, but the process must be conducted carefully to ensure these benefits materialize. The first step is to firmly establish an audit paradigm that meets both DoD internal needs and Congressional demands. The second step is devoting the necessary resources and making the appropriate policy changes needed to faithfully execute the plan. This task force largely agrees with the audit strategy established by the DoD in the May and November 2011 FIAR plans, but questions whether adequate actions are being taken to optimally enact the strategy.

The overall strategy to the DoD audit must be focused on reassuring external stakeholders of prudent financial management within the department, and reforming internal practices to ensure the same. This involves tracking present and future expenditures carefully to make sure they align with legitimate department expenses, budgetary resources available, and overall strategic needs. Producing a full array of auditable private sector style reports is only important as it achieves those ends—not necessarily in its own right. Some of the practices that it entails, such as legacy asset valuation, are likely unnecessarily burdensome on the department and should be dispensed with.

Secretary Panetta and DoD Comptroller Robert F. Hale’s current approach involving five “waves” of activity toward audit-readiness is well-aligned with this task force’s recommendations. Wave 1 is a simple audit of the appropriations received. Wave 2 is the critical Statement of Budgetary Resources (SBR) which “presents the DoD’s total budgetary resources, their status at the end of the year, and the relationship between the budgetary resources and the outlays made against them.”¹⁹⁸ This will ensure that funds from Congress are being spent in

legitimate ways toward strategic programs. Wave 3 verifies existence and completeness of the records pertaining to DoD's mission critical assets, leading to Wave 4 which is a full audit except for the legacy assets. Wave 5 would finally carry out the legacy asset valuation process. This task force recommends DoD focus on Wave 1 through 4 as urgent departmental priorities, while conferring with Congressional leadership and the OMB to determine whether Wave 5 is deemed a worthy use of departmental resources. This waved approach already in place creates an auditing paradigm which will allow DoD to concentrate resources on the most useful tasks first. Now it remains for DoD to commit fully to its plan.

The second part of this process—taking credible steps to execute the waved audit strategy—is a process which will necessitate some swift and extensive changes to the way DoD does business. A recent report from the House Armed Services Committee expressed concern over DoD's efforts on these tasks noting that “a key barometer for assessing whether the Department will achieve its audit readiness goals is its demonstrable ability to meet interim milestones. As reflected in its May 2011 and November 2011 FIAR Plan Status Reports, some of the interim milestones were missed.”¹⁹⁹ In order to execute a successful audit mission, DoD leadership must set a clear “tone at the top” which stresses the importance of the process for the entire department. Secretary Panetta's own efforts toward that end have been commendable, and must be reflected throughout the DoD. There are several strategies managers in the department should adopt to achieve this goal.

First, DoD staff at all levels should be instructed in the benefits of an audit to the department, and how their work helps DoD achieve that goal. Mark Keeley representing PricewaterhouseCoopers argued to the House Armed Services Committee that “functional personnel need to be trained to achieve their functional mission, such as maintaining property,

but they should also be trained to understand financial objectives, such as the completeness of property records.”²⁰⁰ His point is that DoD staff from outside of the financial management divisions may not accurately understand why certain types of information are collected, nor why auditing is important, and thus not take those tasks seriously. Yet this threatens the integrity of auditing efforts. To put it succinctly, garbage in, garbage out. No amount of analysis and actuarial sorcery can make up for poor data-keeping at the source. A successful DoD auditing campaign must involve every employee, so that they understand the important role that quality bookkeeping has in managing the forces effectively and efficiently.

Second, greater effort should be made to distribute the benefits of accurate financial information. In exchange for burdening other parts of the department with sometimes onerous record keeping tasks and intrusive audits, the financial staff at DoD should push this information back down through the ranks in the form of useful data and analysis which can improve decision-making by managers. In a similar manner, DoD should strive toward greater transparency toward the public with the financial information it collects. A highly interactive, readily accessible public website devoted to sharing information about defense spending could work wonders toward addressing the general public’s concerns about defense appropriations. This could be modeled after the successful Recovery.gov site which tracks economic stimulus spending.

Another important step toward achieving an unqualified audit is hiring the necessary workforce to get the job done. Currently it’s unclear whether DoD has adequate financial management staff to meet the 2017 audit deadline. The House Armed Services Committee notes that “the DOD has not yet performed a complete department-wide systematic competency assessment (e.g., an analysis of the workforce abilities, knowledge bases, and skill sets that are currently needed or that will be needed in the future).”²⁰¹ Without such a plan, DoD will have to

hire financial staff on an ad-hoc basis and could jeopardize the 2017 audit deadline if the department finds itself short-staffed. A competency assessment would give DoD a clear picture of the workforce necessary to get its books in order, and could help make the case for additional funding from Congress to bring in more financial staff.

Hiring the additional employees needed to prepare for an audit will indeed be an extra cost to DoD in a time of reduced budgets elsewhere in the department, but the expertise is imperative for successful completion of this mission. Some evidence suggests that hiring of financial professionals has not kept pace with growth in the DoD budget. For example, the Defense Contract Auditing Agency (DCAA) has seen its backlog of work quadruple over the past four years, while staffing levels have only grown by 20%.²⁰² If anything, DoD should expect growth in the financial management workforce to exceed that of the overall DoD budget, since audit worthiness is a new mission the DoD has not achieved before. The costs of expanding this important workforce will be more than justified by the possible savings these analysts will yield, and the credibility they will bring to DoD spending as a whole. Given recent legislative interest in jobs and twenty-first century career training, it might be reasonable to urge Congress to support a program to train former military personnel for positions in defense accounting and auditing. This would ease the impacts of reduced force levels, give veterans marketable skills, and improve the candidate pool for the financial management workforce at DoD.

Conclusion

The steps leading up to a full, unqualified audit are a new and unfamiliar mission for the Department of Defense, but largely a worthy one. While prudence and thoughtful cost-benefit analysis should guide some decisions, such as whether to carry out full legacy asset valuation, by

and large this is a new mission which DoD should pursue with the same gusto that has provided for a sound American defense all these years. The program will require changes within DoD if it is to be a success, but the benefits of more thrifty stewardship of taxpayer dollars and increased Congressional faith in DoD competence will certainly be worthwhile.

Chapter 12. Acquisition and Procurement | *By Marc Quint*

Chapter Summary

Background

Recent Major Defense Acquisition Programs (MDAPs) have highlighted critical issues within the defense procurement sector. Fiscal unaccountability is compounded by the ever-elusive goal of obtaining the perfect weapon for US defense. While this has led to severe cost overruns and major programs stagnating years behind schedule, balancing the budget alone will be insufficient. A mission should be undertaken to reprioritize the ultimate goal of defense acquisition: providing improved weapons to US forces as quickly and as cheaply as possible.

Policy Considerations

Much of the historical record regarding defense acquisition shows a chronic underestimation of cost for new weapons systems. One of the main causes of this is striving to build the perfect weapon. Instead, more emphasis should be placed on decreasing the time it takes for new weapons to reach the field. This will get relatively state-of-the-art weapons to US forces quickly and cheaply; the less time a project is ongoing, the fewer modifications are made and the less need for costly engineers. If this is not done, programs will continue to exceed cost and schedule constraints.

After acquisition requirements are defined and the program is in motion, requirements should not change unless extraordinary factors present themselves. Extraordinary does not mean appealing new technology, but rather unforeseen circumstances that would otherwise put the life of the program at risk. Too often, MDAPs are adjusted based on new technology coming onto the scene, and doing so inevitably leads to changes to cost and schedule.

Although the assumption with employing expert program managers is that less oversight will be necessary, it is still crucial that program managers send their findings through a process of peer review. This is not currently an across the board requirement, but it can significantly improve confidence throughout the system. In this respect, more attention needs to be paid to ensure that MDAPs are technologically feasible, will face little risk, and will finish on-time and on-budget.

An effective way to progress in the R&D arena would be to fund science and technology irrespective of specific defense acquisition programs. Private sector R&D funding, combined with significant appropriations from Congress, are an efficient way to go about modernization and security, and should continue unabated as defense cuts reduce the physical size of US forces.

Recommendations

- Reprioritize the purpose of defense acquisition and procurement so that timeliness and cost effectiveness are viewed as critical objectives;
- Focus on retaining experienced program managers, and reduce Congressional oversight by employing widespread peer review;

- Incentivize contractors to deliver on-time and on-budget by increasing contractor-borne risk;
- Purchase weapons systems in smaller increments to field new technology quickly and offset the risk of changing requirements due to technology upgrades;
- Divide major weapons system contracts among several companies, rather than using a winner-take-all strategy;
- Use commercial, off-the-shelf technology whenever feasible.

Reprioritizing Defense Acquisition: Bringing Timeliness and Cost-Effectiveness Back to the Fore

Recent defense acquisition projects have highlighted critical issues within the defense procurement sector. For too long, the aforementioned fiscal unaccountability has been compounded by the ever-elusive goal of obtaining the perfect weapon for US defense. While this has led to severe cost overruns and major programs still ongoing, years behind schedule, balancing the budget alone will be insufficient. Without a significant change in the defense acquisition mindset, cutting the defense budget and increasing fiscal accountability will only be a band-aid for the wider issue. This part of the report will show where the US acquisition, procurement, and R&D process currently stands, and where the system begs improvement.

Recommendations:

- Reprioritize the purpose of defense acquisition and procurement so that timeliness and cost-effectiveness are viewed as critical objectives;
- Focus on retaining experienced program managers, and reduce Congressional oversight by employing widespread peer review;
- Incentivize contractors to deliver on-time and on-budget by increasing contractor-borne risk;
- Purchase weapons systems in smaller increments to field new technology quickly and offset the risk of changing requirements due to technology upgrades;
- Divide major weapons system contracts among several companies, rather than using a winner-take-all strategy;
- Use commercial, off-the-shelf technology whenever feasible.

Habitual Cost Overruns

Much of the historical record regarding defense acquisition shows a chronic underestimation of cost for new weapons systems. In *Sources of Weapon System Cost Growth*, RAND analyzed 35 mature Major Defense Acquisition Programs (MDAPs) to determine what contributed to cost overruns in both the development and procurement phases. Table 1 shows the cost changes for several types of programs, including aircraft, missiles, helicopters, and electronics. Among the reasons for the changes in cost are 1) errors in cost estimation; 2) technical issues; 3) changes in requirements; 4) schedule changes, and; 5) changes in quantity. For every program listed, errors in cost estimation contributed to growth in both phases. Likewise, almost every program experienced cost increases due to technical issues, changes in requirements, or a combination of both. These examples are indicative of the widespread tendency to inaccurately estimate cost, have difficulty overcoming technical obstacles, and adjust requirements after program initiation. In turn, these lead to obligatory schedule changes and a consequent reduction in quantity procured to offset the true cost when it becomes clear that the original estimations were inaccurate.

Table

1²⁰³

Reasons for Cost Changes in Several Major Defense Acquisition Programs (MDAPs)							
(\$ Millions of Base Year 2005 Dollars)							
Program	AMRAAM	B1-B	C-17	F-22	Apache	MCS	Patriot-3
Type	Missile	Aircraft	Aircraft	Aircraft	Helicopter	Electronics	Missile
R&D Cost Change	(+1020.4)	(+1542.4)	(+4292.3)	(+10572.4)	(+420.7)	(+252)	(+1680.8)
Percentage Increase from Baseline	54.5	31.5	77.2	47.9	98.5	171.7	137.4
Reason for Change	1,2,3,4,5	1,3	1,3,4	1,3,4	1,3	1,4	1,3,4
Procurement Cost Change	(+888.3)	-721	(+17729.6)	-26525.3	(+6790.9)	-110.8	(+3948.1)
Percentage Increase from Baseline	7.9	-1.9	50.7	-43.3	526.1	-32.3	152.9
Reason for Change	1,2,4,5	1,3	1,3,4,5	1,3,4,5	1,2,4,5	1,5	1,3,4,5
KEY:							
1) Errors in Cost Estimation							
2) Technical Issues							
3) Changes in Requirements							
4) Schedule Changes							
5) Changes in Quantity							

Figure vi

It is important to note that the lowest cost increase in the R&D phase was by a factor of 31.5% over the baseline estimation. For many, it was closer to 100%, meaning the development phase cost twice as much as the original assessment. In the procurement phase, some programs did not exceed the baseline evaluation, but this fact is misleading. In the case of the F-22, increases in procurement cost necessitated a decrease in quantity procured. While the original plan was to build 750 aircraft at roughly \$150 million each, it is now clear that the current 184 aircraft produced cost approximately \$350 million each.²⁰⁴ This explains why the procurement cost of the F-22 is shown as being lower than expected—the massive increase in price necessitated a substantial decrease in the quantity produced to stay under budget. Had the program continued at the level originally intended, it would have exceeded the procurement cost estimation.

The F-35 and DDG-1000 (LCS) are not far behind.²⁰⁵ For the F-35, 2,866 units were supposed to be purchased at a Program Acquisition Unit Cost (PAUC) of \$61 million. As of December 2009, that had changed to a PAUC of roughly \$97 million and a quantity of 2,457. In

the case of the LCS, 10 units were supposed to be purchased at a PAUC of \$3.1 billion. After significant cost increases, only three are meant to be built in the short term, at a cost of \$5.8 billion each. This would not be a primary concern if it occurred less often, but it is a typical flaw for many MDAPs. Although it is impossible to guarantee 100% accuracy when estimating the cost of MDAPs, it is not unreasonable to expect better accuracy than has historically been the case.

Current Defense Acquisition Process

The defense acquisition process as it currently stands is untenable. At the root of the issue is a widespread problem of living beyond means, in that “when glittering new technology comes on the scene, there is the temptation to build it for its own sake, not because it is required to meet a national need.”²⁰⁶ Commanders want to have the newest and best technology at their disposal. If given a blank check, there is little reason to refrain from funding the most expensive projects. There is no incentive to be frugal; contractors and program managers can always return to Congress and ask for more money. As mentioned in earlier sections, Congress seldom follows up with the Pentagon to determine where the money has gone or whether it was a good investment. At some point along the way, the original objective of weapons acquisition—“to get equipment to American forces in the field as quickly and as cheaply as possible—equipment that works and whose technology is superior to a potential enemy's”—is lost.²⁰⁷ By returning to the essence of defense acquisition, we can more effectively respond to national security threats.

With a modest glance at Figure 1, it is clear that the acquisition process is extremely complex. Although this complexity can certainly be a hindrance, now is not the best time to propose physical changes to the system. Several adjustments have been made to the acquisition

process in the last five to ten years, and it would be of more help to assess how the changes have affected MDAPs in the future before further revisions are considered.

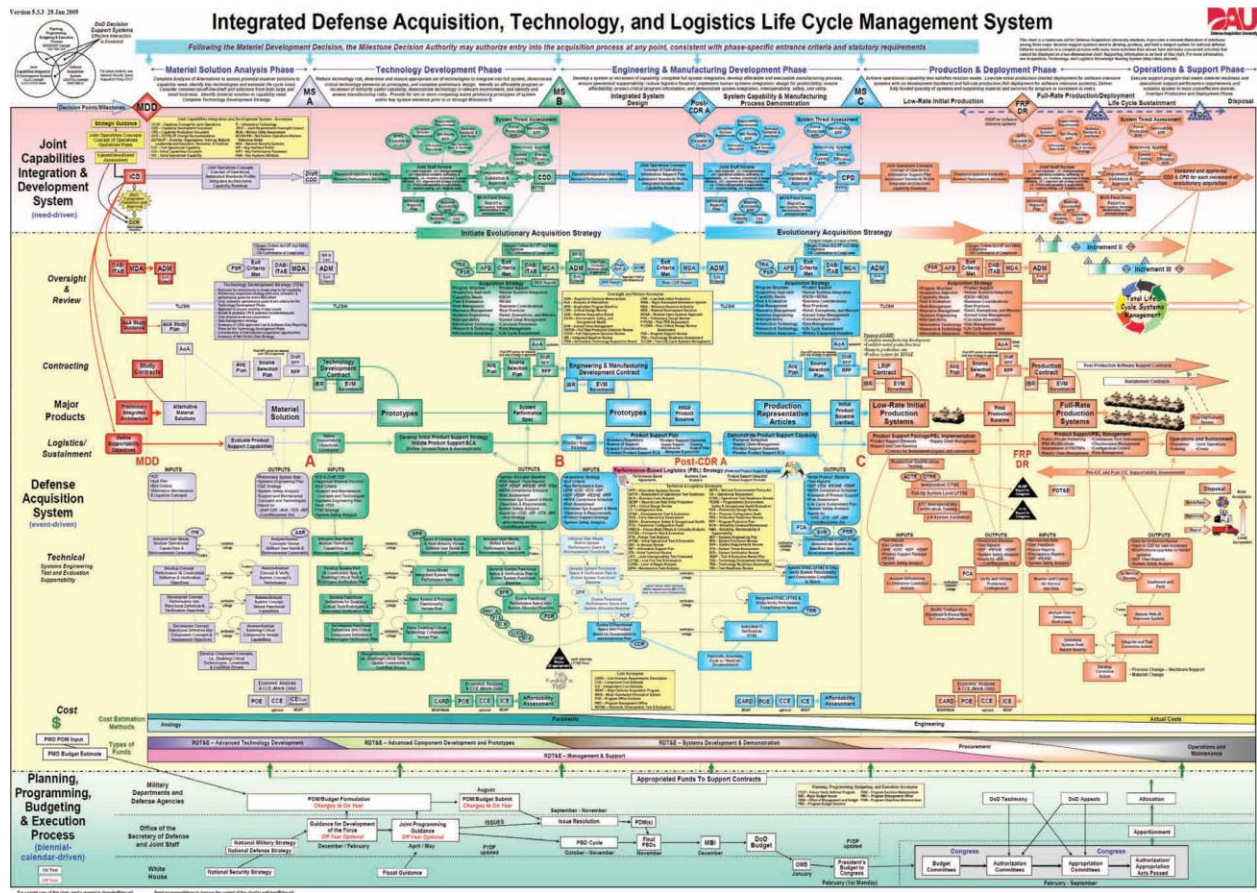


Figure vii²⁰⁸

Overall, there has been a complete overhaul to the system in that there is more communication going on between separate and interrelated components, as evidenced by Figure 2. This is a major improvement in interoperability between the military branches, and exemplifies expanded communication within defense acquisition as a whole.

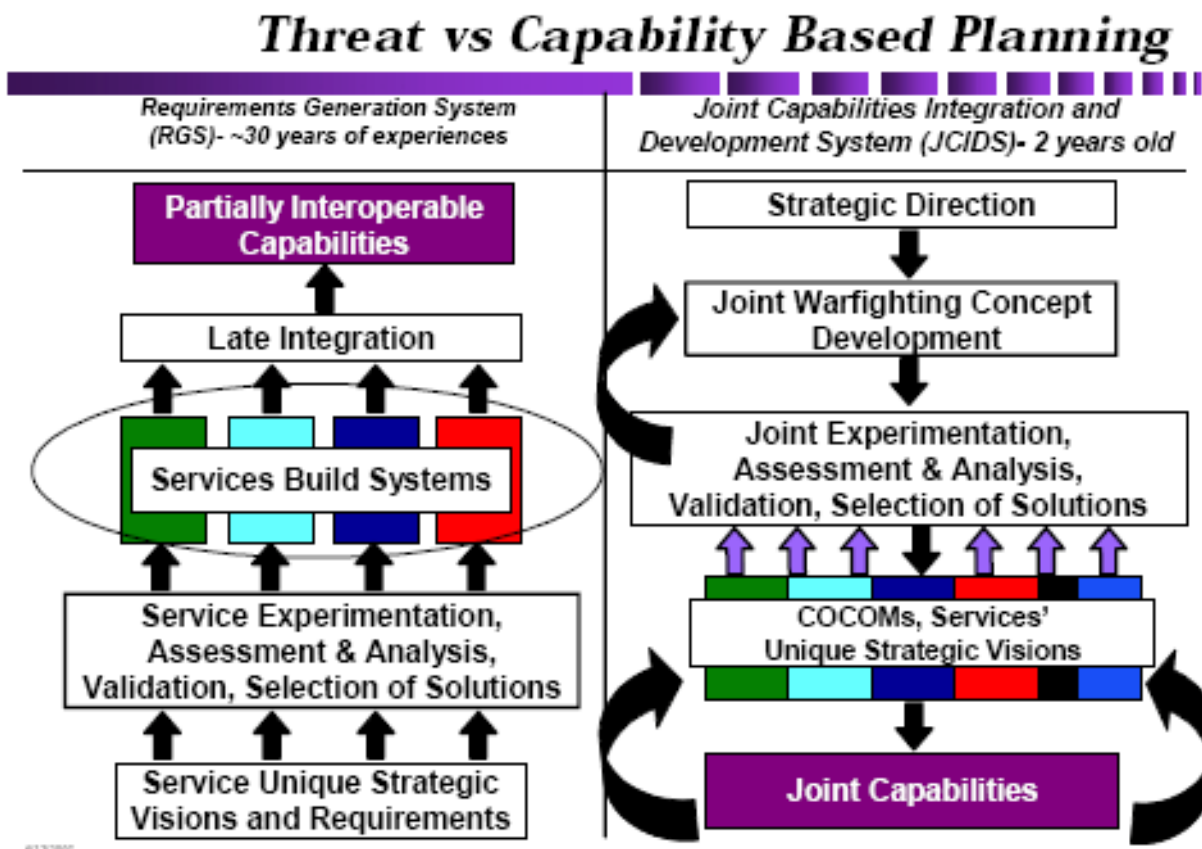


Figure viii²⁰⁹

Rather than developing new systems bottom-up based on separate services' requirements, defense acquisition is beginning to work top-down, taking into consideration the capabilities of other services and how their combined abilities will affect the mission. Interoperability will be addressed in more detail later in relation to procurement issues with the F-35 and bringing allies into the contracting realm.

As is, Boeing, Lockheed Martin, Raytheon, General Dynamics, and a handful of other contractors dominate the industry, with few other options. If an aircraft, missile, or tank is to be built, the contract will likely go to these companies, respectively. With certainty that someone is going to receive a contract regardless of proof-of-concept, the companies are less-inclined to put forth their best effort (if they appear to be the likely candidate), and less-likely to provide a

reasonable, buildable product (if there is competition). Contractors are conditioned to aim beyond the scope of reality and provide the Pentagon with unattainable concepts. Projects like these, such as the F-35, are doomed from the beginning. They may come to fruition at some point, but it will likely be in the distant future, well beyond the estimated delivery date and well above the proposed cost. The system needs to be adjusted so that the true purpose of acquisition and procurement returns to the fore: *quickly* fielding workable tools and technology to US armed forces.

Procurement Process Reform: Consistently Exceeding Cost and Schedule

Rather than adding regulations to improve a given problem, as Congress is apt to do, acquisition and procurement issues can be solved by a process of reprioritization. This includes articulating the importance of timeliness and cost, as well as the quality of program managers. According to Directive 5000.01 of Defense Acquisition Regulations, “the primary objective of Defense acquisition is to acquire quality products that satisfy user needs with measurable improvements to mission capability and operational support, in a timely manner, and at a fair and reasonable price.”²¹⁰ This definition exemplifies the misplaced priorities of defense acquisition. The first purpose listed is to acquire quality products that satisfy the needs of defense, while timeliness and cost are of minimal importance. This leads to building the best weapons system without respect to cost or schedule constraints. The Directive should instead read: “the primary objective of Defense acquisition is to field products in a timely manner and at a fair and reasonable price, in an effort to improve mission capability, while ensuring quality and satisfying user needs.” The definition as is puts too much emphasis on building the perfect item, without due attention given to the timeframe, expected cost, and mission requirements.

The overall quality and user needs are relatively insignificant; quality and need are important only in relation to the capability required by the mission. If responding to a certain threat does not require a fifth-generation fighter, then a fifth-generation fighter should not be on the shopping list in relation to that threat. It is more likely that a threat can be nullified by quick action and current capabilities, as opposed to a drawn-out response time due to lengthy procurement obstacles.

