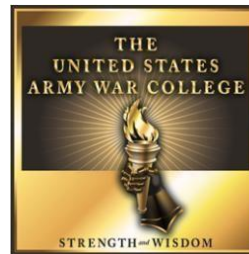


Hiding from Hard Choices: Risk and Defense Strategy

by

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United States Army War College
Class of 2015

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The United States (U.S.) military is at an inflection point. Facing an increasingly complex security environment and declining budgets, military leaders must make hard choices in order to build and maintain the joint force the nation needs. With an anachronistic view of risk, a bias to procure the most technologically advanced high-end platforms, and a floundering defense strategy, the U.S. military is struggling to adapt to the current environment. Fundamental changes must be made to the way the military manages risk, allocates resources, and develops strategy. First, we must identify and determine an acceptable level of risk while finding innovative and balanced approaches to risk management. Second, we must adjust our acquisition strategy and resource allocation model to allow for offsetting ways and means. This includes a healthy high-end/low-end platform mix. Third, we must develop a strategy that aligns ends, ways, and means in a realistic and prioritized manner. This may require adjustments of desired ends, innovative use of reduced means, and ways that shares the burden with friends and partners around the globe.

Hiding from Hard Choices: Risk and Defense Strategy

A man's wisdom is most conspicuous when he is able to distinguish among dangers and make choice of the least.

—Niccolò Machiavelli¹

Risk is inherent in everything we do—it is part of the human condition. Whether we are choosing a salad over steak because of cholesterol, or rebalancing our retirement investments, we make risk management choices all the time. Every day we are surrounded by varying degrees of risk.² Risk varies in significance from a mild concern to worry to outright fear; some barely warrant attention while others cause sleepless nights. Risk comes in many different forms: health risks, risk to investments, or risk to physical safety. To make sense of it all we use a process to identify risk, analyze it, assess it, and make decisions on how best to manage it. Often this risk management process is so simple that we hardly recognize it as a process at all. Who stops to calculate the tradeoffs involved in buckling his seatbelt during an aircraft's takeoff, or discarding food that is well past its expiration date. At other times, however, we anguish over our choices—to undergo a risky and physically damaging cancer treatment, to leave a salaried job to start a small business, and so on. Perhaps because risk management pervades decision-making, we often fail to appreciate the effect of risk on our choices.

Risk is threat to a desired and valued outcome.³ Risk is evaluated in terms of probability and consequence. In order to reduce risk, the probability and/or the consequence of an adverse event must be reduced. Risk management describes the way in which we make choices across a portfolio of risky decisions, many of which may be mutually exclusive or contradictory to the other. Consider, for example, the "security

dilemma.” This occurs when “the means by which a state tries to increase its security decrease the security of others.”⁴ States wanting greater security build a strong military. Potential adversaries increase their own capabilities in what becomes a tit for tat game. This eventually leads to escalation, which increases instability, the risk of strategic miscalculation and an increased probability of conflict. The outbreak of the First World War is often characterized as a failure of escalation. As Colonel Edward House put it in a May 1914 report to President Woodrow Wilson, “[Europe] is militarism run stark mad.”⁵ The “dilemma” is that states that do not invest in military capability risk being too weak to influence events. Such states risk a foreign policy of appeasement, in which their adversaries dictate terms to them and conflict is avoided at all costs—even when justified. The French and British responses to Nazi provocations throughout the mid to late 1930s are examples of this.⁶ The security dilemma requires management of risk across a portfolio of choices, each of which has its own set of potential bad consequences. Risk management assumes that risk cannot be eliminated, and that risk mitigation in one area may increase risk in another.

The concept of risk management has three pillars: First, understanding risk distribution by learning as much as we can about the environment decreases uncertainty. It is critical to gain knowledge about probability, volatility, and potential losses. A deep understanding of causation and contributing factors adds predictability and allows for the development of a strategy that efficiently lowers risk. I refer to this environmental comprehension as strategic understanding. Second, shaping the risk distribution by lowering the probability of an adverse event and reducing volatility. These are the preventive measures that lower the probability of a negative event occurring. For

this paper I refer to preventive measures that lower probability as “pledges.” Third, managing consequence by reducing potential loss by lowering the impact or the magnitude of an event after it has occurred. In this paper, steps taken to reduce or manage consequences are referred to as hedges. Together, these three pillars form the concept of risk management in its basic form.