Expert Program Managers as a Necessity

While there is a propensity to believe that further regulation and oversight will inherently improve the system, there is no substitute for experience. No amount of micromanagement by Congress will trump the expertise of those knowledgeable in the field. Defense procurement requires working weapons expertise, quick decision-making, and prompt action. Congress is not known for possessing any of these traits. This requires appointing program managers with the ability to assess requirements, negotiate contracts, and put the program in motion.

Assessing Requirements

One of the first stages in the defense acquisition process is defining a requirement, or: “a formal description of an operational capability—the ability of equipment to do a job in the field. It is used to determine what specific performance, or what hardware, is needed to solve a particular military problem.”²¹¹ Without this stage, the express purpose of a new system would be unknown. This is an important driver for experienced program managers. Knowledge of past programs is essential, in addition to experience in the process and an understanding of how requirements will translate to tangible systems. Micromanaging by Congressional authority

inevitably leads to problems because “it removes decision making from the manager on the scene and puts it into the hands of those who cannot possibly know the nitty-gritty ramifications of their choices.”²¹² Those on the inside know their programs the best; all that is needed is a reminder that the real priority should be rapid defense acquisition.

After the acquisition requirements are defined and the program is in motion, those requirements should not change unless extraordinary factors present themselves. In this case, extraordinary does not mean appealing new technology, but unforeseen circumstances that would otherwise put the life of the program at risk. Too often, MDAPs are adjusted based on new technology coming onto the scene, and doing so inevitably leads to changes to cost and schedule affecting the overall purpose of defense acquisition. Succinctly put, “time translates directly into money [...] the math is easy. Calculate the aggregate cost of leaving a couple of hundred well-paid engineers on a program a month—or seven to ten years—longer than expected. Multiply that by four hundred or five hundred programs. This contributes significantly to the inexorable cost-climbing.”²¹³ By taking a more hard-line stance on changing requirements, DoD can be more confident that a given weapons system will reach the field as soon as possible.

Negotiating Contracts

Research has shown that program managers sometimes fall into a routine where they use the same type of contract without adequate examination of the nature of the weapons system.²¹⁴ Rather than assessing which contract type would be best for a given system, program managers tend to use types they are familiar with, which detracts from the efficiency of the contract and could easily lead to cost overruns. For example, DoD states that cost-reimbursement contracts are favorable on major weapons systems because the technical risks and possible cost overruns

are high.²¹⁵ Fixed-cost contracts are unlikely to work in these cases because shareholders of Lockheed-Martin and Boeing, for example, will not allow the companies to take on extreme risk without government incentive.²¹⁶ That being said, the defense sector currently reaps too many rewards at the expense of the government. Facing limited financial risk, companies are able to foot the bill to Congress when they exceed budget constraints. As the report states: “Increasing contractor’s share of risk in development contracting will sharpen competition and result in more economical and efficient methods of development and production.”²¹⁷ By forcing contractors to have a stake in the development process, they will be frugal and more-likely to propose a workable design. Moreover, increasing the risk posed to contractors will give them incentive to finish on-time and on-budget.

Putting the Program in Motion

Although the assumption with employing expert program managers is that less oversight will be necessary, it is still crucial that program managers send their findings through a process of peer review. This is not currently an across the board requirement, but it can significantly improve confidence throughout the system. Just as scientists need colleagues to assess conclusions before publishing, defense acquisition managers need other capable people to evaluate cost and schedule estimates, especially in relation to the technological risk involved and the feasibility of the project. Since many MDAPs deal with novel technologies, program managers should use peer review before and during Milestone B.

In concert with the understanding that the US needs to rely more on timeliness and cost than the “perfect” program, it is necessary to purchase fewer products in smaller increments. This serves several purposes. Primarily, it is a way to field new technology and weapons systems

faster, achieving the main goal of defense procurement. Derivatively, fielding the first few items of a new system will allow for field-testing and R&D of new technology under real-world conditions, which is crucial in most circumstances. Procuring faster and in smaller increments also translates to the business level by dividing the contract into subsections. Rather than purchasing an entire airplane through one manufacturer, DoD can cut costs by buying pieces of the end-product through different contractors. If Boeing has a field-proven, less-expensive airframe, and Lockheed has a more cost-effective propulsion system, the contract should be split between them.

Dividing work among several contractors allows for several other inexpensive and superior procurement options. Although research has shown that competition does not always decrease cost, it does provide program managers with the opportunity to see multiple options.²¹⁸ In the same way that subdividing contracts would be beneficial for big American businesses, it would also allow for participation from both smaller contractors and European firms. In addition, subdividing promotes the use of commercial off-the-shelf technology. While huge projects are put on hold awaiting technology maturation, other technology is being updated which could have been used instead. Integrating equipment that would otherwise need to be tooled from scratch has the potential to save time and money.

Purchasing in smaller increments also allows for the integration of newer technology in future production runs. Moore's Law states that technology capability tends to double every two years (specifically in relation to the amount of transistors that can be placed inexpensively within one square-inch on an integrated circuit).²¹⁹ Although the time it takes for computing capabilities to double is now approaching only one-and-a-half years, it means that the cost of the same amount of computing power is halved on a short time scale. For defense procurement, this poses

trouble. If the newest technology is used for a new system, but the system is not built within the next two years, it means that the technology inside is already half as powerful as it could be at current cost. This may necessitate upgrading the technology (avionics in the F-35, for example), which means a certain portion of the system was paid for twice. If the technology is not upgraded, we may be fielding year-2000 technology in 2015. All of this can be avoided by completing small production-runs early in the life of the program. Incorporating the best technology *now* is conceivable. Striving to build a weapons system today with the technology of next year is certainly an appealing goal, but it has the costs to match.

Measure Twice, Cut Once

MDAPs are constructed in “milestones” as a way to progress while allowing the program to be evaluated as it goes. More attention needs to be paid to ensure that MDAPs are technologically feasible, will face little risk, and will finish on-time and on-budget. As is, “all technologies intended for the system are not required to be mature to proceed to Milestone B.”²²⁰ This is defined as “evolutionary acquisition,” and may be appealing in theory, but it allows the program to get ahead of itself. Research has shown that it is more cost-effective to pay the upfront costs of R&D than to continue the program without verification that a given technology will work.²²¹ When something integral to a project proves difficult to produce and the project is already going at full steam, the choices available to program managers are limited. Choosing to halt the program is no longer a realistic option because so much money has been spent to continue with the “easy” parts. If upfront R&D funding had been used to either verify or invalidate a proof-of-concept at an earlier milestone, program managers would have the ability to reassess cost and schedule estimates based on the new information. If they are too far along in

the process, their only choice is to continue and hope the cost overruns can be mitigated. Instead, costs can easily be reduced by factoring in expensive R&D at the outset.

F-35 Joint Strike Fighter

The F-35 Joint Strike Fighter (JSF) exemplifies many advantages and complications of current US defense acquisition and procurement. While the program has gone significantly over budget and well passed its delivery schedule, it is also indicative of many improvements that the US can use in coming generations. The majority of this chapter has already addressed general acquisition problems, but a short recap of those problems which relate to the JSF is helpful. In roughly chronological order: the military should be more realistic of what its mission requirements are; defense contractors should not be conditioned to aim for delivering a wholly untested group of technologies; further stages of acquisition should not progress while multiple integral technologies are unproven; and expert program managers should have the foresight to recognize these issues ahead of time.

A study compiled by RAND, entitled *Root Cause Analyses of Nunn-McCurdy Breaches*, addresses the cost overruns of several MDAPs, of which the JSF is central. The first flight of the JSF occurred in September 2001, with Milestone B approval a month later.²²² Oddly enough, the project was given the green light even though the “memo summarizing its independent cost estimate [...] acknowledged that the program was highly risky, from both a technological and a schedule perspective.”²²³ To address some of the technological and schedule risks, “concurrency” was used to “combine or overlap phases” in an effort to tackle several acquisition stages simultaneously.²²⁴ In essence, many facets of the program were to be going on simultaneously to save time, hedging against the high probability that time would be lost during

difficult phases. The RAND study concluded that the concurrency for the JSF program was about 25%, while the F-22 was 18%, meaning the F-35 would have nearly one-and-one-half times the projects going on simultaneously that the F-22 had.²²⁵ This is critical because the F-22 program was already well underway and had faced many similar obstacles. The JSF incorporated the STOVL and CV variants (Marine and Navy, respectively) in addition to the stealth and supersonic capabilities of the F-22, so it should be assumed that the process would be more difficult. Even after considering all of this, it was still determined that more JSFs could be built in less time than F-22s. This determination should not have been made.

Almost ten years after Milestone B and just under two years before the program was scheduled to have 600 planes procured, fewer than twelve had been built.²²⁶ According to the RAND study, 77% of the estimated development cost had been funded, while only 3% of the expected procurement funds had been dispersed.²²⁷ DoD and Lockheed Martin were spending most of their time dealing with engineering problems, especially in relation to test aircraft being overweight and issues surrounding the maturation of the B-model's vertical take-off technology.²²⁸ Cost growth since then has been attributed almost entirely to “estimating” and “quantity,” meaning the original cost and schedule estimates were overzealous and the quantity had to be decreased as a result.²²⁹ This is true of the Littoral Combat Ship and Future Combat Systems as well, and is emblematic of the larger problem within defense acquisition: striving to build the perfect fighting machine without adequately addressing cost and timeliness factors.

In terms of cost, the JSF was chosen as an “affordable” replacement to the US' aging fighter fleet.²³⁰ As such, new acquisition strategies were undertaken in an effort to contribute to that affordability. Chief among them were the use of common airframes, command and control systems, and propulsion, yet this creates an odd definition of “affordability.” In reality, the JSF is

one of the most expensive fighter aircraft to date; it is only affordable in the sense that building three common airframes (though branch-specific in critical ways) is expected to be cheaper than three entirely different designs. The JSF has not proven that. On the contrary, striving to build a common airframe that supports both stealth and supersonic capabilities, in addition to STOVL and CV options (an uncertain goal never before undertaken) has proven technologically impractical to this day. Nearly twenty years after the start of the program, few JSFs have been delivered, and the STOVL and CV variants are still experiencing critical technical issues. This should come as no surprise. DoD was given advance warning, based off the knowledge from the ongoing F-22 program and the loftiness of the JSF goal, that the program would face considerable difficulties. But while the JSF unfortunately characterizes these issues, it is also representative of defense acquisition advancements that had never before been achieved.

The phrase “Joint Strike Fighter” has three very important implications. Primarily, the typical assumption when militaries use the term “joint-strike” is that the aircraft is capable of multiple roles; fighter and bomber, for example. However, a secondary meaning is that multiple variants of the JSF allow it to be “joint” in the interoperability it allows between military branches. Although each version is highly-specific to the service procuring it, the similar platform allows a majority of the tooling to be used for all designs. This increases cost in relation to procuring different designs, but it also means that furnishing and replacing parts is cheaper than using three wholly different airframes. The final positive lesson is not only the interoperability between US branches, but that of allies. While the US has worked with allies on defense projects in the past, the JSF is a major step toward allied integration in defense procurement. No fewer than ten countries have worked on the project and provided funding.²³¹ Several others that were not involved from the outset have begun the process to purchase JSFs in

the coming years.²³² Overall, the JSF will be a case-study for future acquisition and procurement, both in terms of what to aim for and what to avoid.

Allied Integration

The aforementioned allied integration is crucial to improving defense acquisition. The European Union is facing similar procurement problems, but also faces issues with the alliance system due to US domination of the industry. At the end of the Cold War, enhanced cooperation continued with the hopes of interoperability²³³, whereby NATO forces would aim to use the same weapons—from small arms ammunition to the now infamous F-35 Joint Strike Fighter. However, “market access for foreign companies remains difficult: whereas the openness of European defense markets differs greatly from country to country, the US market is well protected against both foreign investments and sales. Moreover, complex rules and procedures for defense exports represent major hurdles for industrial cooperation.”²³⁴ Some EU countries have responded by establishing corporate entities in the US to overcome market access difficulties, but this has not been entirely effective. Even though the EU is composed of several top industrial economies, the US maintains a strong advantage over EU defense procurement via the “Buy American” attitude and a relative monopoly on R&D.²³⁵ With the US' ability to “conduct the whole spectrum of military operations without any allied contribution,” there appears to be little incentive for the US to “Buy European.”²³⁶ However, this inherently means the US covers the majority of the costs involved with such a strategy. Striving to include allies in the procurement process has the potential to save the US time and money.

Research, Development, Testing, and Evaluation

Research, Development, Testing, and Evaluation (RDT&E) processes are crucial to modernization and the DoD budget. Regardless of threats and current capabilities, RDT&E will need to continue in order to improve America's military and hedge against future challenges. For the past decade, roughly \$200 billion of the defense budget has been spent on R&D every year.²³⁷ With the amount of cuts proposed to the force structure by this task force, it is recommended that R&D funding remain unchanged. A more effective way to progress in the R&D arena would be to fund science and technology irrespective of specific defense acquisition programs. R&D should be done for its own sake. This would allow technology development to continue without procurement issues confusing the process. Many sources agree: “the more time, care, and money invested at the front end of a project, the quicker and cheaper a better and more reliable end product will get into the hands of the field forces.”²³⁸ Additionally, R&D funding will need to be increasingly devoted to cyber security as the probability of major attacks to the US is compounded by increasing technological reliance and proportionate public technological abilities and access. While cyber defenses grow stronger every day, so too do the resources and capabilities of determined groups. Private sector R&D funding, combined with significant appropriations from Congress, are an efficient way to go about modernization and security, and should continue unabated as defense cuts reduce the physical size of US forces.

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SECTION III: FORCE STRUCTURE

Introduction | *By Jordan Laramie*

Approach

The fiscal conditions facing the United States demand that every available option be explored to reduce the impact of federal programs on the budget deficit. These cuts may create hardships for military personnel, manufacturers of weapon systems, veterans, and others. While these cuts will be politically difficult to achieve, they remain consistent with the tentative strategy outlined by President Obama and Congress for future spending at the Department of Defense.

Despite the political challenges faced by scaling down the force structure of the US military, our task force has concluded that reductions can eliminate inefficient programs within the government's current spending plan and realign resources to better meet modern day threats. The result is a vision for our national defense that may be trimmed, but not ineffective. This third and final section of our report lays out that plan.

Recommendation Format

Integral to our approach is a clear meeting of strategic needs with program costs. Bluntly structuring national defense without regard to expense would lead to an excessive and bloated program, yet budgeting without strategy would be reckless and lost. Our attempt has been to scrutinize all components of the DoD budget, and match all recommended expenditures against realistic security threats.

To maximize the applicability of our research, this task force has worked under the guidelines of multiple tiers, with each tier representing the most effective deterrent force for

a particular budgetary scenario. Our lowest tier aligns itself closely with the President's Budget and his revision of national defense strategy; the highest tier outlines cuts that would be made under complete sequestration. Tier Two represents our preferred, middle-of-the-road approach.

Highlights

The following recommendations are a few highlights from the much more comprehensive plans presented in the chapters that follow:

- Eliminate four Ohio-class submarines from the fleet and explore converting one of these submarines from ballistic missile to guided missile capabilities;
- Upgrade 60 KC-135s to KC-135Rs and delay KC-X, reducing on-depot and flight line maintenance costs of the tanker fleet while scaling back new procurement;
- Decommission the USS Dwight D. Eisenhower and its accompanying air wing and supplement it with increased rapid deployment schedules;
- Restructure active duty forces in the US Army from 562,000 to 470,000 while bolstering the more economical Reserve Component by 40,000;
- Slow growth in military salaries while avoiding drastic, morale-crushing cuts;
- Standardize base support costs per soldier to promote efficiency in base support spending.

Chapter 13. The Strategic Nuclear Forces | *By Tyler Emsky*

Chapter Summary

Key Policy Conclusions

The US stock of strategic arms is outsized given its primary role as a deterrent force. Cuts can be made to the overall number of nuclear warheads and strategic launchers without damaging US national security.

Key Recommendations

- America currently maintains a fleet of 14 Ohio-class submarines, which will be replaced over the next three decades by a new ballistic missile submarine, projected to cost between \$5 billion and \$7 billion dollars apiece. The US can cut 2 to 6 of these Ohio boats in the near term with negligible impact on national security. Additionally, the US should procure only 8 to 10 Ohio replacement boats.
- The US strategic bomber fleet is in need of a selective reshaping. In particular, the B-52 should be removed from service as a front-line nuclear bomber. Work on the Next-Generation Bomber should be done in concert with work on the new generation of stealth support drones.
- The US ICBM force is the most cost-effective leg of the American strategic triad. Most or all of the Minuteman III force should be retained well into the twenty-first century.
- US antiballistic missile programs are beset by performance and political problems. Continued support of these programs should be subjected to rigorous examination, with the worst-performing programs discontinued.
- The American stock of tactical and inactive strategic arms should be reduced substantially. This will yield political and financial benefits for the US.

American Strategic Forces in the Age of Austerity

Given the current and projected threats faced by the United States and the reality of the desperate need for fiscal restraint in the federal budget, tough choices must be made in regards to the role the American military will play in regards to global affairs. This fact is especially pertinent in the matter of the American strategic force structure. Strategic arms (defined here as the nuclear weapons, nuclear-capable aircraft, submarines, and missiles; as well as anti-ballistic missile technology in the American armed forces) have long played a crucial role in US foreign policy decisions. An appropriate proposal for the force structure of these arms must be based on a coherent policy regarding their intended uses.

The foremost role of the American strategic forces is, and should be, the prevention of a devastating attack on America or its vital national interests. Strategic weaponry guards against these types of attacks through its contributions to deterrence. Effective deterrence is provided by a system that can radically alter the cost-benefit calculation of a hostile entity considering attack by promising a crippling retaliatory blow. Thus, an enemy actor is faced with negative incentive to attempt a damaging “first strike.”

This “guaranteed second strike” capability forms the heart of deterrence strategy. In the absence of a radical breakthrough in the global nuclear disarmament process, the United States must maintain a strategic force structure that with near-certainty can deliver a massive second-strike.

At the present moment, however, America’s array of strategic weaponry is outsized considering its primary role as a deterrent force. Significant portions of America’s expenditure on its stock of strategic weaponry may be cut out of the budget with little to no tangible detrimental effect on the security of the nation or its vital national interests. Given the budget

constraints of this decade, it is logical to reconcile the size and makeup of the strategic forces with the requirements of their foremost mission.

This harmonization can be accomplished in two ways: reductions in the systems already deployed in the field and changes to the procurement plans for future strategic arms. At the present moment, the United States is in the process of coming into compliance with the terms of the New START treaty, which will limit its number of deployed missiles and bombers to 700, and the number of its deployed strategic warheads to 1550. While it has been argued that the US can maintain an effective deterrent with a small fraction of the New START limits,²³⁹ we propose a relatively conservative reduction to 1010 deployed strategic warheads (as defined under the counting rules of New START). This reduction in the number of deployed weapons will yield savings to the federal budget as well as downstream political benefits resultant from this tangible step towards President Obama's stated goal of a nuclear-free world.

The US maintains a stock of thousands of nuclear warheads outside the bounds of the New START treaty (which only concerns "deployed strategic warheads" and their "launchers"). The utility of such a large store of "nondeployed" and "tactical" warheads is limited in the twenty-first century threat environment. We recommend a significant reduction in the number of these warheads, with the remainder removed to long-term storage for eventual dismantlement. With these reductions taken into consideration, we propose a total of 1860 functional warheads for the American nuclear deterrent, a drop of nearly 64 percent from the 5,113 warheads declared by the US at the beginning of the New START negotiations.²⁴⁰

In addition to offensive strategic arms, the role of "defensive" strategic weaponry has become increasingly important in the security calculus of the United States. We recommend that the US adjust this commitment to defensive strategic weaponry in light of the potentially

insurmountable technical and political infeasibilities dogging the current plan of action. In particular, the anti-ballistic missile systems deployed by the United States have the potential to become an increasingly destabilizing force in the international balance of power. The deployment of these systems, which also presumably have the offensive capability to destroy space-based assets such as satellites or space stations, may in practice provoke reactions that threaten American security.

The strategic arms currently in development by the American military will face a more challenging threat environment relative to today. However, the planned size and composition of these forces does not correlate to their primary role as a deterrent force. When given the projected budget constraints of upcoming years, this incongruence presents an enormous problem.

A Paradigm Tilt

Since the launch of the first Polaris missile in 1960, the US has based its deterrence theory around the concept of the “nuclear triad.” This triad, composed of nuclear-armed bombers, land-based intercontinental ballistic missiles (ICBMs), and submarine-launched ballistic missiles (SLBMs), attempts to minimize the potential for an enemy to eliminate the American nuclear force in a coordinated first strike. The end of the Cold War and the current status of the American armed forces lead to our recommendation that the bomber leg of the nuclear triad be reduced substantially, leaving a small, flexible force utilizing our most survivable technology. The remaining “dyad” of ballistic missiles will face challenges and constraints in the years ahead as well, but steps can be taken to ensure that they continue to serve as an effective deterrent to hostile action. The budget for the American strategic force can be cut

without forming a strategic imbalance with our nearest nuclear peers (Russia and China) by eliminating programs that go beyond the central mission of deterrence. This report will detail a list of options that, taken together, can reduce our defense spending significantly with little to no loss of national security.

Evaluative Criteria of the Triad

The relative advantages and disadvantages of each leg of the nuclear triad will be evaluated in the next section. The evaluative criteria we will use include: “launcher” survivability, total cost, cost over the next decade, launcher availability, crisis stability, and penetrative capability. We will then weigh any proposals for modernization or replacement of the current systems against their cost and relative value to the American deterrence posture.

Ballistic Missile Submarines

America currently deploys a fleet of 14 Ohio-class ballistic missile submarines (SSBN), each carrying 20 Trident D-5 ballistic missiles capable of traveling at least 11,300 km. These missiles carry around half of America’s deployed strategic nuclear weapons, and with good reason. Due to its long-range, ultra-quiet nuclear propulsion system, conservative mission profile, and sound-killing acoustic tiling, the Ohio-class SSBN is quite difficult to detect when on patrol. This stealthiness and maneuverability gives the Ohio class the best probability of surviving a nuclear first strike relative to the other legs of the triad. The subs’ Trident missiles carry multiple independent warheads (MIRVs) that arch towards their targets at speeds of up to 6,000 meters per second, giving the SSBN an excellent ability to penetrate any current or projected defenses deployed by other states.

Given the weapons system's fearsome capabilities, it makes sense that a genuine enemy first strike would attempt to quickly destroy as many SSBNs as possible. Unfortunately, this is a weakness of the Ohio-class, which has a total of two home-ports in Bangor, Washington and Kings Bay, Georgia. Although at all times at least five boats of the class are on station in firing positions, anywhere from two to nine of the boats are at their homeports at any given time.²⁴¹ As the Ohio-class boats are capable of striking China and Russia from alongside their docks and given the large number of warheads carried on each ship (anywhere from 60 to 100), these two homeports represent very attractive "targeting points" for a hostile state weighing a first strike in a crisis situation. A single warhead striking either base could potentially neutralize the hundreds of American warheads concentrated within.

This destabilizing effect is balanced by the presence of the American boats on patrol, each of which is packed with dozens of megatons of retaliatory firepower. However, the possibility remains that America's potential adversaries will make some huge advance in anti-submarine warfare technology, a possibility that mandates that the SSBNs be reinforced by at least one of the other legs of the triad.

The cost of running and maintaining the Ohio-class is relatively high. Two crews are used for each submarine, which must also undergo extensive overhauls and refueling every decade or so. In addition, the Navy spends \$1.3 billion every year maintaining the Trident missiles.²⁴² Given the fact that each Ohio-class sub represents a formidable, survivable deterrent force in itself, a reduction to the number of active boats can be made without fundamentally impacting their collective deterrent effect.