The three main approaches to lowering risk are: (1) time, which can increase strategic understanding; (2) pledges, which lower the probability of adverse events; and (3) hedges, which reduce the consequences of those events. Actions taken in one area usually affect other areas of risk management. For example, ballistic missile defense (BMD) is a pledge that reduces the probability of missiles getting through to their intended targets. But BMD also lowers the consequence of a missile attack by reducing the number of that missiles reaches their destination. And, effective BMD uses time by changing an adversary’s calculus for launching missiles in the first place. BMD is an example of a pledge that has effect on the consequence and time.

Nowhere is risk management more closely studied and analyzed than in the insurance industry, the profits of which depend on an accurate representation of risk. Here, risk serves as a vehicle to communicate uncertainty and danger. With this information, decisions are made to lower the exposure to risk. The similarities between the insurance industry and national security risk management are striking with one notable difference—profit motive. Profit motive is the desire to attain the best possible outcome at the lowest possible cost with the lowest exposure to risk. Finding the best outcome at the lowest possible cost has not always been the strong suit of a military criticized for purchasing \$600 toilet seats and \$500 hammers.⁷ Profit motivation creates

mechanisms that bring equilibrium and stability to the market. However, in national security, there is no precise unit of measure to weigh cost against objectives the way that money does in a market system.⁸ Still, the inner workings of risk management in the insurance industry have strong connections to the ways national security risk is managed.

For example, a hedge in the form of a homeowner's insurance policy protects a homeowner from the consequence of tornado damage. To make money writing tornado insurance policies, the insurance company must accurately gauge the probability of tornado damage and the losses associated with such events. The price of the policy (in the form of a premium) reflects these expectations, plus an additional amount for the firm's profits. This is a simple insurance market because the homeowner in a tornado-threatened area can do nothing that reduces the probability of loss. Weather events are "Acts of God" and are not affected by individual behavior. All the homeowner can do to lower risk by buying a hedge that reduces the consequence.

Consider a more complex market: fire insurance for a home. Again, the homeowner reduces the consequences of fire damage by owning a policy that offsets the financial impact of a fire. The hedge does not affect the probability of a house fire occurring. However, unlike a tornado, the homeowner can install smoke detectors, preform heating and electrical systems inspections, and take other preventative measures that reduce the probability of a fire. Indeed, such pledge behaviors for probability reduction are often mandated as part of the insurance policy. Together, the hedge (insurance policy) and the pledge (home inspections and safe practices) lower the overall risk of a house fire by reducing consequence and probability.

Dollar cost averaging (DCA) is an example of risk reduction over time. The DCA is “the technique of buying a fixed dollar amount of a particular investment on a regular schedule, regardless of the share price. More shares are purchased when prices are low, and fewer shares are bought when prices are high.”⁹ Investors are able to spread the distribution of risk over longer periods of time and thus lower their exposure to risk. DCA risk is lower compared to those that invest in lump sum investments.

The Improvised Explosive Device (IED) problem the United States (U.S.) military faced in Iraq and Afghanistan provides a good example of risk management that brings all three approaches together—the hedge, the pledge, and time. To counter the consequence of IEDs the U.S. military procured material solutions like Mine-Resistant Ambush Protected vehicles and increased individual protective gear. While these hedges saved lives, they only marginally reduced risk by lowering the consequence. In order to significantly reduce risk the military needed to reduce the probability of an effective IED strike and gain a strategic understanding of the environment.

The insurgents’ initial response to the U.S. hedging strategy against IEDs was escalatory in nature—bigger bombs, different initiation methods, and adaptive employment techniques that made the IED more effective. The enemy quickly adapted to counter the hedge. While the hedge was effective in lowering the consequence of the blast, overall risk was not reduced because the hedge did not lower probability of a strike. Recognizing this point, the U.S. military attempted to reduce risk by getting “left of the blast.” The pledge in the form of electronic countermeasures, IED detection equipment, and route surveillance lowered the probability of an IED strike. Gaining strategic understanding of the environment through intelligence enabled the U.S.

military to identify IED facilitators, attack the networks of insurgents employing IEDs, and reduce the availability of the material used to manufacture the bombs. This example illustrates a balanced risk management strategy. While risk was not reduced to zero, it was significantly lowered.