As the next two boats come in for their overhauls, this report recommends that they be decommissioned, and their missiles removed and used for parts. If future budget constraints

demand further defense cuts, this report recommends a further cut of up to four boats, for an end strength of 8 SSBNs. Cuts of this magnitude would mean that the Navy would be able to guarantee fewer boats on station at any given time, a fact that must be taken into consideration in the budgeting process. An alternate scenario would be the conversion of the SSBNs to SSGNs, as has already been done to the first 4 boats of the class through the removal of the Trident ballistic missiles and their replacement with Tomahawk cruise missiles. At a cost of \$700 million apiece, these converted ships could then be used to add cheaper firepower in place of a new ship that would otherwise have been procured by the Navy

The Future of the SSBN in the Triad

The fact that the SSBNs are the most survivable element of the triad gives the boats an outsize boost to their deterrent effect. The Navy should be able to keep at least two boats on station and one in rotation with a smaller fleet of 8 to 12 subs. While this lower number would increase the risk of advanced anti-submarine warfare neutralizing a large chunk of our nuclear deterrent, this is a relatively unlikely scenario given the historical precedent of American technological superiority.

The Navy plans to replace the Ohio-class SSBNs beginning in 2027, and given the long lead times for such a complicated craft, it has already started funding the research for its replacement class. At an eventual estimated cost of \$5.4 billion apiece for a class of 12 boats,²⁴³ this will certainly stretch the Navy's procurement budget.²⁴⁴ Given the fact that these new boats are likely to be more survivable than the Ohio class due to their twenty-first century design and technology, we recommend that the Navy instead procure 8 to 10 of these boats. While this will likely increase the cost per boat, it will decrease the overall program cost.²⁴⁵ As an additional

cost-saving measure, the Navy may delay the start of the procurement process by up to four years. This will allow the technologies developed for the replacement SSBN to fully mature, reducing the chances that the program will face expensive redesigns further along the procurement process.

The Second Leg: Nuclear Bombers

The American Air Force currently maintains a nuclear-capable bomber force consisting of 20 B-2A “stealth bombers” and 76 B-52H heavy bombers. The B-52H, in service for 60 years and counting, is no longer a viable nuclear threat.²⁴⁶ The aircraft, slow and unstealthy, has a nuclear attack profile that rotates around the launch of the slow, unstealthy AGM-86 Air Launched Cruise Missile (ALCM). These missiles and aircraft will fail to provide credible threats to potential nuclear adversaries over the next decade. While the ALCM is due for retirement in 2020, the missiles of the class should be removed from the stockpile and destroyed now, with their associated warheads going into long-term storage. The removal of the B-52H from the nuclear role will allow it to focus on the cheap, long-range, conventional heavy bomber role it has performed quite aptly in the past, while cutting down on the chance of nuclear mishaps associated with a larger, more diverse stockpile.

The B-2A, on the other hand, can be effective as the sole component of the bomber leg of the triad for at least the next ten years. As a delivery system, bombers inherently hold unique advantages over missile-based legs of the triad. For one, bombers are not vulnerable to any sort of antiballistic missile (ABM) technology. This is especially pertinent in the case of Russia, which deploys a battery of 100 nuclear-tipped ABMs around Moscow. Another advantage is that bombers can be recalled after they take off, unlike the irreversible decision to fire a ballistic

missile. At the current moment the B-2 is presumed to be an effective penetrator of enemy defenses; its stealth characteristics proven in combat. However, as all of America's B-2 fleet is based at a single airfield in Missouri, the B-2 is an exceptionally vulnerable and attractive target for a surprise first strike. Of course, in times of crisis the B-2 fleet can be scattered to bases all over the world, or else a number could be continuously kept aloft. Thus, the bombers can be used as "signals" in time of crisis. Dispersing the B-2 fleet would be a show of brinksmanship that the US could use to signal its seriousness in an unstable situation.

Another main weakness of the B-2 fleet is its low level of operational readiness. At any one time, only 5 or 6 B-2s are available for action. However, 5 B-2s would still be capable of carrying up to 80 nuclear weapons, representing a sizable deterrent independent of the other two legs.

The Future of the Bomber Leg

The Air Force had planned to replace the nuclear capability lost with the retirement of the B-52's ALCM with the so-called "Next-Generation Bomber" (NGB) to be deployed in the mid-2020s. This program, which was projected to cost \$40 to 50 billion dollars for 80 to 100 aircraft,²⁴⁷ will provide the Air Force with a stealthy medium bomber capable of long-range strike missions. However, the current budget constraints and global threat environment pose serious challenges to the perceived necessity of this program, especially its nuclear strike role. Most of the capabilities of the NGB can be matched or exceeded by the existing B-2 (albeit with fewer aircraft) which is due to retire in 2037 and be replaced by a more advanced heavy bomber. Thus, the NGB would merely fill a gap of a dozen years in the current procurement plans. Another factor weighing against the development of the NGB is the large number of F-35

fighters due to come into service over the next three decades. Some of these aircraft will be nuclear-capable, thus sharing the burden of the airborne nuclear delivery role with the small number of B-2s.

Given the historical precedent provided by recent aircraft procurement programs (the B-2, for instance, was made for a cost of over \$2 billion dollars per aircraft, almost 6 times the estimated cost) it is likely that the NGB will significantly overshoot its projected program cost. This possibility must be weighed against the specific capabilities the NGB can provide.

The NGB is projected to be the stealthiest, most fuel efficient bomber ever deployed. It will be able to carry a medium-sized payload of large weapons, and potentially carry lasers for defense against enemy anti-air missiles. Stealthy unmanned aerial vehicles (UAVs) will assist the NGB when it is penetrating highly-contested airspace, jamming the adversary's radar and hacking into computer systems in an attempt to counter the threat that networked radar systems pose to low-observable aircraft.²⁴⁸ The NGB will likely have enough range for it to be able to launch from a US base, refuel in the air far off an enemy coast, strike targets deep inside enemy territory, and then return to safe airspace for refueling and its return to base. The success of this mission profile depends on two factors: the effectiveness of its survivability-enhancing measures and the ability of the US to protect the fixed airfields from which the NGB and its support aircraft operate.

The survivability of the NGB keys on whether its suite of low-observable features can defeat the advanced networked radar systems in development by Russia and China, alone or with the aid of UAVs. Otherwise, the subsonic NGB will be an easy target for the missiles and guns of intercepting fighter aircraft, unless its proposed defensive laser proves to be an especially potent system.

Perhaps the most serious threat to the NGB's mission profile would be posed by an opponent capable of neutralizing fixed US and US-allied airfields, and thus denying the US the ability to refuel and resupply the NGB. While the US is now relatively well-prepared to defend these airstrips against attacks by bombers and air- and sea-launched cruise missiles, it would be hard-pressed to stop an onslaught of nuclear- or conventionally-armed ballistic missiles, a deficiency that we will address in the final portion of this chapter.

The B-2, although capable, is as expensive to maintain as it was to operate. The 20 aircraft require approximately \$1 billion dollars worth of routine maintenance each year.²⁴⁹ If the F-35 proves to be more survivable in a 21st century combat environment, budget constraints may dictate the partial or complete removal of the B-2 fleet from its nuclear strike role, and possibly active service altogether.

A factor that could influence the relative effectiveness of the three stealth aircraft is the development of stealth drones capable of electronic warfare. These platforms could potentially boost the survivability of the B-2 and F-35, allowing them to serve as the bomber leg of the triad well into the mid-20th century and eliminating the need for the NGB. Thus, we recommend that the development of these drones continues in any budget environment, as they could potentially provide a substantial boost in American strategic capability at a relatively low cost.

Minuteman III: The Final Leg

The Minuteman III intercontinental ballistic missile is a solid-fueled rocket that forms the land-based leg of the American nuclear triad. This leg holds several important advantages over the other two legs. While the individual, fixed silos used by the Minuteman are vulnerable to a first strike (in the absence of a "launch on warning" posture) the survivability of the leg is greatly

enhanced by the fact that the US has 450 of the missiles scattered across large swaths of the Midwest. Thus, a potential attacker would be presented with a large number of aimpoints, necessitating the expenditure of a large portion of the attacker's warheads in the suppression of the Minuteman alone. Russia, presently the only nuclear power which could possibly succeed in a counter-force first strike, would need to expend all of its SLBMs (the best first-strike delivery system, as it gives the least warning time) to knock out the Minuteman threat, given ideal conditions. Even if the Minuteman missiles never left their silos, they would still play an important role in a nuclear war.

As each Minuteman III missile carries only one warhead, they individually represent unattractive targeting options for a first strike, as an opponent would be required to target each silo with one or more MIRV. The Minuteman lives up to its moniker in one important aspect: it can be launched from its silo in under 60 seconds. Given the estimated warning time of around 6 minutes for a SLBM launch, an opponent would be hard-pressed to succeed in a first strike against 450 missiles. In addition, the ballistic flight profile of an ICBM gives the Minuteman III penetrative capacity against most defenses. Even the Russian ABM network would be challenged by a small number of Minutemen, as the missile is known to carry multiple decoys to confuse enemy radars.

The Role of ICBMs in the Future Triad

The Minuteman III is scheduled to remain in service until 2030. Somewhat surprisingly, given the large number of launchers, the ICBM leg of the triad will be by far the cheapest leg of the nuclear triad during the next 10 years. Acquisition of spare parts for the leg totaled only 67 million dollars for FY 2012, with operations and maintenance costs similarly low.²⁵⁰ This report

finds that ICBMs should be included in any future nuclear force structure, because of the low cost-to-deterrent-capability ratio that they exhibit. As they are relatively cheap to maintain, we recommend that the US maintain 90 to 100 percent of its current ICBM force. Retaining these weapons will ensure that America's deterrent force will not be compromised by a vulnerability in either of the other two legs.

“Defensive” Strategic Forces: Antiballistic Missiles

The United States has long pursued the ability to shoot down enemy ballistic missiles. The current generation of ballistic missile defense (BMD) technology is comprised of a range of weapon systems spread out over three of the armed services. These systems differ in the type of ballistic missile they are designed to counter, the range at which they are effective, and in the missile stages they are supposed to intercept. At the present moment, the US military fields three main types of BMD systems: land-based theater defense, land-based mid-course defense, and the sea-based Aegis/SM-3 system. This chapter will focus on the latter two categories, as they are used to counter intermediate- and intercontinental-ranged ballistic missiles.

The Ground-Based Midcourse Defense (GMD) system is comprised of two interceptor missile launch sites located in Alaska and California, as well as radar systems on land and in one ungainly instance, afloat. GMD is designed to intercept ICBMs in the lower reaches of outer space, before they reenter the atmosphere over the continental US. At the present moment, they are the only BMD system capable of shooting down intercontinental-ranged ballistic missiles, which can travel at rates exceeding 5 kilometers per second.

While the stated purpose of GMD is to defend the US from limited missile attack from a “rogue” state such as North Korea or Iran, the scope of the program has expanded to the point

where the legacy nuclear powers of Russia and China have expressed their concern that GMD threatens the credibility of their own nuclear deterrents. The continued fielding and procurement of GMD interceptors has not only led to diplomatic tensions with these two states, it has directly encouraged the ongoing modernization of the Russian and Chinese nuclear forces. The GMD system threatens the environment of lower nuclear tensions brought about by the end of the Cold War, and could provoke a twenty-first century arms race.

While potentially destabilizing, the GMD program has also had problems proving its ability to carry out its difficult mission. Over the course of extensive testing GMD interceptors have preformed inconsistently, eliminating 8 of 15 targets.²⁵¹ In addition, these tests were preformed only in the most ideal circumstances; the effectiveness of these interceptors against advanced countermeasures remains unknown. As such, we propose a significant cut in the continued procurement and testing of this program.

In contrast, the Navy's Aegis-based BMD system has been successful in 16 of 19 tests of operationally configured interceptors.²⁵² It is our recommendation that this program continues to play a role in the American defense plan. The Aegis system is more flexible and proven than GMD, and currently presents less of a threat to intercontinental-ranged ballistic missiles, decreasing the political backlash associated with its deployment. Aegis-based systems, self-contained on a Navy cruiser or destroyer, have the ability to shoot down the intermediate-range ballistic missiles currently used by the principal "rogue states." In addition, the later blocks of the Standard missile interceptors of the Aegis system are projected to provide some capability against intercontinental-ranged missiles. However, their use in such a role is limited by the range of these interceptors, which is insufficient to defend the entire US, thus limiting their impact on the strategic balance of power.

While the Aegis system is being developed with the capability to engage ballistic missiles in all stages of flight (boost, midcourse, and terminal descent), the most important application of this system may be in a point-defense role against missiles in their terminal descent phase. In times of crisis, Aegis-equipped ships can sail to protect important assets such as allied cities and American military bases. The Aegis system also provides a measure of protection against China's reported ability to target aircraft carriers with conventionally-armed ballistic missiles, which poses a critical threat to the American ability to project power in the region in a future conflict.²⁵³

The “Forgotten Nukes”: American Tactical Nuclear Arms

America retains a stockpile of around 1100 “tactical” nuclear warheads.²⁵⁴ These weapons are remnants of an American Cold War strategy which allowed for a “flexible response” to a Soviet invasion of NATO. Tactical nukes were to be used on the battlefield to destroy enemy military forces, with the hope that the use of these relatively low-yield weapons would not escalate into strategic-level strikes on US soil. Of course, the escalatory potential of such a policy regarding the use of these weapons contributed greatly to their deterrent powers; the USSR knew that a war against NATO would have a high likelihood of quickly becoming an all-out nuclear conflagration.

With the end of the Cold War, however, the battlefield utility of tactical warheads was greatly diminished. As a result, the vast majority of the American stock of tactical warheads was removed from service. It is our contention that this process should be continued by removing the oldest and least-reliable weapons from the tactical stockpile.

The Future of the American Tactical Stockpile

We propose an end stock of 400 tactical nuclear weapons, split between the most recent variants of the B61 gravity bomb. Four hundred weapons would allow the US to maintain its nuclear sharing agreement with NATO, an important display of the strength of the alliance as demonstrated by the American loan of 150 bombs to allied states.²⁵⁵ The number of remaining tactical nukes would still be sufficient to provide a measure of flexibility to a hypothetical American nuclear response. For instance, in a scenario where a nuclear or biological attack on the United States is perpetrated by a terrorist group with links to a state actor, the leadership of the state actor could be targeted using a B61 configured for a bunker-busting role. This action would presumably result in a fraction of the civilian casualties that a full-scale, strategic nuclear strike would cause; this lowering of the potential political consequences associated with nuclear usage would increase the probability that the US would respond to a WMD attack with nuclear arms. Thus, American credibility regarding its willingness to respond with nuclear arms is enhanced because of the lower yields of the tactical weapons in its stockpile.

Furthermore, a number of the 400 tactical bombs could be modified for use in the internal bays of the low-observable F-35.²⁵⁶ On paper, this action would considerably bolster the collective deterrent force of the US and its NATO allies. While the F-35 may not be as stealthy or as long-ranged as the B-2, it is faster, more maneuverable, can be deployed from aircraft carriers, and will be more numerous. The F-35 has the potential to supplement the B-2 in its airborne nuclear strike role, filling a potential capability gap between the removal of the B-52 from service as a nuclear bomber and the arrival of the NGB.

Warhead Counts: Beyond New START?

New START, signed in 2010, limited the US and Russia to a total of 700 “deployed” missiles and bombers and 1550 “deployed” strategic nuclear warheads. However, due to an unusual scheme wherein bombers are counted as carrying only one warhead, regardless of their actual capacities, the actual number of deployed “strategic” weapons will likely be significantly higher than 1550. Given the fact that the B-2 can carry up to sixteen nuclear bombs and that the B-52H is fitted with the ALCMs remaining in the stockpile, America could potentially field up to 2141 warheads under the New START guidelines.²⁵⁷ When tactical weapons are included in this count, the number of readily-accessible warheads jumps to 3241.

We believe that the number of warheads in the American arsenal can be reduced substantially, at a negligible cost to the strength of America’s deterrent force. This task force recommends that the American military retain a total of 1860 nuclear warheads in its inventory, with the remainder sent into inactive storage. Of these 1860 warheads, four hundred would be the tactical B-61, 660 would be deployed on Trident missiles, 450 on the Minuteman III, and 320 on the B-2. This recommendation leaves an additional 30 warheads to be used as a responsible reserve stock. When compared to the potential number of deployed strategic and tactical warheads under New START, a total of 1860 warheads represents a 43 percent cut. In order to make such a large cut in nuclear arsenal without compromising national security, the delivery systems for these remaining warheads must be carefully selected.

Force Structure Recommendations

In the following section, we will synthesize the data from the previous parts of this chapter into a coherent whole. We will do this by presenting three tiers of options, with each tier representing the most effective deterrent force for a particular budgetary scenario. In the first tier,

funding for the US strategic forces is largely preserved by the Obama administration's 10 year defense budget. Given the tremendous importance of the American strategic forces to America's national security, very few of these programs should be cut if there is a relative abundance of available defense dollars.

The force structure outlined in the second tier is an attempt to square the composition of the American strategic forces with the likely pressures the economic realities of the upcoming decade will place on the defense budget. In this tier, tougher cuts are made at the expense of current and future American strategic capabilities. However, the resulting force structure retains a retaliatory punch potent enough to deter any current or projected strategic attack on America or its vital interests. Thus, this force structure represents a balance between the physical and economic security of the American people, and is proposed as a reminder that the two are inextricably linked.

The third tier represents a proposal for a strategic force funded under the auspices of sequestration. Relatively large cuts were accomplished by means of reductions in the current array of strategic forces as well as delaying and shrinking programs meant to supplement or replace the present weapon systems. While this force structure provides an adequate level of deterrence against the current global threat environment, it does not supply a great deal of funding towards the research and development of the next generation of strategic weaponry. A force structure based on this level of funding would be inherently more vulnerable to new, emerging, and evolving threats, especially at the end of the ten-year defense budget and beyond.

Recommendation Section (ten year savings in parentheses)

Tier 1: Keep 12 Ohio (\$5 billion²⁵⁸) procure 10 replacement SSBN (\$2 billion), defund replacement air-launched cruise missile (\$1.3 billion²⁵⁹), fully fund Aegis BMD, cut all other missile defense spending 25 percent (\$13 billion²⁶⁰), drop to 400 tactical nuclear weapons (\$2 billion²⁶¹). **Total: \$23.3 billion.**

Tier 2: Keep 10 Ohio (\$10 billion²⁶²), procure 9 replacement SSBN (\$5 billion²⁶³), delay NGB procurement by 1 year (\$2 billion²⁶⁴), defund replacement air-launched cruise missile (\$1.3 billion), fully fund Aegis BMD, cut all other missile defense spending 50 percent (\$28 billion²⁶⁵), drop to 400 tactical nuclear weapons (2 billion²⁶⁶). **Total: \$48.3 billion.**

Tier 3: Keep 8 Ohio, procure 8 replacement SSBNs (\$27 billion²⁶⁷), delay NGB till 2025 (\$18 billion²⁶⁸), defund replacement air launched cruise missile (\$1.3 billion), remove 50 ICBMs from service (1 billion²⁶⁹), Fully fund Aegis BMD, defund all other missile defense programs (\$55 billion²⁷⁰), drop to 400 tactical nuclear weapons (\$2 billion). **Total: 104.3 billion.**

Chapter 14. Department of the Air Force | By Mike Beckett

Chapter Summary

Key Policy Conclusions

By reorganizing the Air Force and its procurement strategies, the Department of the Air Force is able to cut spending between \$25 and \$110 billion over the next ten years without gravely endangering its capabilities to protect national security interests.

Background

Currently, the Air Force spends billions of dollars on developing and procuring aircraft that are mission specific and unable to perform as multirole combat systems. The Air Force also employs aging aircraft that are becoming increasingly expensive to maintain, while spending large amounts on the procurement of inadequate and underperforming aircraft systems that do not meet Air Force needs or expectations. The more precise weapons systems that are currently used in guided weapons cause every fighter platform to become more effective than ever before.

Policy Considerations

As the Air Force moves forward, it can improve spending habits and maintain capabilities by decreasing the procurement and use of niche aircraft, substituting these with a focus on multirole platforms able to perform a variety of mission types. With the intended decrease in the size of the ground forces, the Air Force will be left with an excess of lift and support aircraft, allowing older vehicles to be retired. By downsizing the current fighter force, the Air Force will preserve an adequate surge force due to the decrease in necessary combat aircraft that guided weapons create.

Key Recommendations

- Restructuring and reduction of Fighter wings;
- Replace niche style aircraft like the C-27J with multipurpose aircraft like the C-130;
- Terminate underperforming and highly expensive programs like that of the RQ-4 Global Hawk;
- Upgrade and replace aging aircraft that are becoming costly to maintain, such as a portion of the KC-135 fleet;
- Retire excess lift craft created by the decrease in overall United States military size.

United States Air Force

Due to the restructuring of the Department of Defense budget, modifications to the overall structure of the United States Air Force (USAF) are necessary to maintain its global mission. This reorganization is necessary to attain the overall budgetary goals set forth, allowing the United States to protect national security interests at a lower cost than over the past decade. Although the Air Force will lose the capacity to fund the current force structure and procure equipment at the current rates, the reorganization of the Air Force will not diminish the capabilities of the USAF. Instead, these changes will allow for the divestment in inadequate and inefficient niche programs, while permitting cost effective multipurpose aircraft and platforms to become the centerpiece of the newly designed Air Force. This new force will be guided by the strategic requirements of being able to deter and defeat aggression by any potential adversary.²⁷¹ Deterrence based strategies will allow for credible deterrence capabilities to fully deny a capable state's aggressive objectives as well as imposing unacceptable costs on the aggressor. Accordingly, this strategy finds basis in the ability to commit to a large scale operation in one region while maintaining the capabilities to deny the objectives of an opportunistic aggressor in another region.²⁷² In order to attain these objectives the Air Force will need to balance its abilities by maintaining core capabilities such as rapid response abilities, modernization, and maintained mission readiness. By creating a leaner force using multipurpose platforms instead of niche aircraft, the Department of the Air Force will be able to cut between \$25 and \$110 billion over the next ten years.

Personnel

As budget cuts lead to the decommissioning of aircraft and a number of programs, the Air Force will not need to maintain its current levels of active duty, guard, and reserve personnel. Current Air Force personnel cut projections predict necessary cuts of around 10,000 personnel throughout all three commands over the next five years. This in turn would include 3,900 active duty, 5,100 Air Guard and 900 reserve personnel.²⁷³ These decreases in personnel are predicted to cut \$873.6 million between fiscal year (FY) 2012 and FY2013.²⁷⁴ Although these cuts seem extensive, more cuts can be made without losing the Air Force's capabilities. As these projections were based on the Air Force's proposal to reduce 303 aircraft by 2017,²⁷⁵ these estimates can be increased with the retirement of a larger portion of aircraft. Higher decommission rates and lower maintenance needs of the outlined changes, such as retirement of the B-1B Lancer as well as an upgraded KC-135 fleet, generate even lower personnel needs in the future Air Force structure. By increasing aircraft reductions, personnel reductions can increase to between 12,000 and 15,000 active, reserve and guard personnel. These reductions are able to generate an increased cut of \$1.064 billion between fiscal 2012 and 2013.²⁷⁶

US Air Force Aircraft Reduction

Fighter Aircraft

Currently the United States Air Force officials must decide how to structure the fighter wings over the next ten years. There are multiple options on the table that include the use of next generation aircraft like the F-22 and F-35A. The USAF has the ability to continue, expand or decrease its procurement of the F-22 Raptor. It is worth noting that this next-generation aircraft "cannot be matched by any known or projected fighter aircraft".²⁷⁷ With its "combination of stealth, super cruise, maneuverability, and integrated avionics, coupled with improved

supportability, [the F-22] represents an exponential leap in war fighting capabilities.”²⁷⁸ Similarly, the USAF must also decide how to proceed with its procurement of the F-35A, which has shown signs of success as a weapons system unlike the F-35B and F-35C. The F-35A is designed as a complementary next generation aircraft to the F-22. While the F-22 is an air to air focused fighter the F-35 has an air to ground based design. The USAF must decide how to integrate these aircraft if they are procured and determine what effects these aircraft will have on the F-16, F-18, F-15, and A-10 which have been the longstanding backbone of the USAF fighter planes. These older aircraft have all been proven effective in the battlefield, are all cost efficient, and upgradeable to newer generation systems.

The USAF has the ability to slow its procurement of next generation fighters over the next ten years, continuing its reliance on the cost effective aircraft that already make up the bulk of the fighter wing. Although the F-22 and F-35A far outmatch any of the longstanding fighter aircraft programs like the F-16, the high costs of the next generation aircraft without consistent performance (particularly the F-35) causes their cost to outweigh their benefits. With the F-35A estimated cost at \$200 million per unit²⁷⁹ and F-22 at \$143 million per unit²⁸⁰ compared to the minimal costs of F-16C/D at \$18.8 million, the older designs only cost a fraction of the next generation designs. Even upgraded designs like the F-15 Silent Eagle, which is an F-15 that is upgraded with up-to-date stealth technologies and new weapons systems, can cut costs significantly from its competitor, the F-35. The unit cost of a new F-15SE is estimated at \$100 million²⁸¹ and it is ready to be manufactured. Compared to the F-35A, which is still in the research and development as well as testing phases, the F-15SE costs around \$100 million less per unit without having to invest in R&D.²⁸² These savings can also be applied to other aircraft if the Air Force is intent on upgrading the F-16 and F-18 in place of procuring next generation

fighters. Moreover, the Air Force already has training systems as well as maintenance operations and equipment in place for the older aircraft. By limiting the amount of next generation fighters the Air Force procures, the USAF will incur fewer costly changes to training systems and maintenance techniques. By reducing F-35A procurement by between 179 and 301 aircraft, the Air Force will be able to cut between \$15.1 billion²⁸³ and \$60 billion²⁸⁴ in aircraft procurement over the 2012-2022 decade.

Although the F-16 and F-15SE are outmatched by the F-35A and F-22, the older generation aircraft are more than capable of maintaining the United States military's aerial dominance around the world. The array of older aircraft that the USAF uses has been proven effective even on an unconventional battlefield during the operations in Iraq and Afghanistan. These aircraft are also more than capable of maintaining air dominance in any conventional battle the United States may find itself in against state actors like Iran or North Korea. For these reasons, USAF officials have the ability to slow the procurement of next generation aircraft. This will allow the Air Force to maintain the abilities that next generation fighters can give the military while avoiding the inefficient funding of unproductive programs that the USAF has done in the past. F-35 procurement in Fiscal Year 2010 numbers was \$2.358 billion for 10 aircraft.²⁸⁵ By waiting for the systems to complete testing and cutting procurement costs while maintaining research, development, testing and evaluation (RDT&E) costs, the USAF can efficiently cut spending without losing the eventual capabilities gained with next generation fighter aircraft.

A-10 Thunderbolt II

The A-10 Thunderbolt II is the primary low altitude close air support aircraft that the USAF relies on. This niche aircraft is designed to have excellent maneuverability at low altitude, with extremely accurate weapons and the ability to loiter in operational zones for long periods of time.²⁸⁶ Although the A-10 has proven itself as a premier aircraft to provide close air support, the A-10's exclusive air to ground abilities at subsonic speeds label the aircraft as a niche platform.²⁸⁷ In efforts to create a multirole-based fighting force, the A-10 is one of the few successful aircraft that the USAF can consider downsizing. Although aircraft like the F-35A which are preparing to take over a portion of the A-10's missions do not have the same close air support capabilities, these aircraft offer both air-to-air and air-to-ground abilities in an effective multi-mission capable platform. In a plan to restructure the Air Force's fighter wings, between one and five A-10 squadrons can be cut while maintaining the USAF's fighter capabilities. The bulk of these cuts are intended to come from the Air Force National Guard, with the possibility of reducing one active squadron.²⁸⁸

Fighter Wings

With the technological advancements of both aircraft and weapons that the Air Force has gained in recent years, a decreased number of fighter aircraft can sustain the effectiveness of the current force size. By restructuring the fighter force of the USAF, the Air Force stands to cut between \$40.3 billion²⁸⁹ and \$89 billion²⁹⁰ over the next decade. With the current and proposed sizes of the US Navy, Naval airpower is capable of containing and dealing with most wars. Accordingly, the Air Force lacks enemies that can challenge its air superiority in any conflict. Advancements in weapons guidance systems have escalated the destructive power and capabilities of every fighter aircraft in the Air Force, allowing for a smaller Air Force to retain

the capabilities of the current structure.²⁹¹ By downsizing the current fighter force, the Air Force will preserve an adequate surge force due to the decrease in necessary combat aircraft that guided weapons create. The more precise weapons systems produced a two-thirds reduction in combat aircraft sorties between the 2003 Iraq War and the 1991 Persian Gulf War.²⁹² For these reasons the Air Force stands to gain by cutting between two and six fighter wings, corresponding to an overall cut between \$40.3 billion²⁹³ and \$89 billion²⁹⁴ from FY 2012- FY 2022. These reduction costs include the aircraft, munitions, reduced personnel, reduced air wing operations and maintenance as well as reduced base operations costs.²⁹⁵ These cuts also include the reduction in procurement of F-35A aircraft by between 220²⁹⁶ and 301²⁹⁷ aircraft. The majority of these fighter wing reductions would be aimed towards the A-10 Thunderbolt II with maximum cuts reaching five squadrons and 102 aircraft.²⁹⁸

Lift Aircraft

Lift aircraft are in many ways the lifeblood of the US military supply lines. USAF lift planes transport anything from medical supplies and food for disaster relief efforts, to the military vehicles and personnel on a battlefield. The backbone of the Air Force's lift capabilities is composed of the C-5 Galaxy, the C-17 Globemaster III, and the C-130 Hercules. Out of these three planes the C-5 is by far the largest, being one of the largest aircraft in the world. The C-5 has the ability to carry a fully equipped, combat-ready unit anywhere in the world. The aircraft's enormous capacity makes it the only plane in the USAF arsenal that can transport the M1 Abrams tank by air, as well as other outsized and oversized cargo over intercontinental distances.²⁹⁹ Currently the Air Force has a total force of 103 C-5s mixed between four variations. These are the C-5A (51), the C-5B (44), the C-5C (2) and the C-5M (6).³⁰⁰ Of these variations

the C-5A is the oldest and most outdated of the aircraft, while the C-5M are modified C-5B aircraft with new systems and equipment. Due to the high cost of maintenance that the C-5A is beginning to accrue, the Air Force has the opportunity to begin to decommission some of the older aircraft. While decommissioning these older aircraft and possibly selling some to allies (at a unit price of \$152.8 million fiscal 1998 constant dollars), the USAF can continue to modify C-5Bs (at a cost of \$90 million in fiscal 2009 constant dollars)³⁰¹ into aircraft that the USAF can rely on for lift capabilities far into the future. Current proposals for the C-5 aircraft include retiring 27 C-5As as they are becoming considered excess capacity, due to the fewer transport aircraft needed for a shrinking ground force.³⁰²

C-17

The C-17 is the Air Force's newest high capacity lift aircraft. This aircraft is flexible in the cargo that it carries and the missions it carries out. The C-17 can be relied on to deliver troops and supplies to major operating bases or directly to forward bases. This aircraft can perform tactical lifts as well as airdrops. With the demands of the modern battlefield, the C-17 has made its mark in the Air Force by being an extremely reliable and easily maintainable lift aircraft. This effective aircraft has the ability to become the main air lift craft of the USAF over the next ten years. The high unit cost of \$202.3 million³⁰³ (fiscal 1998 constant dollars) is outweighed by the reliability and low maintenance cost that the plane is able to create. As C-5As and C-130s age the C-17 can become a reliable lift platform, able to cover almost all lift capabilities of the other two aircraft.

C-130

The C-130 has made its mark mainly in airlift missions as opposed to troop and cargo transportation. This aircraft has proven itself capable of operating in rough terrain and is a staple aircraft of the Active Air Force, the Air National Guard, and the Air Force Reserve. Although this aircraft is aging, it has proven its ability and maintains its status as an important part of the Air Force lift capabilities. With a reasonable cost of \$48.5 million³⁰⁴ (fiscal 1998 constant dollars) the C-130 is both efficient and effective. Over the next ten years the Air Force will benefit by keeping these planes as one of the main lift crafts, only decommissioning aircraft on an as-needed basis. With the planned reductions in ground forces, it is important for the Air Force to retire the oldest 65 C-130s due to the excess lift capacity these aircraft create.³⁰⁵

C-27J

In many cases the Air Force is faced with the vital task of transporting necessary supplies to forward operating bases within war zones. The need for reliable lift aircraft to complete missions to forward positions with semi-prepared landing strips is what drove the USAF into the procurement process of the C-27J. This mid-range aircraft's niche capabilities of transporting men and materials with the ability to land on short runways was seen as a vital need on the modern battlefield. However, as the war in Afghanistan has proven, the current C-130s are much more capable to suit these needs than the USAF had previously predicted.³⁰⁶ Due to the enduring abilities and the lower operating costs of the C-130s, the Air Force can cancel procurement and retire all 38 C-27Js. Cancellation of this program will lead to the annual savings of \$327.1 million³⁰⁷ dollars and the estimated cut of \$0.4 billion³⁰⁸ over the decade due to procurement and research costs. This savings can also be heightened by selling the 38 decommissioned C-27Js to allies like Australia that are willing to pay up to \$950 million for ten aircraft, creating an

estimated \$3.61 billion in additional sales revenues.³⁰⁹ The complete termination of the C-27J program could in turn lead to an overall cut of \$4.01 billion during the FY 2012 - FY 2022 period.³¹⁰

Bomber Aircraft

The United States Air Force has made it clear that over the next ten years it plans to invest in the next generation of the long range bomber. This announcement has created a necessity within the Air Force to make decisions about the current structure of the bomber wing of the Air Force and how it should look over the next ten years. At the top of this list is the need to decide on what capabilities the next generation bomber will incorporate and how this goal will be accomplished. Former Secretary of Defense Robert M. Gates explained in a January 2011 speech that *“a major area of investment for the Air Force will be a new long-range, nuclear-capable penetrating bomber. This aircraft—which will have the option of being piloted remotely—will be designed and developed using proven technologies, an approach that should make it possible to deliver this capability on schedule and in quantity.”*³¹¹ This outline for a new bomber that will be delivered on schedule and in quantity creates a need for the Air Force to assess the capabilities and necessities of the current bomber fleet.

The USAF uses three main bombers: the B-2, the B-52 and the B-1B all with differing capabilities. The most capable and most technologically advanced is the B-2 Spirit which is a multirole stealth bomber able to deliver both nuclear and conventional munitions. This long range and low-observable bomber is able to penetrate and strike deep in enemy territory without warning. It is imperative that the USAF inventory of 20 B-2s does not change and that the B-2 remain a staple of the Air Force bomber squadrons. Similarly, the aging B-52 Stratofortress is

also a multirole, long range bomber capable of carrying nuclear or precision-guided payloads. The heavy bomber also has a strategic intelligence, surveillance and reconnaissance (ISR) use to assist the Navy in anti-ship and anti-mine laying operations, due to their high endurance and ability to monitor vast expanses of ocean surface in flight. Although the B-52 is an old design and a subsonic aircraft, its ability to play significant functions in a variety of roles on the modern battlefield makes it a necessary component of the Air Force. Conversely, the B-1B's limited role as a high-velocity, non-nuclear bomber is becoming less important and plays a more limited role in modern engagements. The high velocity, long range design was created during the Cold War period with the intentions of fighting a conventional war against a conventional enemy. In the modern day, weapons systems need to be effective at playing versatile roles in both conventional and non-conventional war. This ideal makes the B-1B seem overshadowed by the other bombers in the USAF. With the intended creation of a next generation bomber, the USAF has the ability to create an aircraft that replaces and outdoes the B-1B as a long range bomber. The B-1B already shares its roles with both the more versatile B-52 and the stealthier B-2. For these reasons, the Air Force has the opportunity to decommission a large percentage of the B-1B aircraft over the next ten years. Given the unit cost of each aircraft at \$283.1 million (fiscal 98 constant dollars),³¹² the USAF can decide to either sell the aircraft to allies, creating a revenue stream, or simply decommission them and use the aircraft for other purposes such as training.

Unmanned Aircraft Systems (UAS)

Currently the United States Air Force employs nine different UAS aircraft ranging from the Wasp III field-deployable system to the Reaper and Predator drones that can carry out Hellfire missile strikes. UASs are quickly becoming an essential tool used by the Air Force for

both tactical strike and ISR missions. Over the next ten years the Air Force should aim to maintain and possibly increase the use of battle-proven UAS aircraft. Accordingly the USAF needs to evaluate and discontinue funding of inefficient and ineffective UAS platforms. These inexpensive and effective pieces of equipment are essential as the USAF moves into the future.

RQ-4 Global Hawk

This aircraft has consistently underperformed and failed to meet the expectations of the Air Force. The short lifespan of the aircraft causes it to be excessively expensive. The Air Force “initially projected a purchase of 42 Block 30 Global Hawks in their 2011 budget proposal at an estimated cost of approximately \$215 million per aircraft.”³¹³ Recently, the U.S. Air Force stopped buying the RQ-4 Global Hawk UAS by canceling ten of the Block 30 models ordered.³¹⁴ Accordingly, none of the planned Block 40 models will be built. Due to the inability of the Global Hawk to meet the specification of the Air Force needs, the Air Force has the opportunity to sell their remaining RQ-4s for over 30 million dollars per unit, excluding the sensory equipment and ground stations.³¹⁵ “The Defense Department commented that the future cost of the Block 30 aircraft, in a best case scenario, would be comparable to the U-2” causing the cost of the new UAS system to be excessive for the minimal gains it provides.³¹⁶ The Air Force has already made it apparent that they plan to “keep its Cold War-vintage U-2 spy planes flying into the 2020s.”³¹⁷ Over the next five years the Global Hawk program is expected to cost significantly more than the cost of maintaining the U-2. Accordingly as the USAF is in the process of decommissioning the seven Block 10 aircraft that it currently has, the Air Force has the ability to create a revenue stream of at least 210 million dollars by selling the old Block 10 aircraft to allies or other governmental agencies (this number excludes all sensory and surveillance systems). By

divesting in all 18 block 30 RQ-4 aircraft the Air Force is able to generate \$2.5 billion in cuts.³¹⁸ Divesting in the RDT&E of the RQ-4 aircraft, the Air Force can further cut \$309.2 million per year, adding up to a total cut of \$3 billion over the 2012-2022³¹⁹ time period.

MQ-1B Predator

The MQ-1B Predator is an armed, medium altitude, and long-endurance aircraft. This low cost aircraft has a range of 770 miles with a ceiling of 25,000 feet.³²⁰ The Predator system has become increasingly important in the surveillance and tactical strike missions that the Air Force carries out. Current Air Force assessments give the Predator drone a unit cost of \$20 million fiscal 2009 dollars (including four aircraft, a ground control station and a Predator Primary Satellite Link).³²¹

Due to its low cost and effective ability to perform its killer/scout role, the predator drone is an aircraft that the USAF has the ability to look to for expanded use, in order to replace other weapons systems that are less efficient and less effective. Although this UAS is unable to have the long-range capabilities of the RQ-4 Global Hawk, the Predator can be used in other search and destroy roles to supplement the use of manned aircraft.

MQ-9 Reaper

The MQ-9 Reaper drone is a highly effective hunter/kill role UAS that can perform multiple mission types including both tactical strike and ISR. The Reaper has a maximum range of 1,150 miles (1,000 nautical miles) with a ceiling of 50,000 feet.³²² Like the Predator, the Reaper is armed with Hellfire missiles and is able to execute missions against high value,

fleeting, and time sensitive targets. According to the USAF, the Reaper per-unit cost is \$53.5 million fiscal 2006 dollars (including four aircraft with sensors).³²³

Due to the battle-proven effectiveness and low cost of the MQ-9 Reaper, the Air Force is capable of expanding the use of the Reaper to cover other less efficient manned and unmanned aircraft. Currently the likelihood of the United States fighting a conventional war is low, allowing the USAF over the next ten years to explore the use of the Reaper drone in roles traditionally played by manned aircraft. By increasing the use of Reaper drones and slowing the increase in next generation manned fighters like the F-22 and F-35, the USAF has the ability to save over \$100 million per unit exchanged for the UAS.³²⁴ Although the Reaper does not have anywhere near the capabilities of the F-22 or F-35, the Reaper is extremely efficient at fighting unconventional wars, as seen with its use in the War on Terror. The Reaper can also be looked at as a short to mid-range ISR craft that can be used to replace the RQ-4 Global Hawk in shorter range ISR missions.

Support Planes

Tankers

In order to maintain the capabilities of a global fighting force with the capacity to reach and project air power anywhere in the world, the ability to refuel while airborne through the use of tankers is essential. In 2010 the USAF's KC-135 fleet supported the joint forces assertion of air power over Iraq and Afghanistan by air-delivering 255 million gallons of jet fuel.³²⁵ The ability to air-deliver fuel allows US and allied forces to keep aircraft in the air for the duration needed to complete vital missions. The current force of 415 KC-135s is aging, leaving nearly twenty % of the aircraft in maintenance and repair depots for extended periods each year.³²⁶ The

KC-X program aims to replace roughly one-third of the KC-135 aircraft, allowing for the oldest and least cost efficient planes to be decommissioned. Using current Air Force maintenance practices, the cost of sustaining the KC-135 fleet is becoming excessively expensive. Air Force projections illustrate increases of maintenance costs to \$6 billion annually over the next ten years.³²⁷ The Air Force has reported that time devoted to flight line repairs has increased to 12.5 maintenance man hours to one flight hour on the KC-135 fleet in FY 2010.³²⁸ Due to these exorbitant increases in maintenance costs caused by the KC-135s age, the Air Force should begin a restructuring plan for the tanker fleet. By procuring new tanker aircraft and upgrading old KC-135s, the Air Force is able to save money both on depot maintenance and flight line maintenance costs of the tanker fleet. Currently the next generation KC-X tankers are in the research and development stage, only receiving \$14.9 million annually.³²⁹ By retaining research and development rates and extending the procurement date until after 2016, the USAF will be able to upgrade 60 KC-135s to the KC-135Rs.³³⁰ This in turn will create a savings of \$9.9 billion between 2012 and 2022, while allowing for new designs of KC-X aircraft that will yield lower operating costs.³³¹

Space

In order to sustain the battlefield readiness and the overall capabilities of the US military, space-based and related systems are vital. These systems act as a force multiplier by providing US military personnel with communications services, navigation capabilities, and remote information and intelligence collection systems.³³² Space-based systems give US personnel the informational superiority that allows for dominance on the battlefield. In order to maintain and

secure this important platform of military communications and intelligence, the USAF has an obligation to maintain levels of funding in this category.

Training Systems

As the Air Force finds inefficiencies within aircraft and procurement programs, it is important for the USAF to examine training systems as well. By ridding itself of expensive and redundant training practices the Air Force can find savings without cutting programs or losing capabilities. Flight training is an expensive process, causing the Air Force to spend around \$2.6 million on the training of each fighter pilot and \$600,000 on the training of each airlift pilot.³³³ Under the current flight training regimens pilots spend about 65 % of their training flight time in an aircraft, with only 35 % in a simulator.³³⁴ As students advance into their designated aircraft training these numbers become further lopsided towards flight time in aircraft. Due to the high cost of jet fuel, decreased fuel consumption can lead to large amounts of savings. By further incorporating simulator systems in areas such as tanker refueling practice, a training mission can drop costs from \$49,000 for an eight hour tanker sortie (not including the receiving aircrafts' costs) to approximately \$4,800 over the eight hour period.³³⁵ Additionally, by revising UAS pilot training, Air Force auditors estimate that a savings of at least \$500,000 per pilot can be found. This revision includes eliminating twenty unnecessary weeks of undergraduate pilot training as well graduate training on aircraft other than a UAS platform.³³⁶ Although the cuts created by training reorganization may not be very large annually, over a long period these efficiencies have the potential to noticeably reduce Air Force spending.

Options

- **Tier I**

- F-35A – lower procurement by 179 aircraft, cutting \$15.1 billion from FY2012-2022³³⁷
- Maintain the current bomber force at current levels (20 B-2s, 66 B-1Bs, and 94 B-52s)³³⁸
- RQ-4 Global Hawk – terminate the Block 30 aircraft program, cutting \$2.5 billion from FY2012-2022³³⁹
- C-27J – terminate program, cutting \$0.4 billion³⁴⁰ with the potential to sell the 38 aircraft the Air Force owns for an additional \$3.61 billion³⁴¹, totaling \$4.01 billion from FY2012-2022
- Tanker Restructuring – procurement of 179 KC-46A to replace one third of the aging KC-135 aircraft, cutting \$2.4 billion from FY2012-2022³⁴²
- Personnel – cut 9,900 personnel - 3,900 active duty, 5,100 guard and 900 reserve, cutting \$873.6 million from FY2012-2013³⁴³
- Cuts totaling - \$24.87 billion dollars from FY2012-2022
- **Tier II**
 - Fighter Wings – retire two fighter wings concurrently reducing F-35 procurement by 220 aircraft, cuts \$40.3 billion from FY2012-2022³⁴⁴
 - RQ-4 – termination of entire program both Block 30 and Block 40 systems, cutting a combined \$3 billion from FY2012-2022³⁴⁵
 - C-27J – terminate program, cutting \$0.4 billion³⁴⁶ with the potential to sell the 38 aircraft the Air Force owns for an additional \$3.61 billion³⁴⁷, totaling \$4.01 billion from FY2012-2022
 - KC-135/ KC-X – upgrade 60 KC-135s to KC-135Rs, delay KC-X procurement until after 2016, cuts \$9.9 billion from FY2012-2022³⁴⁸
 - C-5A – retire 27 oldest aircraft
 - C-130 – retire oldest 65 aircraft
 - Personnel cuts – cut 9,900 personnel, 3,900 active, 5,100 guard and 900 reserve, cutting \$873.6 million from FY2012-2013³⁴⁹
 - Cuts totaling - \$58.08 billion dollar from FY2012-2022
- **Tier III**
 - F-35A – program cancellation and replacement by other upgraded airframes – cuts \$47.9 billion from FY2012-2022³⁵⁰
 - RQ-4 – termination of entire program both Block 30 and Block 40 systems, cutting a combined \$3 billion from FY2012-2022³⁵¹
 - C-27J – terminate program, cutting \$0.4 billion³⁵² with the potential to sell the 38 aircraft the Air Force owns for an additional \$3.61 billion³⁵³, totaling \$4.01 billion from FY 2012-2022
 - KC-135/ KC-X – upgrade 60 KC-135s to KC-135Rs, delay KC-X procurement until after 2016, cuts \$9.9 billion from FY2012-2022³⁵⁴

- C-130 – terminate Avionics Modernization Program – \$2.3 billion³⁵⁵ From FY2012-2022
- C-5A – retire 27 oldest aircraft
- C-130 – retire oldest 65 aircraft
- B-1B – retire all B-1B aircraft
- Air Wings- retire six fighter wings, reduce procurement of F-35A by 301 aircraft – cuts \$89 billion from FY2012-2022³⁵⁶
- Personnel – cut approximately 15,000 personnel- 5,900 active, 7,800 guard and 1,300 reserve – cutting \$1.064 billion from FY2012-2013³⁵⁷
- Cuts totaling - \$109.27 billion from FY2012-2022

Recommendation

The United States Air Force would benefit the most from structuring cut policies over the next ten years around the Tier II optional cuts listed above. By following this recommendation, the Air Force will largely be able to maintain capabilities to project power and deter enemies like Iran and North Korea from becoming belligerents. Due to the termination of expensive niche programs that this tier offers, the Air Force will be able to make sizeable cuts without losing capabilities that allow the USAF to successfully conduct wartime operations if a large scale conflict arises. With the continued use of successful UAS platforms like the Predator and Reaper drones, the USAF can conduct ISR and hunter/kill operations throughout the Middle East in the constant efforts to combat al-Qaeda. Due to the downsizing of the ground forces throughout the US military, the lift capacity of the Air Force can be reduced without harming overall lift capabilities. In consideration of the movement away from the Two War strategy framed by Secretary of Defense Panetta, the reduction of both fighter wings and procurement of fighter aircraft can further help the USAF diminish its impact on the overall defense budget. By retiring two fighter wings and reducing procurement of the F-35A by 220 aircraft, the USAF will not lose its abilities to deter and defeat aggression by any potential adversary. This is due to the recent advancement of weapons guidance systems that have allowed every fighter platform to

become more lethal and efficient in carrying out operations. By maintaining the F-35A program with decreased procurement, the USAF will allow itself to be better equipped with the most advanced weapons technologies and fighter aircraft in the world. The use of platforms like the F-35A will further help to deter the aggression of potential enemies and will enable the Air Force to effectively conduct missions against any enemy. This recommendation, combined with the overall recommendations of this task force, will exceed the limitations of the Budget Control Act's \$487 billion in cuts without the indiscriminate cuts that sequestration calls for. By making the calculated and controlled cuts this task force recommends, the USAF will be able to maintain the capabilities necessary to successfully protect national security interests.