National Security Risk

The primary purpose of the U.S. military is to reduce national security risk. Thus, risk management is central to all national security and military decision-making. Vice Chairman of the Joint Chiefs of Staff Admiral James Winnefeld described strategic risk as, “The difference between the threats to a national security interest and our ability to protect it.”¹⁰ Given that U.S. national security interests have become so broad and elastic, bridging the gap between threats and our ability to counter them is an expensive, if not unsustainable, proposition. This definition exposes the way many senior leaders view risk. Risk reduction is everything—strategy is built around it, it justifies acquisition programs and force structure, and resources are allocated to counter risk. The higher the risk, the greater the resource applied against the threat. While this type of risk-based resourcing was effective during the Cold War, it has many pitfalls in today’s fiscal and security environment. Risk-based resourcing in its current form prevents the military from making the hard decisions required during fiscal austerity. It also prevents the efficient allocation of precious resources to effectively counter diverse threats.

In this environment, senior leaders are incentivized to focus on worst-case scenarios in order to receive a greater share of resources. This means inflating risk by exaggerating the probability or the consequence of a threat. Commanders that fail to articulate risk are more likely to be deprived of resources. A common risk-inflation

approach involves describing unrealized threats in the distant future. Such vague notions are impossible to refute. This creates a bias toward high-end threats while leaving the more likely threats under-resourced. This also leads to the inefficient allocation of scarce resources and exposes the U.S. to increased risk.

The U.S. military resource decisions are based on risk—and that is not a bad thing. However, in a resource constrained and competitive environment, leaders tend to exaggerate risk in order to justify their own resource expenditures—and that is a bad thing. To be clear, senior leaders are not the real culprits. The problem is systemic. Naturally, senior leaders want warfighters to be equipped with the tools they need to fight effectively, survive, and come home safely. Yet, in this system, a leader who doesn't articulate the graveness of the risks he is trying to counter will lose the resource contest to another leader who does. It is problematic when resource decisions are based on exaggerated or inflated risk assessments. We want to allocate resources based on an accurate assessment of risk. It is important to acknowledge these tendencies in our decision-making. This is not a roadmap on how to correct this behavior, but more recognition that the current risk model may be exacerbating many of the issues we face.

In 2009, Secretary Robert Gates recognized the need to make the Department of Defense more efficient and sustainable. Gates realized the department faced significant problems after eight years of war. He led a department with out-of-control acquisitions costs and a high percentage of program failures, budget uncertainty, post-war drawdowns, and skyrocketing personnel costs, all in a volatile environment. Seeking to rebalance the department, Gates said, “[We need] to institutionalize and enhance our

capabilities to fight the wars we are in today and the scenarios we are most likely to face in the years ahead, while at the same time providing a hedge against other risks and contingencies.”¹¹ As a Cold Warrior himself, and someone who learned about risk from a career in the intelligence community, Gates’ saw the legacy of the Cold War in the way that the Department of Defense was doing business—especially when it came to managing risk.

Cold War Risk

The junior and mid-grade officers from the Cold War are the strategic leaders directing the military today. They carry with them the experiences, the lessons, and the attitudes gained from the Cold War. What they learned about risk management and resourcing was taught through the lens of countering the Soviet Union. During the Cold War, risk management was, in many ways, much simpler than it is today. The U.S. military focused on an organized, identifiable, and relatively predictable threat. There was no question that the threat emanating from the Soviet Union was existential and that war would result in mutually assured destruction. To reduce risk the U.S. waged a war of acquisition. The strategy was to outspend the enemy and drive risk as low as possible. With an expanding pool of resources, the U.S. built the best-trained, best-equipped, and best-led military in world. The U.S. made significant investment in intelligence, strategic deterrence, high-end technology and weapon systems, and partnerships and alliances.

Under the Regan administration the U.S. military was flush with resources—morale was high, pay was good, troops were trained, and the force had the best equipment money could buy. Risk assessments were based on comparing U.S. military capability against the Soviet Union. If the Soviets built a tank, the U.S. built a better one.