Chapter 15. Department of the Navy | By Jordan Laramie

Chapter Summary

Key Policy Conclusions

The Department of the Navy can reduce its budgetary outlays while maintaining its core objectives by targeting its cuts towards the least critical areas of national defense strategy. More than 160 billion dollars can be removed from the budget within the next decade by trimming inefficient programs and returning to a rapid deployment schedule for remaining weapon systems. Despite the reductions purposed in this task force, the US Navy and Marine Corps would remain the largest naval and expeditionary force in the world, equipped with the necessary tools to achieve their principal goals.

Background

Reducing the impact of DoD on the overall federal budget has been an increasingly pressing issue on Capitol Hill. Budgetary outlays for the Department of the Navy have always been placed under close scrutiny because naval-based assets have proved instrumental in every United States military operation including the recent Libyan Civil War. Maintaining the industrial base also remains a key issue with Congressional leaders, as the necessary infrastructure to build these weapon systems continues to be paramount for soldiers serving overseas as well as the Americans workers needed to construct them. While defense hawks will contest to any abatement of defense spending, reasonable cuts are necessitated under the current fiscal standing.

Policy Considerations

The Middle East will remain the key threat priority in the near-term due to regional states' nuclear agendas, military and political instability, and US engagement in the War on Terror. At the same time, the Western Pacific necessitates attention due to sustained threats of nuclear aggression and emerging military tendencies. Accordingly, this task force has identified key states with the potential to demand US military intervention in the coming decade and the force structure necessary to surmount these opponents. Despite the combination of these conditions, reductions can be made without diminishing the Navy or Marine Corps' ability to deal with potential threats. Cutting unnecessary programs that can be procured at greater cost efficiency within current design architecture is the first step in reducing budgetary outlays. Deeper and more politically difficult cuts will be made to the troop size and the structure of the industrial base. These cuts are demanding, but attainable through proper restructuring procedures. Modifying the maintenance, training and deployment schedules of the fleet's surface and submarine vessels, aircrafts, and expeditionary systems can promote greater time spent underway and on-station. Considerations should also be undertaken to increase forward presence in certain theaters while repositioning elements of the fleet that will be more effectively deployed to counterbalance contemporary adversaries.

Key Recommendations

- Reduce the size of US Navy and Marine Corps surface and submarine vessels, aircrafts, expeditionary systems and troops in a way that maximizes US national security;
- Minimize security concerns by increasing the maintenance, training and deployment schedules for the entire fleet to support the core objectives of each branch;
- Maintain forward presence in the 5th Fleet Area of Responsibility (AOR) after the withdrawal of primary ground forces from Afghanistan in 2014 with Carrier Strike Groups (CSG);
- Explore an increased Expeditionary Strike Group presence in the region;
- Reposition one CSG from the 2nd Fleet AOR to the 3rd Fleet AOR to counterbalance PRC naval priorities and expand the US Navy surge potential in the 7th Fleet AOR.

Department of the Navy

The end of the “Two War” strategy marks an important turning point in the United States’ role in global security. Deficit reduction will have to be met in tandem with securing US military strategy. Reducing the force structure of the Department of the Navy (DoN) will change its ability to conduct operations in multiple theaters under current spending practices, but these changes should not be thought of as a reduction in its capabilities; rather, the DoN can find innovative ways to secure national security interests abroad at lower relative costs than those faced in previous decades. In particular, retracting the size of the defense budget will enable a leaner military force and provide the means to engage with greater agility in conflicts around the world.³⁵⁸ Prioritizing threats with the composition of weapon systems and troops necessary to face them is essential to these goals. As such, this task force has concluded that different cuts will be able to counter different threats. We have chosen the best allocation of resources to match purposed cuts as well as the threats they will be able to surmount. The various contingencies outlined in this proposal range from \$46 to \$264 billion during the next ten years and are comprised of reductions to the U.S. Navy (USN) and U.S. Marine Corps (USMC), sea-going vessels, aircraft, expeditionary systems and accompanying troop distribution during the Fiscal Years (FY) 2012-2022. Each of these cuts takes into consideration the scale and scope of potential threats while maximizing security and minimizing risk over the next decade.

US Navy Combat and Support Vessels

US Navy Fleet Reduction

As of February 16, 2012, the US Navy is comprised of 285 surface and submarine vessels which enable it to complete forward projection, deterrence, and humanitarian missions. This

number of ships is nearly the lowest level of the USN fleet since the nineteenth century but it still provides the US military with the greatest strength of any navy in history.³⁵⁹ Efficiencies in on-station time are being employed that enable this smaller force to remain present in multiple theaters around the world and provide cruise missile and aircraft support in a variety of operations. Although this fleet is small, in the FY2013 defense budget the Obama administration has proposed retiring nine vessels from the fleet while reducing procurement of another 12 by FY2017.³⁶⁰ Even greater cost savings can be attained through deeper cuts which will still allow the Navy and Marine Corps to achieve their core objectives. Reducing the total number vessels in the fleet by 12 percent% through FY2022 will continue to allow the USN and USMC maritime deterrence, power projection, and their ability to carry out humanitarian missions, but it will reduce the scope of these endeavors. Expanding current deployment schedules, finding efficiencies in maintenance operations, or increasing the amount of forward ported vessels are all ways that the USN and USMC could alleviate problems associated with such a reduction in the fleet. The Sea Swap program has increased destroyer on-station time by more than 20%,³⁶¹ the Blue/Gold deployment regiment used by the Ohio-class submarines increased their time spent underway by 15%,³⁶² and the forward deployment of the George Washington in Yokosuka, Japan allows for a 100% presence in the 7th fleet's area of responsibility (AOR). Savings proposed by these cuts to the fleet amount to \$50 billion dollars over the next decade.³⁶³ Reductions would result in the construction of fewer ships while retiring more vessels than the US Navy had originally intended under its current shipbuilding strategy. The proposed reduction of 35 vessels to the fleet by 2022 would also require fewer aircraft and personnel to support the fleet, which is concurrent with the proposals made by the Obama Administration.

Carriers

Although current defense spending strategy outlines a sustained 11-carrier fleet with an accompanying 10 air wings,³⁶⁴ after the completion of the USS Gerald R. Ford, procurement should be limited to the USS John F. Kennedy and future shipbuilding projects should be put on hiatus. Additional carriers beyond CNV-79 are not essential to USN strategy because the remaining 11 within the fleet have similar air strike and airlift capability. That being said, the production of these vessels remains essential to the preservation of the industrial base. Newport News Shipbuilding is the only manufacturer capable of producing the next generation of aircraft carriers, so that ability must be maintained in the near-term.³⁶⁵ While the Ford class carrier's A1B nuclear reactor will be able to support next generation programs including electromagnetic launch systems and rail gun technology, the need for these capabilities is more than a decade in the future and is not paramount in current fiscal conditions. Present technological ability and air lift proficiency is already greater than any naval force in the world, while the US fleet of carriers exceeds the number of all other naval powers combined. Especially apparent are the capabilities of rival carriers, notably China's, whose current forces can only hold half the tonnage of Nimitz class carriers.³⁶⁶ So while the Ford class carrier is able to exceed the capacities of modern US carriers, Nimitz class carriers already have an advantage over carriers in rival navies into the far-term. Cutting the next Ford aircraft carrier from its production cycle would save \$9 billion dollars³⁶⁷ while careful restructuring strategies could also generate reductions to the existing carrier fleet in order to achieve greater cost savings.

Abatement in the overall size of the fleet by one to two carriers would enable the USN to accomplish many of the central tenets of its Cooperative Strategy for 21st Century Seapower.³⁶⁸ By relying on joint efforts to combat threats around the world, the size of the current carrier fleet

would not be a requisite for continuous at-sea deterrence. Sea-based missions that were once thought to be achieved only by carrier support, such as the involvement of NATO forces and forward positioned US submarines and surface vessels in the Libyan Civil War, highlight that the carrier fleet can be mitigated if multilateral strategy is employed. These assets will remain vital to force structure, but the way in which they are deployed can become more efficient to adapt to future threats at a reduced cost. By reducing the size of the fleet, it also helps to mitigate the risk associated with emerging weapons systems such as the advent of anti-ship ballistic missiles.³⁶⁹ The proliferation of these asymmetric weapon systems puts the viability and safety of one the US Navy's greatest strategic resources at considerable risk in the far-term. While reducing potential risk, this strategy would also enable a sufficient amount of carriers to remain in the fleet to retain the Navy's core objectives. As the next one or two Second Generation Nimitz-class carriers enter their refueling and complex overhaul maintenance schedules, they can be placed on inactive reserve. A reduction of either magnitude would still embody the largest naval and mobile air wing force of any military in the world over the next decade. Operational efficiencies within this enhanced fleet can be found by changing the maintenance, training and deployment cycle from 24 months to 18 months or lengthening the deployment schedule of deployed servicemen through Congressional mandate.³⁷⁰ Either of these strategies would enable the carrier fleet to provide its current level of forward projection (one carrier in three different areas of responsibilities) despite reductions from the fleet. Projected cost savings from this program would range between \$15.5 and \$31 billion dollars over the FY2012 defense plan.³⁷¹

Submarines

Virginia Class Submarines

As aging Seawolf and Los Angeles class fast attack submarines (SSN) approach the end of their service lives they are intended to be replaced by Virginia class SSNs. To achieve this goal, the DoN is engaged in a multiyear procurement strategy to acquire two Virginia class SSNs during each fiscal year.³⁷² Cuts outlined in this proposal would amount to a 50% procurement freeze on planned Virginia class submarines through the FY2012-2022. By increasing efficiencies in the fleet's maintenance, training, and deployment schedules the US Navy will be able to support continued anti-submarine deterrence and surveillance efforts. The Blue/Gold deployment regiment could be applied to Virginia class submarines to increase time spent underway as well as initiating forward deploying on certain vessels like the guided missile and ballistic missile submarines stationed in Guam.³⁷³ Further advancements can be made by modernizing the existing attack submarine fleet as these ships enter their refueling cycles in the coming decade. Improvements could be found by installing new sonar equipment, updating Tomahawk missile launch systems, and redesigning hulls that would modernize the existing fleet at reduced cost of new procurement³⁷⁴. Although the Navy will have fewer submarines in the fleet, it will be able to implement more efficient programs to achieve the greatest utility from them under these guidelines.

US Navy and Marine Corps Aircraft

F-35 Programs

With the delays that have plagued the JSF program the US Navy has been forced to seek alternatives to its long awaited fifth generation airframe. One of these alternatives is to acquire existing fourth generation fighters to replace planes within Navy air wings and preserve its strike capabilities until the F-35C is ready for combat. Procurement of the F/A-18E/F at a 50% rate of

capitalization to planned F-35Cs would enable current air wings to remain at full capacity and maintain air supremacy during carrier operations over the next five years. This plan will save a total of \$8.4 billion dollars over the FY 2013-2017³⁷⁵. A procurement freeze at half of the expected level of new F-35Cs would still enable long range missions with higher maximum payload to strike strategic objectives. The role of F-35C aircraft would be limited under these projections for Navy aircraft strategy but they would remain an important asset in its arsenal.

Redesigns for the JSF program have put it incomparably behind schedule. The result has been an airframe that has not entered mass production despite the enormous fixed costs and time associated with its development. The Marine Corps' F-35B has caused the most significant problems due to project goals to make the design of all three variants as uniform as possible. By eliminating the F-35B from the airframe architecture, Lockheed Martin can focus on mass production of F-35A and C variants which have been nearly perfected. This alternative would save the Department of the Navy \$13.6 billion from FY2012-2022.³⁷⁶ Instead of procuring F-35B aircraft the Marine Corps can replace its stock of F/A-18C or AV-8 which, despite the lack of stealth technology, perform all of the same tasks at a lower marginal cost than their afflicted substitute.

The budgetary outlays for aircraft procurement over the next ten years will need to be adjusted to meet the reduction in the size of the carrier fleet. President Obama has stated that the role of the carrier demands maintaining the force structure at its current level, but efficiencies in the number of missions flown by aircraft on carriers can be increased to match a reduction in the number of aircraft that the fleet would be scaled back by. The number of sorties flown per aircraft per day can be higher than two, but during the first months of Operation Iraqi Freedom it averaged less than one.³⁷⁷ Carrier-based aircraft have increased the total number of targets that

they can attack per day, from 200 in 1997 to greater than 700 in 2005.³⁷⁸ This ability can be translated into a reduced number of air wings that perform at greater efficiency than previous generations of naval-launched aircraft. Additionally, naval-launched tactical aircraft cost twice as much as their land-based counterparts on a per-mission basis³⁷⁹. Current plans are to replace a portion of the existing carrier air wings with F-35 Joint Strike Fighters. In addition to the savings of scaling back the carrier fleet size and the two air wings that they hold, it would also allow for 60 fewer F-35C variant planes to be produced over the FY 2012-2022 at a savings of \$12 billion dollars.³⁸⁰

Unmanned Aerial System (UAS) Programs

The DoN currently employs the RQ-4C Global Hawk, RQ-7 Shadow, and MQ-8B Fire Scout as part of its intelligence, surveillance and reconnaissance (ISR) UAS programs. ISR is an integral part of ensuring communication and information between sea, air and ground forces in hostile territory. Although critical to overseas ISR missions, reductions in the procurement of RQ-4C UASs can be found in replacing it with the Predator C variant. The payload, maximum range, and surveillance technology are nearly identical but the Predator C costs 42% less than the Global Hawk.³⁸¹ Marine Corps' MQ-8B remains one of the only vertical take off and landing (VTOL) UASs in its armament that can manage a successful mission rate. Due to these factors, the Fire Scout should be retained at its current levels to maintain ISR capabilities on amphibious landing crafts. The Navy has been developing a VTOL tactical UAS since 2000 but the program has been drastically behind schedule. Eliminating the program would save \$1.6 billion dollars over the next decade.³⁸² Due to the importance of ISR programs, these savings could be redirected towards existing systems that can be launched from either Navy carriers or Marine

Corps amphibious assault ships. One example is expanding the RQ-7 Shadow program—a UAS that is 60% of the cost of an RQ-4C and can carry out many of the same roles.³⁸³

US Marine Corps Expeditionary Systems

MV-22 Osprey Program

Expeditionary missions require a vehicle to transport troops from sea-going vessels to shore as quickly as possible. Despite these requirements the MV-22 Osprey has not proven that it can achieve that goal reliably, safely, or with the same cost efficiency as current helicopters. From a technological standpoint the MV-22 can fill an important role for the US Marine Corps due to its speed and high-altitude flight, but it has not proven that it can put troops on the ground better than conventional fixed-rotor aircraft. To add to this, the acquisition costs of the Osprey have skyrocketed by nearly 150% over the program's 26-year history while the procurement strategy has shrunk by half.³⁸⁴ The Obama Administration has decided that it will restructure the procurement strategy of the MV-22 over the coming years, but these cuts should be extended.³⁸⁵ Under this program the Marine Corps are purchasing an aircraft that doesn't perform the goals that were planned, while receiving fewer aircraft at a greater expense than previously projected. Eliminating the MV-22 program at its current level of 245 tilt-wing aircraft and replacing the scheduled 195 aircraft with more reliable and less expensive alternatives, such as the MH-60 Seahawk, would save the DoN \$12.7 billion dollars over the FY 2012-2022.³⁸⁶

Maritime Prepositioning Force (Future) (MPFF) Vessels

The DoN's latest prepositioning vessel is a support craft intended to serve a Marine Corps Expeditionary Strike Group (ESG) by providing it with the necessary supplies to last 30

days unassisted. With the current stock of Air Cushioned Landing Crafts (LCACs) and current generation prepositioning vessels it would enable Marine Corps to match the tonnage of the MPFF.³⁸⁷ These two preposition systems can be used in a “high-low” mix that can be adjusted to meet the needs of the battlefield they are encountering. LCACs are faster than their prepositioning vessel counterparts, but hold fewer supplies, so supply operations can be contingent on strategy rather than budgetary outlays. The Department of the Navy would be able to save \$17.3 billion dollars over the next ten years if the MPFF program was eliminated and the current stock of prepositioning vehicles were used in their place.³⁸⁸ This option would reduce wasteful spending and allow for ESGs to effectively breach enemy territory through amphibious assaults while having access to support vessels.

Marine Amphibious Combat Vehicle (ACV)

While the ACV was designed to engage in amphibious assaults without air support, it is unlikely that such an engagement would occur in the near term. ESGs are launched in tandem with USMC amphibious assault ships and potentially USN carriers in the same AOR.³⁸⁹ Therefore, there are redundancies in the acquisition of ACV, not only due to the strategic problems of how amphibious assaults occur but also the practicality of it being used. The costs of this vehicle exceed its expected benefits as well as the strategy of its potential engagements. The current mixture of combat and support weapon systems will still allow ESGs to perform their strategic role while the costs incurred by the DoN can be reduced. The preceding program, the Expeditionary Fighting Vehicle, was 14 years over schedule and 160% over budget before it was canceled early last year.³⁹⁰ If the designs between the two programs change significantly it could continue the trend of under performing weapon systems that are procured at exorbitant costs.

Eliminating this program would save the Department of the Navy \$11 billion dollars over the next decade,³⁹¹ so that cost effective alternative strategies can be pursued

US Navy and Marine Corp Active Duty and Reserve Troop Levels

Navy Force Reduction

Under the President's Budget the Navy would be reduced by 6,200 sailors, or two percent of its current size.³⁹² A downsizing of this amount will not impede the ability of the US Navy to continue support operations in multiple theaters, nor will it restrict its ability to maintain forward presence. These objectives are essential to future US Navy strategy as they are highlighted in the USN's Cooperative Strategy for 21st Century Seapower.³⁹³ As military operations begin to wind down in the Middle East there will be a shift towards the Western Pacific to act as a counter balance to the Chinese military buildup, but only a modest amount of troops are necessary to achieve this goal. With the 5th CSG home ported in the 7th Fleet's AOR and forward ported SSBN and SSGN in Guam, troop restructuring needs to be carefully examined. The Middle East should remain the central strategic focal point due to the threats faced from Iran, Pakistan, and the US military's continued efforts in Afghanistan. However, if greater cuts were to be made it would force a revisal of these strategic goals. Cuts could only be achieved through restraining the USN's continuous deterrence policy. Cutting five percent of the force size is approximately the personnel necessary for to operate two carriers, their air wings, along with further fleet reductions mentioned above. This proposal will create more than \$19 billion dollars in savings over the next decade.³⁹⁴

While the present strength of US Navy reserves stands at 66,200,³⁹⁵ this number will need to be bolstered over the course of the next decade to deal with potential threats as they emerge.

To accomplish this objective, training activities will need to be incorporated more heavily than they currently are to prepare Navy reservists for actual combat operations if the deepest cuts are made to US national security interests. Annual spending on USN recruiting numbers in the tens of millions of dollars. This funding could be expanded to help attract potential reservists and increase the reserve force. FY2012 expenditures on Navy reserves amount to \$2.24 billion. A 2 % increase in reserve force structure would result in 79,440 Navy reservists at an additional cost of \$.46 billion per year for the next decade, for \$4.48 billion in total costs.³⁹⁶

Marine Corps Force Structure

Projections for the future of the US Marine Corps have been developed to promote agile security strategies that can be employed around the globe. Accordingly, the Obama administration has requested that the number of soldiers in the USMC serving in active duty be reduced substantially over the next decade. Reductions in the total number of overseas and domestic troop levels of the USMC can be considerable, but they must be made in the right areas in order to remain capable of achieving its core objectives of rapid response in amphibious terrain. Important to the strategic element of these downsizing efforts is the emergence of the Asia-Pacific front, with North Korea and China playing a vital role in national defense strategy. While active duty troop levels will be scaled down in Europe, the significance of a nuclear-capable North Korea and the rising Chinese military cannot be ignored. Adding to these issues is the threat of states in the Middle East which present potential conflicts that cannot be overlooked. Different levels of force restructuring will inevitably create strategy conflicts, so it is critical to find a mixture of active duty troops that meet these requirements. President Obama has suggested a 10% reduction in Marine Corps forces over the next ten years which would amount

to almost \$20 billion dollars in savings over the next decade.³⁹⁷ If the situation surrounding the nation's deficit worsens, the number of soldiers could be reduced by twice that amount to generate more than \$40 billion in savings over the same time period.³⁹⁸ Force restructuring would have to incorporate the Pacific in a more substantial way than is already being implemented so that land forces can achieve their strategic goals.

With the restructuring of USMC soldiers, the surge potential needs to be maintained at levels that would enable troops to react to threats that are within its strategy objectives. Present reserve levels are 39,600³⁹⁹ and if a reduction in active duty troops were to be enforced at the highest level of cuts purposed, reserves would need to be increased significantly. Recruitment expenditures account for a relatively small portion of the funding for the Marine Corps as a whole. Additional funding could be channeled into recruitment activities to help increase the size of the reserves and support future military engagements. FY2012 expenditures on Marine reserves amount to \$.678 billion. A 20% increase in force structure would result in 47,520 reservists at a cost of \$.135 billion per year and \$1.35 billion in total costs over the next decade.⁴⁰⁰

Force Structure Options and Strategy Implications

In the following section these programs will be organized into tiers to help describe the savings of each program over the next decade, as well as see their significance to national defense interests.

Tier One (Obama/Panetta Cuts)

- Removal of 7 Arleigh Burke-class destroyers from the fleet \$1.5 billion
- Reduce Procurement by 10 to 12 Navy Vessels \$13.1 billion

- MV-22 Osprey restructuring \$1.7 billion
- Reduce Troops Levels by 6,200 Sailors and 20,000 Soldiers +\$30 billion

Total Savings: +\$46.3 billion

Tier Two (Tier One + Cuts Recommended by this Task Force)

- 1 Carrier and Air Wing Reduction \$15.5 billion
- Virginia-class Submarine Procurement Reduction \$19.0 billion
- F-35 Program Restructure \$30.0 billion
- UAS Program Restructure \$1.6 billion
- MV-22 Osprey Program Elimination \$12.7 billion
- Maritime Prepositioning Force (Future) Program Elimination \$17.3 billion
- Amphibious Combat Vehicle Program Elimination \$11 billion

Total Savings: +\$153.4 billion

Tier Three (Tier One & Two + Sequestration Cuts)

- Navy Fleet Reduction from 285 to 250 \$50.0 billion
- Carrier and Air Wing Reduction by 2 \$31 billion
- Reduce Troops Levels by 16,285 Sailors and 40,420 Soldiers +\$66 billion
 - Increase in USN and USMC Active Reserve Size -\$5.93 billion

Total Savings: +\$264.5 billion

The Middle East

Threats in the Middle East will remain predominant over the next decade as Iran's nuclear program continues to be a point of contention that expands beyond the region; uncertainty within Pakistan's political and military structures will determine its role as a nuclear

power in the area; and security missions in Afghanistan will persist after US withdrawal in 2014. The threat potential in this region will remain the highest of any AOR in the Navy or Marine Corps' role in global security. Accordingly, it will be necessary to continue the Navy strategy of forward deployment of CSGs in the 5th Fleet's AOR in the near-term. A reduction of one carrier to the fleet will not impede this ability; it will only affect the Navy's surge capacity. These capabilities can be corrected by finding operational efficiencies outlined above. A reduction in SSNs will be able to accommodate surveillance and support activities as long as similar regiments are increased to maximize time spent underway. By reducing the amount of JSF aircraft that are scheduled and replacing them with fourth generation airframes, it will enable naval launched aircraft to retain their strike capacity against hostile targets throughout the region. Incursion into Iran or Pakistan by Marine Corps forces would be heavily contingent on the ability of prevailing levels of prepositioning systems and current expeditionary vehicles, so the reductions made by our task force will also create acceptable levels of program cuts without sacrificing the capability to deal with them.

The Western Pacific

The Western Pacific presents an interesting challenge to the balance of power between emerging powers and conflicts that have been present for the last half century. While China's influence in the world has greatly expanded over the past three decades, its economic interdependence with the United States remains integral to military operations that it might choose to pursue. The restrictions placed on Chinese military action by the US Navy should inhibit acts of aggression against the US over far-term projections. If they do not, the force structure that has been presented by this task force would be able to counter Chinese military

efforts if they become viable threats for the future of US national security. While the Chinese Navy is large in number, it doesn't compare to the US Navy's nuclear submarine force, the number of vertical launch systems employed by its surface vessels, its mobile air wing force, or its expeditionary capabilities even in our purposed levels. During disputes between the PRC and Taiwan in 1996, the US Navy sent two CSGs to deter aggression by the Chinese military. While trade was disrupted for several weeks, no military action was enacted. The presence of CSGs is a powerful deterrent to hostile aggression and their deployment capacity will be retained under our Tier Two strategy. North Korea remains a constant threat due to its efforts to obtain WMDs to terrorize neighboring states. As conditions in North Korea have worsened over the last decade, their propensity to adopt these tactical weapon systems has increased. Concurrently, as conditions in the country have deteriorated they continue to enter into multilateral negotiations to dismantle such systems. If the North Korean military were to use these political assets it could cripple the nation's people and its economy due military confrontation and a lack of foreign aid normally generated from these talks. The potential threat from the DPRK is therefore low on the near to far-term contingency strategies within the USN and USMC that have been proposed within this task force. If North Korea would strike neighboring states, nuclear retaliation, Tomahawk missile strikes, ESGs incursion and airstrikes from naval-launched air wings would be an imminent threat that its military would not be able defend against.

Weighing the threats of different adversaries around the world leads to a specific conclusion about the role of the DoN in the next decade: targeted reductions in its force structure would maintain its capabilities into the far-term. These cuts align within Tier Two, between the limitations of the Budget Control Act's \$487 billion dollar target, but below the constraints of \$750 billion dollars of sequestration. In line with changes to the "Two War" strategy outlined by

Secretary of Defense Panetta earlier this year, the US Navy and Marine Corps will continue their core objectives while also reducing their effect on the deficit. Accordingly, it will provide the United States with the greatest force structure at the lowest absolute cost, without sacrificing security in the process.

Recommendations

- Reduce the size of US Navy and Marine Corps surface and submarine vessels, aircraft, expeditionary systems and troops in a way that maximizes US national security;
 - Minimize national defense risks by increasing the maintenance, training and deployment schedules for the entire fleet to support the core objectives of each branch;
- Maintain forward presence in the 5th Fleet Area of Responsibility (AOR) after the withdrawal of primary ground forces from Afghanistan in 2014 with Carrier Strike Groups (CSGs);
 - Explore an increased Expeditionary Strike Group presence in the region;
- Reposition one CSG from the 2nd Fleet AOR to the 3rd Fleet AOR to counterbalance PRC naval priorities and expand the US Navy surge potential in the 7th Fleet AOR.

Chapter 16. Department of the Army | By Erika Nicks

Chapter Summary

Key Policy Conclusions

The Army can transform into a leaner, more lethal ground force capable of defeating one major adversary in one theater while denying aggression elsewhere. Despite budget cuts, the Army will preserve the capabilities necessary to continue to achieve its strategic goals: an end strength ready for any war or aggression, a solid forward presence to keep deterrence or provide quick response, a reliable and ready reserve component, and minimal equipment program cuts that will maintain all of the current modernizing capabilities.

Background

This past decade, the Army's end strength stretched to extreme limits as the US made its attempt to handle two prolonged operations in Iraq and Afghanistan at once. As of fiscal year 2012, the Army's active forces still total 562,000 soldiers. President Obama's plan is to lower the budget over the next five years by reducing the Active Component (AC) to 490,000—approximately 7,000 troops greater than just prior to 9/11. However, as the nature of threats to the US evolves, the role of forward deployment is becoming much less cost-effective and less necessary. The new strategy is to confront aggression with air and naval expeditionary forces and Special Operations Forces. Thus the Army's role in the near future will shrink more and more. During the recent wars, the Army's ground forces have shown that they have reached their capable limit due to shortages in troops. Although the Reserve and Guard worked as a surge force, they were unprepared due to lack of training and equipment. The demand for budget cuts has put the Army in a position where it must realign itself to better prepare for future threats, maintaining its strength with fewer boots on the ground.

Policy Considerations

With two wars coming to an end, the Army will no longer need as many boots on the ground to meet its new strategy objective, which is to confront one major adversary while defeating aggression of another. Reducing troops provides the greatest savings at the lowest risk, in contrast to making cuts in equipment. Additional troops are always able to be quickly trained, whereas cuts in modernizing capabilities will restrict the development of creating safer and more efficient equipment in the future. Because of the US shift to using expeditionary and smaller ground forces, fewer ground forces will in no way affect the stability of the regions where the US is currently present. Our task force further suggests that with the shrinking of the force, immediate changes should be made to retain combat-experienced soldiers in the Reserve Component, to create a readier surge force that will not cause troops strains in the future.

Key Recommendations

- Shrink the Active Component to the level that is necessary to capably handle one ground war as large as the war Afghanistan plus one smaller aggression;

- Reduce the size of forward deployment in Europe, Asia-Pacific and the Middle East;
- Increase the Reserve Component, including the Individual Ready Reserve by retaining combat-experienced soldiers from the two wars;
- Selectively terminate and restructure current equipment programs, but maintain modernization capabilities as much as possible, including for the Reserve.

The US Army

Force structure realignment for the Army has become a necessary means not only of reducing the excessive expenses of defense, but also adapting our forces to the current and potential threats they will be expected face. By proposing the cuts in this section, we aim to follow Secretary of Defense Leon Panetta’s vision of an Army that is leaner, more lethal, and capable of “defeating one major adversary in one theater while denying aggression elsewhere.”⁴⁰¹ The focus of this proposal is to preserve the necessary capabilities the Army needs to achieve its future strategic goals: an end strength ready for any war or aggression, a solid forward presence for deterrence or quick response, a reliable reserve component, and an Army that still maintains modernization programs in its equipment procurement.

We recommend that for the fiscal years (FY) 2012-2021, active troops will maintain a “leaner” force at 470,000 active soldiers and a potential savings of \$132 billion over ten years. These savings go beyond the Obama Administration’s plan which is to make a modest reduction of forces to 490,000⁴⁰² at an estimated savings of \$101 billion per year. However, our recommended cuts still ensure greater security compared to the smaller force that may be required in the case of sequestration.⁴⁰³⁴⁰⁴ Under sequestration, we suggest an active force of 443,000 with a larger Reserve, bearing \$151 billion in savings.

General Numbers

The following figures illustrate the present end strength and budget size of the Army:

Authorized End Strength as of FY2012:⁴⁰⁵

US Active Component – 562,000 (Prior to 9/11—482,000).....49% of total Army Force

US Army Reserve – 205,000

Army National Guard – 358,000.....Combined (563,000): 51% of total Army Force

2012 Army Base Budget Request:⁴⁰⁶

Total –\$144.9 billion

Military Personnel, Army*–\$78.33 billion

Military Personnel, National Guard* — \$14.66 billion

Military Personnel, Army Reserve*—\$7.50 billion

Procurement – \$22.15 billion

RDT&E --\$9.7 billion

*Operations and Maintenance Included

End Strength for a Future War and Aggression

This past decade, the Army's end strength stretched to its limits as the US attempted to handle two prolonged operations in Iraq and Afghanistan at once. As of FY2012, the Army's active force totals at 562,000 troops, 90,000 of which are still fighting in Afghanistan. The highest number of troops deployed for Iraq and Afghanistan was 195,000 troops, while over the years it averaged above 150,000. As the war in Afghanistan dwindles, the greater number of these active troops will no longer be necessary to fulfill the DoD's less ambitious goal in the future, which is to be able to defeat one major adversary while denying a smaller aggression elsewhere. The Obama Administration has made no indication of the end strength necessary to meet these goals and has only broadly suggested reducing the Active Component (AC) by 72,000 for a total of 490,000 troops by FY2017—approximately 7,000 troops greater than prior to 9/11.⁴⁰⁷

Using the war in Afghanistan as a benchmark, we suggest that the US should have only as many as 100,000 soldiers deployable at any time for a future aggression, not only to manage wartime costs, but to reduce strains on the deployable number of troops. The number of soldiers deployed at one moment should be capped to the approximate amount of soldiers in Afghanistan and this number should not be expected to be exceeded in future deployments. Although Iraq

required over 150,000 soldiers, this was attributed to the very little international support the war received. In Iraq, coalition forces comprised at most 14% (25,300) of total troops while the war in Afghanistan received as much as 30% (40,000 out of 130,000) of troop support from other NATO forces.⁴⁰⁸⁴⁰⁹ The war in Iraq has led to excessive economic and troop strains as a result of fighting a war that received very little international support, and it is a scenario that should be avoided at all costs in the future. In order to reduce strains put on US soldiers, the US must rely on its allies to provide additional support for operations. Much like Afghanistan, any potential conflict with North Korea and Iran is likely to involve the international support the US needs to confront these two countries. If North Korea was to start aggressions, South Korea and Japan would be able to provide the bulk of the necessary forces. If Tehran were to aggress by closing the Strait of Hormuz, the UK, other western allies, the Gulf Cooperation Council states, and possibly Asian oil consumers whom have also signaled discomfort over Tehran's threat should also be present to provide support.⁴¹⁰

Nonetheless, even with the support of allied forces there are other factors that will affect the readiness of a force for war. In Afghanistan, the US faced tremendous troop shortages due to the unexpected length of the war, leading to redeployments and stop-loss.⁴¹¹ By 2008, the Army tapped into 12% (14,805) of its Reserve/Guard and 2,000 troops from the Individual Ready Reserve.⁴¹² The size of the force was required to expand in part because the quality of each soldier had come to decline. Troops were mentally unstable and the Reserve Component did not have equal preparedness as active forces.⁴¹³ In order to prevent similar strains in the future, the Army must focus on: 1) preventing prolonged war or wars (as indicated in its policy objective), 2) retaining an experienced Reserve Component as a surge force (see section on Reserve), and 3) maintaining a large enough Active Component (AC) to handle initial stages of conflict.

Handling the initial stages of conflict requires having a steady deployment rotation ratio of 1:3 (or greater), where one-third of troops are placed in combat, another third are in training to go to combat, and the final third are leaving combat to recover. If the Active Component maintained 100,000 active troops deployable for combat, this indicates a full rotation of 300,000 troops at 100% capacity. Although deployment times and troop numbers vary, this could allow a successful deployment of 100,000 soldiers per year for three years, 50,000 soldiers per year for six years, or a deployment of 25,000 soldiers per year for twelve years without resorting to redeployment.

However, there is one caveat to be aware of. According to 2010 reports by the US Army, the undeployable rate of active troops reached 14.5% and is expected to increase to 16% by 2012. Some troops are considered “not available” to be deployed because they are undergoing special training, are in school, or in transit between assignments. The largest cause for undeployable troops is the psychological stress caused by redeployment to combat in the Middle East.⁴¹⁴ In order to maintain a full capacity of 300,000 soldiers, the percentage of undeployable troops should be considered. We suggest that with the help of investments in greater therapy for soldiers, the Army should target undeployable rates of 14% or lower. With the incorporation of this additional constraint, the total Active Component (AC) that the Army can expect to pool from during conflict would be approximately 345,000 soldiers. On the other hand, if the Army were to seek larger cuts to troop levels in the case of sequestration, an undeployment rate as low as 10% must be targeted if at all possible, making the total force 330,000 soldiers. The Army should also maintain an additional 60,000 soldiers ready to fight a smaller contingency or aggression.

Under our proposed Tier 2 cuts, the total force will sit at 405,000 soldiers. Under the greater Tier 3 cut, with a 10% undeployment rate the force becomes 390,000. Our recommended cut and the cut for sequestration both fall approximately 100,000 less than the current 498,000 active troops that are rotated and deployed to and from the US.⁴¹⁵ Expecting that the US will no longer participate in two simultaneous major aggressions, this is an appropriate number to cut. Despite this drastic decline in troops, the Army will still maintain stronger and more lethal capabilities after these two wars, now becoming the most combat-experienced Army in the world, including soldiers in the Reserve.

Changes: Reduction of approximately 93,000-108,000 active soldiers

Estimated Savings: \$12.1-\$14 billion in one year / \$121-140 billion over ten years

Forward Deployment

The US's strongest form of deterrence and ready response to conflict has been achieved through its forward-basing component throughout all regions of the world: Eastern and Western Europe, Asia, Africa, and the Western Hemisphere. As the nature of threats faced by the US evolves, forward deployment is becoming a much less cost-effective and less necessary strategy.

Europe

Secretary of Defense Leon Panetta proposed that two out of four brigades be removed from Europe and 7,000 troops be converted to continue rotational deployment from the US. These plans are not intended to reduce the current end strength of 42,000 soldiers in Europe, so much as to rebalance it. According to Congressional Budget Office analysis of possible basing scenarios for Europe and Korea in 2004, having unaccompanied one-year tours in Europe versus

the current accompanied 3-year tours will actually make costs increase by \$75 million a year, on account of having to pay three times as many soldiers to fly to Europe every year. Our suggested cut is to reduce troops by 7,000-10,000, leaving 32,000-35,000 in Europe and cancelling rotations altogether. The role of ground forces in Europe has declined. Because these forces in Europe do not serve to deter any particular threat in the region, all troops can readily be deployed or utilized for missions elsewhere. The benefit of maintaining these troops within Europe as opposed returning them to the Continental US (CONUS) is that it will allow troops to maintain joint training capabilities with European counterparts, as well as to continue plans to join NATO's rapid response force.⁴¹⁶ As cuts get underway, increasing capabilities amongst regional allies will be a new focus for the Army and the DoD as a whole. While President Obama's plan may potentially incur extra costs of \$75 million a year, our proposed cuts can offer \$650 million to \$1.3 billion savings a year.

Changes: Cut active forces by 7,000-10,000

Estimated Savings: \$91 million - \$1.3 billion in one year / \$9.1-\$13 billion in ten years

South Asia and the Middle East

The Middle East is and will still remain a hot spot for crises, where temporary troop presence over the next five to ten years may still be necessary. As the US makes plans to withdraw from Afghanistan over the next two years, Iraq and Afghanistan will need temporary assistance to train their security forces. We propose that 2,000-8,000 troops be temporarily stationed in the region or in Europe as long as FY2021, in addition to the 800 soldiers currently stationed throughout North Africa, Near East, and South Asia as of September 2011.⁴¹⁷ Neither President Barack Obama nor the DoD have indicated how many troops are intended to stay in the

region, but as of January 2012, 15,000 active soldiers have moved out of Iraq and stationed in Kuwait.⁴¹⁸ The purpose of maintaining 2,000-8,000 troops is to respond to any possible security collapses in Iraq and Afghanistan that may occur after the war, but another purpose is to allow an immediate response to military confrontation with Iran, should Tehran decide to close the Strait of Hormuz. A smaller number of ground forces and a larger navy power may be necessary to confront this threat. Although Pakistan is assessed as only moderately likely to lead to conflict in the Strategy section of this report, such an occurrence would most likely be dealt with by Special Operation Forces (SOF) that have already been playing a prominent role in the current dealings with Pakistan. In the next decade, this temporary stationing of troops will increase costs by \$260 million to \$1 billion a year, but it is expected to not persist past 2021.

Changes: Temporarily maintain additional 2,000-8,000 troops in Kuwait or surrounding regions

Estimated Costs: \$260 million-\$1 billion per year / \$2.6-\$10 billion in ten years

East Asia

Although the DoD will maintain a focus on Asia, in addition to the Middle East, ground forces can still potentially decline in the region. The nuclear and missile threats of North Korea, as well as China's growing investments in its military suggest a US strategy focused more on expeditionary power projection than forward deployment of soldiers. This puts the Army in a better position to shrink ground forces in Asia, while letting other capabilities grow. US forces in both South Korea and Japan total 22,000 Army soldiers, 4,000 Navy troops, 21,400 Air Force troops, and 17,300 Marines.⁴¹⁹ The number of US soldiers in South Korea shrank tremendously over the past decade when 12,500 of these soldiers were deployed to surge more troops in Iraq.⁴²⁰ Despite this, another drawdown phase can be accomplished by cutting a modest 2,000-

5,000 troops from South Korea and Japan, which would save \$26-65 million per year. The purpose of US troops in the Pacific region is to play a supportive role in defending South Korea from its Northern counterpart; US forces are thus only intended to complement South Korea's already built-up military force comprised of 520,000 soldiers, 95,000 Navy and Marine Corps troops, and 65,000 Air Force troops.⁴²¹ As addressed in the strategy section of this task force report, any US confrontation with North Korea will most likely entail nuclear and missile threats that cannot be challenged with ground forces. In the case of China, the US maintaining greater naval and anti-ballistic capabilities in the region will serve a more useful purpose than ground troops.

On top of troop reductions, tour normalization in South Korea should also be cancelled, if not selectively implemented, to reduce costs. Although this influences forces from all branches of Defense, it pertains to the majority of troops that are soldiers. Infrastructure for 28,500 personnel and 55,500 dependents has been set to be built by 2020. By allowing longer tours, it is said to help reduce the total time that troops are separated from their families as well as allow long-term training so troops can be deployed to other regional and global contingencies.⁴²² Commander of US Forces Korea Army Gen. Walter Sharp believes that bringing families would send a "huge deterrent message to North Korea."⁴²³ From another perspective, allowing these families implies that a growing stability is spreading on the peninsula. Instead of paying more for tour normalization to mark this stability, the US Army should alternatively cut back on its troops. By cancelling the normalization project, the DoD can save an estimated \$5.1 billion through FY2020 (and \$22 billion through FY2050).⁴²⁴

Changes: Cut active forces by 2,000-5,000; cancel tour normalization

Estimated Savings: \$26-\$65 million in one year / \$7.7-\$11.6 billion in ten years

National Guard and Reserve

In the Army's "Action for 2012" Report, the Army National Guard and Reserve are described as forces that will transform to progressively "augment and reinforce" the Army's Active Component.⁴²⁵ Prior to the wars in Afghanistan and Iraq, the Reserve Component (RC) never played such an active role in deploying its troops since Operation Desert Storm. The strain of handling two wars put the US at a greater necessity to pool extra forces from the Reserve and Guard. Unfortunately, the level of preparation in training and the quality of equipment of the RC was not enough to carry out the duties of the active forces.⁴²⁶

Under pressure to reduce the budget, the Army has agreed to cut 5,000 troops from the National Guard by 2017. However, instead of reducing troops, the Reserve Component should grow its surge force capacity to balance the shrinking active force. Moreover, it is becoming much more crucial to have a Reserve Component that is better prepared and with better training to replace active forces when needed. If we total the recommendations laid out in the sections above, the future Active Component will be 383,000 to 425,000 soldiers, which is 57,000 to 99,000 soldiers less than the number active just prior to 9/11. Rather than these reductions, we recommend that the Reserve Component increase its surge force by as much as 40,000, setting the total Reserve Component at 563,000-603,000 soldiers. Because the cost per soldier in the Reserve is approximately 30% less than that of active soldiers, it would cost \$1.6 billion per year as opposed to \$5.2 billion if they were in the Active Component.⁴²⁷ However, benefits of major transformations in the Reserve Component are not fully reflected merely in fiscal benefits. Not only could there be 40,000 more soldiers, but these soldiers would be pooled from the combat-experienced active forces that may be cut from the active force. The Reserve has more wartime

experienced soldiers than it has ever had since 2001, and by retaining these soldiers the Army will become the “leaner” and more “lethal” force that Secretary of Defense Leon Panetta intends for the future.⁴²⁸

Readiness does not just end there. In addition to retaining as many former troops on the Reserve—the specific name being “Selected Reserve”—the Army should focus on expanding the Individual Ready Reserve (IRR) that will potentially serve as a second back-up for active forces. The IRR are inactive Reservists that do not do training and are former active duty or reserve personnel who have yet to serve 8 years of mandatory service obligation (MSO).⁴²⁹ During the war in the Middle East, strains in troop numbers caused the Army to deploy 5,700 IRR out of the total 78,000 that exist.⁴³⁰ Although the Army requested twice as many as were deployed, many IRRs chose to delay their service because such a request was largely unexpected. In order to increase preparedness, the Army should reassert the necessity of the IRR’s potential strength and retain as many war-time experienced troops in the IRR if not in the Selected Reserve.

It is important to stress that on top of reducing the active strength only to what is necessary for handling immediate aggression and conflict, the Reserve Component will become the “dormant but ready” force that the Active Component can rely on to pool more soldiers. Over the past decade, recruitment levels for the Reserve and Army have not reached authorized levels, most likely because of the increase in Reservists being deployed for war. In order to retain the necessary Reserve Component, the Army should raise up-front incentives that will be reflected in the Army’s recruitment costs.⁴³¹ Although these will add additional costs to the budget, these costs will in no way be larger than the cost of unpreparedness.

Changes: Increase Reserve Component 0 to 40,000 soldiers

Estimated Costs: Up to \$1.6 billion per year / Up to \$16 billion in ten years

Equipment

Despite budget cut demands, the Army is and should continue to maintain modernization capabilities by preserving as many equipment programs as possible. There are greater savings and fewer drawbacks to reducing the force versus cutting equipment programs. While cutting forces can easily be reversed by recruiting and training soldiers within one to four years, equipment must continue to be up-to-date in order to protect and empower soldiers while facing hybrid threats.⁴³² Our recommendation is to stick to the \$5 billion proposal by the Army to terminate and restructure certain programs over the next five years. Even while the Active Component shrinks, the equipment meant to grow the Army active force can instead be shared more generously with the Reserve and Guard to have access to modern equipment to train at home for contingency or crisis.⁴³³

According to military analyst Loren Thompson from the Lexington Institute, “anything affordable can’t protect troops.”⁴³⁴ Although large discussions have been made to cancel programs such as the Joint Light Tactical Vehicle (JLTV) and Ground Combat Vehicle (GCV), the lowered procurement costs and the vehicles’ safety and operational pluses maintain great incentives for the programs to be continued. The large drive is to produce new vehicles that can protect against the ever-increasing incidents with Improvised Explosive Devices (IED) and roadside bombings.⁴³⁵ The Joint Tactical Radio is also piling up in costs, but the potential that it has to improve communication within and between military forces suggests it should continue. With these new programs continuing, the Army’s major savings in equipment can come from cancelling the recapitalization of older equipment and purchases. However, only so much can come out of these savings.

The \$5 billion suggested cost cuts includes cancelling the Humvee Recap program in order to continue the production of the JLTV with a savings of \$900 million, saving \$1.4 billion by buying the Family of Medium Tactical Vehicles (FMTVs) at an earlier date than planned, \$1.2 billion for cancelling the Enhanced Medium Altitude Reconnaissance and Surveillance System, \$500 million for cancelling the Mounted Soldier's Wearable Kit, and \$400 million for cancelling Joint Precision Approach and Landing Systems (JPALS).⁴³⁶ According to Barbara Bonessa, the Army's deputy budget director, nearly 100 programs are being restructured or deferred.⁴³⁷

If the Army is to prepare for the even greater budget cuts of sequestration, suggested cuts would be the Global Hawk program (a high-altitude unmanned aircraft vehicle) and delaying or cancelling half of the Army's procurements in three helicopters: the UH-60 Black Hawk Helicopter, CH-47 Chinook Helicopter, and AH-64 Apache Helicopter. The Global Hawk is set to replace the UAV U-2 that was made in the 1950s, however, both planes' ability to fly over targets do not differ so much. The U-2 can stay aloft for 20 hours while the Global Hawk is capable of staying slightly over 24 hours.⁴³⁸ The three helicopter programs have the most expensive procurement costs, ranging between \$1 billion and \$1.5 billion in investments just for FY2012. The purpose of these helicopters has been geared towards the Army Modernization Plan; however the DoD in its FY13 Budget Request Overview states that these are entering the force before they are needed. These programs can be deferred until the Army can further justify how they are geared towards certain threats in the near future.

Changes: Same as President Obama's Plan

Estimated Savings: \$5 billion in five years

3-Tiers

To summarize the three levels of restructuring proposed in this chapter:

Tier One

Have a total active force of 490,000 (13% reduction):

One Year / 10-Years

- Reduce active forces by 72,000 (\$9.4 million / \$94 billion)
- Cut 5,000 Guard troops (\$215 million / 2.2 billion)
- Terminate and restructure equipment programs (\$5 billion in ten years)

Total Savings: \$9.6 billion / \$101 billion

Tier Two (Recommended)

Have a total active force of 470,000 (16% reduction):

One Year / 10-Years

- Reduce active forces in US from 498,000 to 405,000 (\$12 billion / \$120 billion)
- Eliminate 7,000 soldiers from Europe (\$910 million / \$9.1 billion)
- Eliminate 2,000 soldiers from Asia-Pacific (\$260 million / \$2.6 billion)
- Temporarily maintain 8,000 soldiers in Middle East (\$1 billion / \$10 billion)
- Cancel tour normalization in South Korea (\$5.1 billion in ten years)
- Terminate and restructure equipment programs (\$5 billion in ten years)

Total Savings: \$12.7 billion / \$132 billion

Tier Three

Have a total active force of 443,000 (21% decrease):

One Year / 10-Years

- Reduce active forces in US from 498,000 to 390,000 (\$14 billion / \$140 billion)
- Eliminate 10,000 soldiers from Europe (\$1.3 billion / \$13 billion)
- Eliminate 5,000 soldiers from Asia-Pacific (\$650 million / \$6.5 billion)
- Temporarily maintain 2,000 soldiers in Middle East (\$250 million / \$2.5 billion)
- Increase Reserve Component by 40,000 (\$1.6 billion / \$16 billion)

- Cancel tour normalization in South Korea (5.1 in ten years)
- Terminate and restructure equipment programs (\$5 billion in ten years)

Total Savings: \$14.1 billion / \$151 billion

Our Recommendation

We recommend that in order to alleviate the cost increases of the past decade, the US Army seek the \$132 billion ten-year savings suggested in our Tier II cuts. By doing so, it will reduce the active force to 470,000—only 12,000 less than prior to 9/11. Even as the size of the force decreases, ground forces will constitute the most combat-experienced in the world, including the Reserve. By following the cuts in Tier II, the presence of ground troops in Asia and Europe will modestly decrease. New strategic threats are posing different scenarios that will require greater air and water expeditionary capabilities as well as small Special Operations Forces units, rather than large conventional ground forces. However, the goal is not to diminish the Army in its value or strength, but to lie dormant and ready for what may come next, with a larger and readier Reserve Component capable of backing up the Active counterpart. It will also maintain equivalent if not greater modernization capabilities than today by minimizing the number of cuts in Army procurement. The new outlook for the Army is one that is leaner, but more lethal—not to mention one that is smarter at balancing both economic and defense risks to protect the wellbeing of US citizens. One final word of caution that must be made is that there is no greater cost than unpreparedness, and despite having military might, there are no greater savings than preventing war.

Chapter 17. USSOCOM | *By Erika Nicks*

Chapter Summary

Key Policy Conclusions

The Special Operations Forces (SOF) of the United States Special Command (USSOCOM) are and will continue to be an intellectually nimble force that will train and send out highly-qualified troops capable of defeating asymmetric threats, particularly al-Qaeda. The recommendations by our task force will ensure that as the SOF grows in size, the quality of its troops and efficiency in executing its missions will grow at an equal, if not greater pace. As a result, USSOCOM's contribution to training and counterinsurgency in other nations will begin to show its effects as those nations become stronger and to a greater extent independently capable of deterring threats.

Background

USSOCOM is a new branch of the Department of Defense that was founded in 1987. It currently makes up 2% of the DoD budget and has nearly doubled in troops, tripled in the budget and quadrupled in overseas deployments over the past decade. Among its greater accomplishments: the capture of Saddam Hussein in 2007 and the killing al-Qaeda leader Osama Bin Laden in 2011. The growth of USSOCOM is attributed to its successes in counterinsurgency and counter-terrorist operations. Its efficiency in managing these operations emphasizes how necessary USSOCOM is to confront hybrid threats in the future. Nonetheless, DoD must be mindful of USSOCOM's growing responsibilities in light of fiscal restraints.

Policy Considerations

USSOCOM should in no way stop from expanding and strengthening its force, but our task force recommends that it must wisely use spending to maintain and improve the quality of its force before growing further in size. The reality is that USSOCOM and the US's conventional forces will not be able to train and provide equipment to all US allies to counter terrorism or insurgencies. Thus, USSOCOM should consider carefully the scope of assistance it can capably offer to other countries without risking its own budget resources. Rather than reduce current spending, the key policy consideration for USSOCOM is to be mindful of the budget going forward.

Key Recommendations

- Shrink the rate at which the current force is growing (3-5%) if there are no plans in place to do so;
- Set clearer goals for completing missions, to maintain efficiency and cost oversight.

USSOCOM

Since September 11, 2001, the United States Special Operations Command (USSOCOM) troops have nearly doubled, the budget nearly tripled, and overseas deployments have quadrupled.⁴³⁹ Signs of this significant growth indicate the increasing reliability of USSOCOM's role especially in defeating global terrorist networks through small-scale counterinsurgency operations. Its second most important role is providing security force assistance by training special operation forces and militaries of US allies, among others, to perform special reconnaissance, unconventional warfare, foreign internal defense, counterterrorism, psychological operations, information operations, counter-proliferation and counter-weapons of mass destruction operations. USSOCOM has distinct capabilities as an intellectually nimble force, created and adapted to respond to the asymmetric threats that have increased and will continue to exist in the twenty-first century.

Even as the US will continue to depend on the unique capabilities of USSOCOM for the security of the nation and allies, US Defense must keep this evolving branch's budget in check to prevent the uncontrollable spending seen in its military counterparts. Despite the fact that USSOCOM has consistently maintained a 2% share of the total DoD budget, this still means that costs are rising as the size of the overall defense budget increases.⁴⁴⁰ In the FY2012 Budget Request, USSOCOM requested a 7% increase over the previous year, going from \$9.8 billion to \$10.5 billion. These rises in costs press for a reassessment by the DoD to determine what the future prospects of USSOCOM's role should be. Although the DoD is aware that the use of this force will remain crucial to counterinsurgency operations and other smaller, high-intensity missions, the question is how much larger and under what priorities these forces should grow.

Secretary of Defense Leon Panetta perceives USSOCOM's role as one that will "advise and assist partners in other regions and prioritize the most important for building partnership capacity."⁴⁴¹ Indeed, as budget cuts shrink the force size of the other services, USSOCOM will continue with its efforts to train US allies to become replicated special operations forces that the US can rely on in the future.

USSOCOM has proven itself to consist of the most efficient and cooperative forces from all services (Army, Navy, Marines and Air Force) that have marked many great successes over the past decade. Although USSOCOM is not expected to undergo drastic cuts as some of the other services are, this chapter concludes with general considerations that may help improve SOCOM's current structure as well as to slow budget increases in the near future.

Command Structures and Components

Outgoing USSOCOM Chief Admiral Eric Olson describes USSOCOM as "a microcosm of the Department of Defense."⁴⁴² As of 2012, USSOCOM has a total of 60,000 members from all four military branches, collectively known as Special Operations Forces (SOF): 28,500 soldiers in the US Army Special Operations Command (USASOC); 3,800 personnel including 2,400 who are active Special Warfare Operators (SEALS) in the Naval Special Warfare Command (NAVSPECWARCOM); 12,000 personnel in Air Force Special Operations Command (AFSOC); and 2,600 personnel in the Marine Corps Special Operations Command (MARSOC).⁴⁴³ A sub-unified command called Joint Special Operations Command (JSOC) also exists amongst the four, which commands and controls the military's special missions units which are responsible for identifying and destroying terrorists and terror cells worldwide.⁴⁴⁴ The

JSOC includes a mix of regiments from all four services, one of which is the Navy's SEAL Team Six that shot and killed Osama Bin Laden in a Special Operations mission.

What the Special Operations Force is primarily known for is the success that they have achieved in their missions, due to a small but solid mix of specialized and qualified members. Personnel are very carefully picked from the general military and trained not just with equipment, but with intensive language and cultural lessons to suit whatever operation to which they are assigned. 20,000 career members are also selected and trained to become SOF operators. By having non-rotational members on the team, the SOF is capable of maintaining a team with longer experience in the department. These elite forces are also supported by nearly 6,500 civilian personnel who form an important part of the team. What makes the SOF far different from conventional military forces is the merging of skills for ground, air, and water within inherently joint, tight-knit teams. The SOF is swift, stealthy, able to maintain greater confidentiality in missions, and has access to locations that large conventional forces do not.

All of these capabilities have shown the importance of the SOF in its main successes on precision counterterrorism missions, of which 85% of the forces deployed are still directly engaged in Operation New Dawn (OND) and Operation Enduring Freedom (OEF).⁴⁴⁵ In other missions, at the request of a host government, SOF conducts a wide range of activities that focus on training allied special operation forces or cracking down on other al-Qaeda-linked terrorists (for example, in the Philippines). During the initial stages of OEF all four services of the SOF were engaged before any large-scale forces were employed, along with CIA Paramilitary officers. Since then, they have continued to perform counterinsurgency operations. Among their greater accomplishments, SOF defeated the stronghold of terrorist group Ansar al-Islam in northern Iraq in 2003 and in the same year captured Saddam Hussein. In 2011, SOF Team Six

SEALs managed to kill Osama Bin Laden and US-born al-Qaeda leader Anwar al-Awlaki, and in early 2012 they also saved two hostages from Somali Pirates. Many covert operations such as the capturing of Saddam Hussein and operations in Iran have included joint task forces with the CIA.

Recommendations

USSOCOM's record of successes show the critical role it plays in confronting terrorism and enabling counterinsurgencies. Nonetheless, there is still room for improving its strength and efficiency by safely slowing down the growth of SOF in numbers, in order to increase investments in quality training and equipment. Although future projections for USSOCOM suggest that its missions and costs will continue to grow, this report emphasizes that as USSOCOM's ability to strengthen and rely on other militaries increases, its role as a teacher may be allowed to decline. Now is a defining moment for the US to reconsider how much money and responsibilities it can capably offer to other countries without imperiling its own forces.

Recommendation One: Maintain Quality over Quantity

Over the past decade, the number of troops doubled to 60,000 under an annual rate of 3%-5% growth.⁴⁴⁶ If these trends continue, numbers could grow to 120,000 by 2021. As the war in Iraq has ended and is expected to end shortly in Afghanistan, the demand for SOF troops to train the Afghan and Iraqi troops could potentially increase. This increase is most evident in the Middle East, however SOF troops have increased in deployment to nearly 100 countries under the request of host nations that ask for training and protection from insurgencies. However, precautions may well have to come before ambition as SOF forces continue to expand. It is in the best interest of USSOCOM to protect the hallmark quality of its troops. Thus, under budget

constraints, protecting investments in training and education must continue to outpace the increase in SOF forces. In order to prevent jeopardizing quality, USSOCOM's best goal is to transition its 3%-5% annual increase in troops, to a slowdown of 0%-3% growth.

The Congressional Research Service January 2012 statement on "U.S. Special Operations Forces (SOF): Background and Issues for Congress," reported that language proficiency and cultural awareness have suffered due to the high operational tempo, and SOF personnel lack readily available local ranges, aircraft, and vertical capability that are also affecting qualification and proficiency for training. For future budget requests, there should be a greater focus on keeping SOF fully prepared for operations, although this does not necessarily mean drastically increasing procurements and acquisition (which has been the driving factor for high costs in the Army, Navy, Marines and Air Force). As USSOCOM pushes for greater equipment needs, the DoD must maintain greater oversight over these requests. Alternatively, in order to reduce the costs of new equipment altogether, SOF could train using the necessary equipment that is already available for the Army, Navy, Marines and Air Force.

Recommendation Two: Manage the Number of Missions

Rather than increasing and overextending the capabilities of the Special Forces, USSOCOM must take into consideration managing the number of missions it is engaged in. The purpose of limiting the number of missions is to encourage USSOCOM to give its full attention to those it is currently involved in and complete these missions with timely goals in mind. By doing so, USSOCOM will also be able to manage associated program costs. This is an important point to consider as the greater burden of costs in providing training and protection to other countries is generally borne by the US. In the Philippines, SOF spends \$50 million a year to

provide training to Philippine forces to fight against the Abu Sayyaf terrorist group.⁴⁴⁷ As of 2010, the DoD poured \$150 million into Yemen's security assistance, \$34 million of which went into "tactical assistance" and \$38 million to give Yemen military transport aircraft.⁴⁴⁸ Greater yet, the total USSOCOM costs that go toward training in Iraq and Afghanistan under the Overseas Contingency Operations (OCO) fund totals approximately \$8 billion a year.⁴⁴⁹

Ten-Year Prospect

Taking these suggestions into consideration, the goal that USSOCOM must pursue over this decade of major budget realignments is to continue to train and send out highly qualified troops that will be capable of defeating asymmetric terrorist threats—particularly al-Qaeda. Fighting terrorism has been an ambitious initiative which began under the Bush Administration and has lasted for 11 years. What the US must consider is: What will the nature of these missions be in the future, and what kind of resources can DoD expend on these missions with budget concerns taken into account? Clearly, USSOCOM and conventional forces will not be able to train and provide equipment to all US allies against terrorism or counterinsurgency. By the end of this ten year period, it is imperative that USSOCOM's contributions to training and insurgency begin to pay off as other military and governments become stronger, and to a greater extent independently capable. Not only should the SOF train troops but they should shape leaders who can continue training after SOF troops leave. By focusing on each particular mission at a time and strengthening a consolidated force with intelligence and training, USSOCOM's SOF will be more than capable to move forward in the long run, adapting to newer threats in the future.

Chapter 18. Military Personnel | *By Andrew White*

Chapter Summary

Key Policy Conclusions

Military personnel costs consume an alarmingly large fraction of the US defense budget, yet politicians are hesitant to make needed cuts within military personnel in order to preserve the necessary US military strength essential to defending national interests. Deeper budget cuts need to be made. By focusing first and foremost on national security and keeping in mind the looming threat of possible sequestration, options for budget cuts within military personnel must be on the table.

Background

This report emphasizes the importance of economic strength and smart cuts as key components of US military strategy. The US military rightfully prides itself on stellar treatment of and support programs for its military personnel, whether active duty service members, military retirees, reservists, or their family members. These courageous individuals put everything on the line for the security of the US on a daily basis. The US military's all volunteer force is both a source of pride and a testament to effective recruitment, maintenance, and support of military personnel. However, the benefits and programs contained within military personnel come at a heavy cost. While the US military can continue to sustain and improve the treatment of its members, the DoD will find itself in a crisis in fund allocation. Personnel costs have grown at an increasing rate, and left unabated threaten to consume an increasing fraction of the US defense budget. This trend can be curbed through thoughtful prioritizing, reforming or cutting of specific personnel numbers, programs and benefits.

Key Recommendations

- The Department of Defense must take steps to raise the share of health care costs carried by some of its Tricare members, through increasing out of pocket requirements for Tricare-for-Life and raising co-pay to adjust for rising military healthcare costs over the next ten years;
- DoD must reduce its recruitment costs as it winds down the two wars in the Middle East and copes with fewer projected deployment demands in the future;
- The Department of Defense must reduce its Pentagon civilian workforce by 20% to match the shrinking scope of US military presence abroad over the next ten years.

Military Personnel Reforms

Although often cited as politically difficult, budget cuts to personnel expenditures share a spot at the table with other significant cuts within the Department of Defense.⁴⁵⁰ Personnel costs consume roughly one-third of the Department of Defense budget and have been growing at an inflation adjusted rate of 4.2%.⁴⁵¹ The total budget numbers for military personnel over the past year are as follows:

FY 2012: Grand Total Direct - Military Personnel⁴⁵²

Base: \$142,828,848,000

OCO: \$11,228,566,000

Total: \$154,057,414,000

FY 2012 (from 2013 report): Grand Total Direct - Military Personnel⁴⁵³

Base: \$135,111,799,000

OCO: \$14,060,094,000

Total: \$149,171,893,000

Todd Harrison of the Center for Strategic and Budgetary Assessments notes that “if military personnel costs continue growing at the same rate as the past decade while the overall budget remains flat, personnel costs will consume the entire defense budget by FY 2039.”⁴⁵⁴ Because personnel costs are consuming an increasing share of the military budget, less funding will be available for other parts of the Defense budget like research and development, procurement, readiness, training and other priorities.⁴⁵⁵ Lower amounts of funding in areas of the Defense Department which play a direct role in countering threats to national security will ultimately augment the severity of those threats.⁴⁵⁶ Despite resistance from Congress and

veterans groups, and irrespective of the projected global threat landscape, cuts within personnel costs will be necessary in order to support active duty troops and uphold national security objectives in the future. Some areas of potential personnel reforms and budget cuts include: the Military Health System, salaries, compensation, hiring practices and recruitment, the Pentagon civilian workforce, and the military retirement system. With the current Obama Administration defense budget plan in mind, a deeper cut strategy that will avoid sequestration, and an even deeper cut scenario if necessary, the three tiers of cuts that are laid out in this section will total up to \$44.7 billion, \$192 billion, and \$444.2-520.7 billion respectively.

The Military Health System

The Military Health System currently uses up 6% of the Department of Defense budget. Military Health expenditures are expected to rise to 10% by 2015 and consume a larger fraction of the total defense budget.⁴⁵⁷ The costs to provide the same level of healthcare services within the Department of Defense are eating up an increasing fraction of the defense budget pie and making it more and more difficult to properly equip our armed forces.⁴⁵⁸ Former Defense Secretary Robert Gates has himself stated, “health-care costs are eating the Defense Department alive.”⁴⁵⁹ Tricare, the military’s Medicare supplemental insurance plan, provides civilian health benefits for military personnel, military retirees, and their dependents.⁴⁶⁰ Tricare costs are projected to notably increase and ultimately lay an increasing burden on US Defense.

There is strong political opposition against raising Tricare fees, supported by a belief in a “moral contract” between the US government and every soldier.⁴⁶¹ This moral contract implies that by committing oneself to a career in the military, one will receive healthcare for life for their service.⁴⁶² Keeping healthcare costs low for military personnel, military retirees, and their

dependents is important for honoring US military service. However, the severity of budget cuts coupled with the rising costs of providing healthcare over the next ten years suggests a threat dilemma to US national security, where healthcare costs could impinge upon funding for active duty military personnel. While it is important to avoid a Vietnam effect where US troops lack the benefits that accompany service, the Department of Defense must focus first and foremost on making sure our active troops have the resources they need to fight. What good are low healthcare costs if the US cannot maintain its vital interests abroad?

From 1991 to 2010, military healthcare costs rose from \$19 billion to \$51 billion, while healthcare premiums remained the same.⁴⁶³ The Tricare health program was created in 1995 and since its inception it has yet to raise its premium rates—an anomaly in health insurance according to former Defense Secretary Robert Gates.⁴⁶⁴ A dedication to low premiums supports the US military's objective of ensuring that its personnel receive the best healthcare they can, at a low price. It is important to note that costs of healthcare services for consumers in the private sector have risen over time, yet in the Military Health System have remained low. While making no effort to downplay the service given by US military personnel, this gap in premiums is striking. The result is that many military retirees forgo healthcare offered through their employers because the premiums are lower within the Tricare system. This gap plays an important role in attracting new talent to the US military and improves morale, but it must not grow excessively large.

The Obama Administration has suggested the possibility of raising healthcare premiums by \$200 per year for military personnel and their families.⁴⁶⁵ This plan will save roughly \$6.7 billion in the Department of Defense and falls into the Tier I cuts laid out here.⁴⁶⁶ It is a good quick-fix solution for the present, but in order to address the underlying issue of rising healthcare

costs, deeper cuts and reforms must be necessary to avoid the potential situation 20 years down the road where “all the money is going to be paying for people no longer serving.”⁴⁶⁷

Within Tricare, Tricare Prime is a health maintenance organization (HMO) available for active duty personnel, retirees from the active component, retirees from the reserve component, and their eligible family members. The beneficiaries must choose a primary care physician, and obtain referrals and authorizations for primary care and only have to make a small copayment on each visit. In order to combat rising costs in the Military Health System, the premiums provided to servicemen and women must rise as well. The Department of Defense should only allow Tricare Prime for active duty members and their dependents. Currently Tricare Prime can be accessed by retirees and this plan would exclude them from it and save up to \$115 billion over the next 10 years.⁴⁶⁸ Military retirees would still have access to Tricare services and active duty personnel could continue to receive the best medical care possible at low rates.⁴⁶⁹ Active duty members presently serve on the field, and therefore Tricare funding should emphasize active over retiree health.

Also contained within Tricare is the Tricare-for-Life program. Established in 2001, Tricare-for-Life originated as a response to rising out-of-pocket costs for then Medicare recipient military retirees who had reached an age of Medicare eligibility and were therefore dropped from the Tricare system. Consequently, Tricare-for-Life costs have increased since 2001. The Department of Defense should establish minimum out-of-pocket requirements for the Tricare-for-Life program. This would shrink the eligibility of Tricare-for-Life users because only senior members of the military with larger salaries could afford this service while others would be pushed into the Medicare system. These requirements could potentially save \$43 billion over the next ten years.

In addition to restrictions in Tricare Prime and Tricare-for-Life eligibility, the Department of Defense should raise co-pay for pharmaceuticals within the Tricare system. This effort would push military retirees from dependency on the Tricare system into Medicare or another health system. The Medicare system was created as a national social insurance program for Americans age 65 and older, with some exceptions. Under the present system, military retirees over 65 are favoring the co-pay rates they receive under Tricare. By raising co-pay in the Tricare system, the healthcare costs will begin to shift under the umbrella of Medicare for those retirees over 65 and away from the Department of Defense's Tricare system. The co-pay rates offered by Medicare and private social insurance programs would begin to look more attractive to military retirees over 65. The Department of Defense could save up to \$26 billion with this plan over the next 10 years.⁴⁷⁰

These three cuts (the latter two taking priority) must only come after the US military has reached a consensus that its ability to defend its strategic interests abroad has been threatened by healthcare costs. Although these cuts may harm the recruitment of new personnel who have historically assumed that their immediate down payment of years of service would be rewarded with healthcare for life, active duty personnel and their families will still receive the best medical care and military retirees will be able to find healthcare through other services including Medicare if they need it. Thus, the restrictions on Tricare-for-Life eligibility and raised co-pay cuts fall into the Tier II cuts, with the restrictions on Tricare Prime falling into Tier III cuts. These cuts total: Tier I, \$6.7 billion; Tier II, \$69 billion; and Tier III, \$115 billion respectively.

Salaries

Military salaries have historically led inflation and thereby attracted the best and the brightest minds to the Department of Defense. It is important that the Department of Defense continue to draw the talent and skills it needs to assemble the most effective military force possible. President Obama's 2012 budget plan calls for a two-year pay freeze on federal workers in the executive branch (with exceptions for promotions) and recommends a 1.6% pay increase for military personnel.⁴⁷¹ This plan is expected to generate \$38 billion in savings and is a part of the Tier I personnel cuts.⁴⁷² While higher salaries have consistently been a selling point for entrants to the Department of Defense, a growing gap in salaries between public sector pay in the Department of Defense and pay in the private sector has been present since the beginning of the 2000s, with Department of Defense workers receiving pay above comparable positions in the private sector.⁴⁷³ Since 1982, military pay has risen at a faster rate than private sector pay.⁴⁷⁴ While this strategy of leading inflation with higher military salaries than salaries of comparable skills in the private sector may have helped with recruitment in the past, this strategy is ultimately unsustainable if wage increases are taken too far.

One plan that bears much in common with the current Obama Administration plan is to cap military wage increases (thus reducing the rate of increase) from 2012 to 2015 at half a percentage point below an average of private-sector wage increases, in order to bring salaries closer in line with private sector pay raises and inflation rates. The Obama Administration plan specifically focuses on pay freezes for executive branch federal workers while leaving military personnel salaries intact. The Department of Defense should freeze salaries of the civilian work force at the Pentagon for 3 years. Obama's current plan calls for two years for federal workers.⁴⁷⁵ This plan to cap military pay increases and freeze the salaries of the civilian work force at the Pentagon will save the Department of Defense up to an additional \$15.5 billion over the next ten

years.⁴⁷⁶ This cut, though not initially necessary given the \$38 billion in saving with the current Obama plan, may become a more viable option should the Department of Defense need to make deeper cuts. Therefore this cut falls into the Tier III recommendation. Although morale and recruitment could be negatively impacted in future years due to a relative decrease in military salaries, these cuts should not go so deep as to lose the talent and skills needed to defend the nation. These cuts total: Tier I, \$38 billion; Tier III, \$15.5 billion.

Compensation

The military compensation system was established at a time when the skills acquired in the military were not easily transferrable to the private sector.⁴⁷⁷ This transferability has improved in recent times suggesting that a jump to the private sector from the military is more possible now than before. The current system in place is the “up and out” personnel policy, which makes it so military employees are either promoted within their service or are separated from the service.⁴⁷⁸ Compensation is currently determined by time and grade rather than skills and requirements needed by the Department of Defense.⁴⁷⁹ Given that there are likely to be personnel reductions in the US military, the “up and out” policy needs to be reformed in some way to allow for an easier switch to the private sector.

The Department of Defense should work to remain competitive with the private sector in order to attract and retain talented personnel. However, “today, average cash compensation to military personnel, including housing and food allowances, is greater than that of more than 75% of civilians of comparable age, education, and experience.”⁴⁸⁰ This gap between public and private sector compensation is a result of Congressional spending practices which have added extra half-percent increases to salaries across the board to Pentagon workers. With a renewed

focus on skills and requirements, and more cautious Congressional spending practices, spending could be reduced.

According to the CBO, median cash compensation for military personnel—including the tax-free cash allowances for food and housing—exceeds the salaries of most federal civilians of comparable education and work experience. Prior studies indicate that noncash and deferred benefits are also higher for military personnel than for federal civilian workers.⁴⁸¹ As mentioned before, this gap should not seem surprising given the nature of the service by members of the US military. Compensation practices within the US military offer more to their workers than other federal government agencies, but still must be monitored and controlled in a responsible manner while maintaining the competitiveness of the Department of Defense with the private sector.

If the time comes for the Department of Defense to change the military compensation calculation under greater pressure to cut the Defense budget, then reforms within the calculation will be necessary. A reformed compensation calculation “would slow the rate of growth in tax-exempt military allowances for housing and food by combining them with basic pay. The vast majority of military personnel receive these allowances, which have grown at a faster rate than basic military wages.”⁴⁸² There would be \$55 billion in potential savings over the next 10 years for the Department of Defense with this policy in place.⁴⁸³

While morale and recruitment could be harmed with compensation more closely resembling the private sector, the military compensation system may need to be reigned in and more closely resemble other compensation plans set up in other departments of the federal government if deeper cuts need to be made than the Obama Administration plan. Due to the potentially damaging nature of this cut in terms of the brain drain that could occur, if this cut

goes through we recommend it as a Tier III cut that should be avoided unless absolutely necessary. These cuts total: Tier III, \$55 billion.

Hiring Practices and Recruitment

Hiring and recruitment play an essential role in supplying the US military with skilled personnel. The Obama Administration plan has emphasized the importance of maintaining and possibly increasing funding for military recruitment. As the wars in Afghanistan and Iraq wind down to a close and troop levels drop off, there will be less demand for funding for hiring and recruiting. Also, it is important to keep in mind that there is a waiting list to join the US military, so hiring and recruitment will remain strong in the near future. As the United States draws down in the Middle East, the Department of Defense can work to reduce recruiting expenses and save up to \$5 billion over the next decade.⁴⁸⁴ This cut will be reasonable to expect unless new conflicts emerge in the world which would require increased recruitment spending. This is a Tier II cut. These cuts total: Tier II, \$5 billion.

Pentagon Civilian Work Force

If the US military diminishes its operations and military personnel abroad, then the Pentagon must work to make cuts in its large civilian workforce as well. A smaller military requires fewer civilian support personnel. With roughly 784,000 to 789,000 Pentagon employees, the Pentagon civilian workforce currently costs roughly \$77.07 billion annually.⁴⁸⁵ If the Department of Defense were to make similar cuts to the Pentagon as it did throughout the 1990s when civilian manpower was reduced by 34% and civilian compensation declined by about 24%, then savings on a similar scale could be found.⁴⁸⁶ If the threat landscape remains

constant or grows over the next decade, it may still be necessary to retain or rebuild a large civilian workforce.

The Department of Defense should reduce the Pentagon civilian workforce by 150,000 over 10 years by not replacing some retirees. This cut will be conducted mostly through attrition and could save up to \$73.3 billion in the next ten years. A similar plan recommends a 20% cut to the Pentagon civilian workforce, mostly through attrition as well, to 630,000 workers which could save up to \$73 billion in the next ten years.⁴⁸⁷ This cut should be feasible if there are large troop draw downs in other parts of the world, and is recommended as a Tier II cut.

Another way to approach cuts in military compensation is to reduce the civilian payroll to a greater extent, by roughly 30% to around 550,000 personnel over a ten-year period. Somewhere around \$105-\$130 billion over the next ten years would be saved.⁴⁸⁸ This estimate mirrors larger reductions made between 1991 and 2001, when civilian manpower was reduced by roughly 35% and civilian compensation declined by roughly 25%. During that decade, cuts in manpower averaged roughly 4% each year, resulting in compensation savings of roughly 2.5% per year.⁴⁸⁹ This cut is more feasible if the Department of Defense feels more confident about a reduced threat landscape over the coming decade and is recommended as a Tier III cut.

These cuts total: Tier I, \$73.3 billion; Tier III, \$105-130 billion.

Military Retirement System

The Department of Defense must meet personnel needs in a cost effective manner and the military retirement system is no exception. Military retirement benefits to military retirees are currently costing the Pentagon \$50 billion annually. For the average military retiree, she or he spends roughly \$460 per year for a family plan and \$230 per year if single on retirement

benefits.⁴⁹⁰ The Military Retirement System was established at a time when skills learned within the military were less transferable to the private sector. A military retiree receives full benefits after 20 years of service.⁴⁹¹ Also, unlike private sector employees who collect entitlements like social security and Medicare at age 65, military retirees can collect entitlements such as Tricare in their 40s, following 20 years of service.⁴⁹²

Because of the long-term commitment needed to receive benefits, and the lack of a good severance pay program, many retirees do not receive benefits if they have served for less than 20 years. Also, there are military retirees who serve their 20 years and then receive benefits from working civilian jobs, on top of the benefits and pensions earned by military service. It appears to be a faulty system where an all or nothing approach to the 20 year commitment plays a key role in the decision making process for someone hoping to make a career out of the US military:

For a number of different reasons, the military's pension system—a "cliff vesting" program, whereby retirees who have served 20 years receive a full pension, and those who serve anything less (19 years, for example) receive no pension at all—is widely considered to be neither cost-effective nor a good way to retain employees.⁴⁹³

Proposed changes to the military retirement system tend to receive hostility from Congress and veterans groups.⁴⁹⁴ Yet if the situation becomes dire, the Department of Defense should switch to a model similar to a private-sector 401(k) for new entrants. This reform could generate \$35 billion in potential savings. A CQ report suggests, "A new entrant could make \$16,500 in tax-deferred annual payments to a retirement fund and \$5,500 in annual tax-deferred 'catch-up' contributions for those over 50. Vesting would occur after four years."⁴⁹⁵ Defense Secretary Leon Panetta has stated that he is against this reform, and many in the defense community are disgusted with this proposal's effort to equate the work done in the US military to civilian work. Others argue that despite the benefits deserved by military personnel, retirees, and their families, personnel costs like the military retirement system should not get in the way of the US military's

ability to “put the best force on the field.”⁴⁹⁶ Because this cut would be politically difficult to pass, it is recommended as a Tier III cut.

An even deeper cut that could be placed upon the military retirement system would be to cut back military retirement pay for new entrants to the Department of Defense. Although \$86.5 billion in potential savings could be generated over the next decade, “a recruit joining now who works for 20 years would not receive retirement pay until age 60.”⁴⁹⁷ Under the current system, military personnel can retire after 20 years and immediately receive 50 per cent of the average of the last three years of salary.⁴⁹⁸ This cut would severely damage the attractiveness of a military career and would harm recruitment greatly. This is also a Tier III cut.

These cuts total: Tier III, \$35-86.5 billion.

Conclusion

The total cuts recommended in this chapter sum to:

First tier cuts: \$44.7 billion

Second tier cuts: \$192 billion

Third tier cuts: \$444.2-520.7 billion

Military personnel costs appear to be one of the most divisive and least discussed subjects for US defense budget cuts. Members of Congress tend to avoid discussing personnel cuts due to the strength of military veterans groups who hold a strong sway on politics in Washington, D.C. This is likely why the Obama Administration plan does little to cut military personnel programs. Members of the military must continue to remain vigilant to make sure they receive the benefits they and their families have earned from many years of service. However, keeping balance in mind when making Department of Defense budget cuts, military personnel costs cannot be

allowed to cripple US military forces by consuming an ever-increasing fraction of the US defense budget. In order to avoid sequestration, the Tier II cuts discussed in this section must be seriously considered. Included are two cuts to the Tricare system, which, while freeing up about \$69 billion alone, will be quite difficult to pass. These cuts counter fears amongst many in the defense community of increasing military healthcare costs. The hiring and recruitment and Pentagon civilian workforce cuts couple more smoothly with other cuts being made to conventional forces in the armed forces, and are therefore contingent upon reductions in other areas of the US military. Morale issues tend to be an area of high contention, and therefore many of the potential cuts to military retirement, and healthcare have been placed within the Tier III cuts.

Chapter 19. Operations and Maintenance | *By Andrew White*

Chapter Summary

Key Policy Decisions

Operations and maintenance costs consume an excessively large fraction of the US defense budget. These costs, while essential for the smooth functioning of US military forces, must be streamlined as much as possible to reduce waste. Efficiency must be goal number one. By emphasizing reform and cutting programs that do not directly aid US military force strength, operations and maintenance costs can be greatly reduced.

Background

Operations and maintenance costs reflect a wide array of programs funded by the Department of Defense. These costs reflect the structure of the military and determine the costs of keeping US military forces well-prepared and well-placed throughout the world. The “bean counters” in Washington will have their hands full working to locate budget cuts within US military operations and maintenance over the coming decade. With the US military likely reducing its external troop presence, operations and maintenance costs can be further reduced both domestically and abroad to align themselves with the reduced requirements of maintaining a large military force. Troop reductions aside, operations and maintenance spending must be oriented toward strengthening and sustaining the existing US forces in the coming decade.

Key Recommendations

- Take steps to reform the military depot system to encourage efficiency over the next ten years;
- Reduce labor costs and personnel over the next ten years;
- Cut funding for the National Defense Education Act;
- Standardize military base spending;
- Trim military bands by two-thirds.

Operations and Maintenance

Operations and maintenance costs consume a significant fraction of the overall defense budget. The total budget sizes for operations and maintenance over the past year are as follows:

FY 2012: Total Operation and Maintenance Title⁴⁹⁹

Base: \$204,832,483,000

OCO: \$90,760,832,000

Total: \$295,593,315,000

FY 2012 (from 2013 report): Total Operation and Maintenance Title⁵⁰⁰

Base: \$197,688,945,000

OCO: \$87,132,652,000

Total: \$284,821,597,000

The Department of Defense must work to make operations and maintenance function more efficiently. By targeting programs that do not directly counter national security threats over the coming decade, significant cuts can be made in this section. With the current Obama Administration defense budget plan in mind and deeper cuts if necessary, the three tiers of cuts laid out in this section will total up to \$0 under the Obama plan, \$81.3 billion where sequestration is met without forcing a drastic one-year cut or making proportional across-the-board reductions, and \$158.2 billion in total potential cuts.

Depots

Military depots are a source of inefficiencies in the Department of Defense. The Department of Defense can reform the depot system by changing the pricing structure for repairs in military depots and easing restrictions on contracting. This new system creates incentives for

unit commanders to use central depots more than their less cost-effective unit-level repair facilities.⁵⁰¹ This change could save \$2.5 billion in a decade.

Secondly, by opening up an additional 10% of depot work to bidding from private contractors, another \$3.9 billion could be saved over the next decade.⁵⁰²

These two recommendations improve military efficiency and carry little political backlash, yet are not contained with the Obama Administration plan. They two are both recommended as Tier 2 cuts. These cuts total: Tier 2, \$6.4 billion.

Military Personnel Reductions

The Department of Defense prides itself on its all-volunteer force. This volunteer force faces stresses and challenges on a day-to-day basis that are highly unique and put huge demands on troops and their families. However, the cost of maintaining military personnel has risen in recent years.⁵⁰³ Including OCO or wartime funding, personnel costs have doubled since 2001.⁵⁰⁴ These personnel costs sit at 40% above inflation, yet the number of military personnel has only grown by 8% over the same time period.⁵⁰⁵ Within the base budget alone (no OCO or wartime funding), personnel costs increased by nearly 90% (about 30% above inflation), while the number of military personnel increased by 3% since 2001.⁵⁰⁶ Many military personnel in the Department of Defense work the supply, transportation, communications and support jobs, which could be filled by more efficient civilian labor outside of the Department of Defense.

The Department of Defense should replace military personnel who perform commercial activities with hired civilians who will work for less. Personnel numbers will be reduced from 88,000 currently to 62,000, and if this change is made it will save up to \$53 billion over the next ten years.⁵⁰⁷ This cut presents clear efficiency gains which will play a key role in freeing up

funding for other, more essential programs to the Department of Defense. This is recommended as a Tier 2 cut. These cuts total: Tier 2, \$53 billion.

Defense Department Commissaries and Retail Stores

The Defense Department has historically funded commissaries and retail stores on US bases across the world. The Department of Defense's chain of over 250 commissaries and three chains of retail stores will not directly counter threats to US national security over the next decade. Importantly however, the commissaries and retail stores benefit the many servicemen and their families who live on US military bases.

The Department of Defense should consolidate its commissaries and retail stores over the next five years. This will save up to \$9 billion in the budget.⁵⁰⁸ This is a Tier 3 cut. These cuts total: Tier 3, \$9 billion.

Travel

Troops sent abroad currently serve tours of duty lasting from one to three years.⁵⁰⁹ In an effort to reduce military travel costs, the Department of Defense could save \$14 billion over the next ten years by reducing domestic and international travel by 15% by lengthening tours of duty to a four to six year range.⁵¹⁰ This effort to reduce military travel costs could harm recruitment further, as fewer recruits would favor the longer tours of duty. Thus we recommend this as a Tier 3 cut. These cuts total: Tier 3, \$14 billion.

Education

The Tuition Assistance Program funds the education of active duty members. The program creates an incentive for military personnel to pursue higher education. In 2009, the Tuition Assistance Program reimbursed 377,000 service members up to \$4,500 each for college courses taken while on active duty.⁵¹¹ The problem with this program is that there are redundancies between this program for active duty personnel and the Montgomery G.I. Bill for military veterans. The Department of Defense should consider cutting most college tuition assistance for active-duty military due to the redundancies between the Montgomery G.I. Bill and the Tuition Assistance Program. This cut could save \$4.9 billion over the next ten years.⁵¹² However, cutting this program could harm recruitment for the Department of Defense. This is recommended as a Tier 3 cut.

The National Defense Education Act passed in 1958 established DoD-funded programs in science, education, technology, and math in elementary schools, within the context of the Cold War. The purpose was to create American scientific and engineering leaders. This program should no longer be the responsibility of the Department of Defense, given that the Cold War has ended and the US military must orient its strategy towards cyber and asymmetric threats. The Obama Administration's plan does not address cutting funding for this act. Cutting this program would save \$1.7 billion over the next ten years.⁵¹³ This would be a Tier 2 cut.

The Department of Defense has historically funded elementary and secondary schools all over the nation. These 16 military installations hold 26,000 students, but are often in worse condition than the local public schools. The issue of contention here is that children living on bases would need to commute longer distances to attend nearby public schools. The Department of Defense must take the necessary steps to either improve the quality of these schools or close them and push the kids into public schools. These elementary and middle schools do little to

defend US national interests, but do provide the resources necessary for military families who consistently make the sacrifices necessary to serve the country. The Department of Defense should consider closing these elementary and secondary schools and cut \$10 billion from the budget over the next ten years.⁵¹⁴ This is a Tier 3 cut.

These cuts total: Tier 1, \$1.7 billion; Tier 3, \$16.6 billion.

Base Support

Currently, military base support costs per-soldier on support services are not standardized from base to base, and therefore vary in cost. The cost “now varies from a low of \$10,800 per service member in the Marine Corps to \$17,500 per service member in the Air Force.”⁵¹⁵ By standardizing spending on base support, \$20 billion could be saved from the Department of Defense budget over the next ten years.⁵¹⁶ While standardizing spending on base support will promote efficiency in base support spending, this cut is contingent upon troop reductions and base closures to generate large savings. Should the Department of Defense need to uphold high base support costs in order to counter threats to US national security, then these cuts would be placed on hold. This is advisable as a Tier 2 cut. If even deeper cuts are needed, other proposals suggesting up to \$39 billion in savings could be managed in the next decade if coupled with even greater deployed troop reductions.⁵¹⁷ These would be Tier 3 cuts. These cuts total: Tier 2, \$20 billion; Tier 3, \$39 billion.

Military Bands

The US military spends somewhere around \$300 million to \$550 million on 154 military bands, annually.⁵¹⁸ Military bands have historically served the purpose of playing for

ceremonies and other military events.⁵¹⁹ These bands help the US military accomplish victory on the battlefield by raising morale for the servicemen and women abroad. Former Defense Secretary Robert Gates has consistently stated that “[the Armed Services] have more people in military bands than [the Federal Government has] in the Foreign Service.”⁵²⁰ Given the serious nature of the budget outlook, cuts need to be made to this small program too. The Department of Defense should cut back military band membership by two-thirds. These cuts will save up to \$0.2 billion over the next ten years.⁵²¹ The bands will still exist and serve the same purpose as they have historically, so the negative consequences of this cut are minimal. This is recommended as a Tier 2 cut.

These cuts total: Tier 2, \$0.2 billion.

Conclusion

The total cuts recommended in this chapter sum to:

First tier cuts: \$0

Second tier cuts: \$81.3 billion

Third tier cuts: \$158.2 billion

Operations and maintenance costs have not been addressed to the extent they must be in the context of serious budget cuts within the Department of Defense. While many cuts within the armed forces take the spotlight in budget cut debates, the magnifying glass must be held up to military operations and maintenance costs. In our Tier 2 which takes cuts a step further than the Obama Administration plan, the large operations and maintenance share of the defense budget is accounted for, and aids in spreading cuts more evenly across the Department of Defense without seriously jeopardizing US military strength. All of the Tier 2 cuts have been chosen with the goal

of efficiency in mind. These Tier 2 cuts are less likely to damage morale and recruitment for future years in comparison with the potential cuts that have been placed in Tier 3. It is this perspective of balance in budget cuts that will allow the Tier 2 cuts to become a viable option as Congress seeks to avoid the threat of sequestration.

Conclusion | *By Gregory Johnsen*

The motivation for this task force report has been a pragmatism about the future of the United States and the world it will face. Economic strength will be every bit as critical to making the twenty-first century an American century as a strong national defense will. The two depend upon each other. With tax receipts still lagging from the recent recession and annual deficits reaching unprecedented levels, it is imperative that every dollar count.

The nature of the threats to American national security has shifted dramatically over the past decade, making now the perfect opportunity for a strategic review of the nation's defense. Our task force has concluded that historical concerns in Europe and the former Soviet Union no longer pose as great a threat today, while more recent areas of conflict such as Iran, North Korea, Afghanistan, and Pakistan may continue to escalate in importance. The rise of China as a global economic and military power must also be acknowledged. We also examined asymmetric threats such as terrorist networks and cyber warfare, which arguably pose the greatest threat to our present national security and necessitate drastic changes to the way America thinks about defense. Along with all of this, we noted that the strong American system of alliances has and will always serve us well, though we should never be in a position of depending upon others for our own security.

We also examined the fiscal matters at hand with great scrutiny, concluding that the present situation will require strong leadership and decisive changes. A runaway national debt would thwart even the best of defense plans. As to whether or not the current share of our spending devoted to the Department of Defense is too great, we found that the numbers handily support either side of the argument—what really matters is whether each dollar spent is prudent, justified, and tied to our strategy. Two important steps toward meeting that standard will be receiving an unqualified opinion on an audit, and reforming the way DoD procures new equipment. Another important step toward that end is making sure that each of our services is structured to respond to the true threats we face.

Our task force evaluated all of the Department of Defense's key operations: the strategic nuclear force, Air Force, Navy, Marine Corps, Army, and Special Operations. We found that by linking programs to the security needs they address, there are significant opportunities to cut redundant or ineffective expenditures while maintaining capabilities. We also note that personnel costs, though politically unpopular to cut, must be controlled as they are eating up an increasing share of the DoD's budget.

In particular, we set out three ten-year expenditure scenarios: one that would roughly match the President's plan in scale; another, our recommended scenario which reduces spending \$658 billion from the CBO's baseline; and lastly an extreme scenario which prepares for the case of drastic cuts to defense. To borrow a metaphor frequently used by President Obama, we have examined spending with a scalpel rather than a machete, and found that such an approach can still lead to significant savings. This is a much more reasoned approach than the blunt, across-the-board cuts which would take place under sequestration, but accomplishes a similar task.

What we have done is forge a vision for American national defense which makes sensible incremental changes from current trends. We have not extensively engaged in more fundamental philosophical arguments about the role America's military should play in the world, or what our priorities in spending should be as a nation. While important questions, they have their place elsewhere in the public sphere. Rather, our report is crafted to show that careful, reasoned changes to our defense spending can reduce defense's burden on an already gloomy fiscal

outlook, while maintaining or even improving its ability to meet and defeat all contemporary threats.

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