The same went for airplanes, ships, and missiles. The Soviets could not sustain this arms race and the Cold War ended. While the strategy of acquisition worked, it also had a lasting effect on the U.S. military. This strategy created a risk-based resourcing model that still exists today.

While risk-informed resourcing is fine, the problem is that this strategy conditioned our current leaders to plan for the worse case scenarios and to inflate risk in order to secure resources—and they're still doing that today. They are not exaggerating risk out of malice. They believe that by adopting resource intensive strategies they are saving lives. No senior leader wants to needlessly put American service members in harm's way without the required resources. General Dempsey often says that he never wants U.S. troops in a fair fight.¹² However, as noble as these intentions are, they can end up increasing risk exposure. With finite resources, these tendencies can cause a misallocation of precious resources against today's risk.

Today's Risk

The current risk environment is characterized by complexity and exacerbated by partner dynamics. The U.S. is attempting to use global partners to counter many of the diverse threats the world faces. The World Economic Forum's latest report on risk states that, "decision-makers are struggling to cope with heightened complexity and uncertainty resulting from the world's highly interconnected nature and the increasing speed of change."¹³ Today's threats are much more dispersed, diverse, and complex. Global interdependencies, proliferation of technology, weakening institutions, and a diffusion of power to non-state actors and super-empowered individuals contribute to greater instability and insecurity. The U.S. is not immune from these challenges. The Chairman of the Joint Chief of Staff (CJCS), General Martin Dempsey, uses "2-2-2-1" to

describe the biggest threats the U.S. faces today. Two near-peer competitors in China and Russia; two middleweights in Iran and North Korea; two networks in terrorist groups and transnational criminal organizations; and one domain: cyber.¹⁴ While these threats pose varying degrees of risk, the real question is how to build a joint force capable of countering these diverse challenges now and in the future, especially given what then-CJCS Admiral Mike Mullen called the biggest threat to U.S. national security—the national debt forcing austerity on the military.¹⁵ One way the U.S. military intends to cope with this environment is through increased reliance on our international partners.

But the U.S. is not the only nation facing austerity. Partners that the U.S. relies on to defray the cost of security are significantly reducing their military capabilities. Nowhere is this felt more than with the U.S. and North Atlantic Treaty Organizations (NATO) allies of Western Europe. Relying on the U.S. to underwrite security, friends and partners are willing to accept the risk of smaller military budgets. This poses a challenge for a U.S. defense strategy that attempts to offset risk through partnerships and alliances. In the Asia-Pacific, states fearing a rising China are more willing to work closely with the U.S. to counter that threat. The same can be said for countries in Eastern Europe that are concerned with a reemerging and aggressive Russia. In the Middle East, the U.S. leads the coalition effort to fight the Islamic State and deterrence of Iran. In each of these efforts, the U.S. is trying to disperse risk across a great number of partnerships. Yet U.S. over-investment to counter these threats has enabled the under-investment by some of our partners. The U.S. continues to underwrite global security, thus creating a “free-rider dilemma.” The U.S. defense cuts and strategies that identify acceptable risk are met with criticisms of America’s reduced commitment and

failure to lead. Partners not faced with a direct threat from a nation state have a false sense of security created by a paradox that in many ways leaves them less secure in today's security environment.

Today's security environment creates what General Dempsey calls a security paradox. "Although geopolitical trends are ushering in greater levels of peace and stability worldwide, destructive technologies are available to a wider and more disparate pool of adversaries. More people have the ability to harm us or deny us the ability to act than at any point in my life—and that's the security paradox."¹⁶ This environment also creates a risk paradox. That is, Americans feel less secure in today's environment than at any time during the Cold War. Today's threat of terrorism fuels fear and insecurity in the U.S. "Terrorism inspires fear because of its unique ability to evoke a profound uncertainty and a lack of perceived control with regard to one's safety."¹⁷ The emotional response to the threats we face today is strongly influenced by our perception of risk and drives many of our strategic choices.

Emotional Response to Risk

The emotional response to risk has a strong influence over national security decisions. Threats to national security play to our greatest fears. Whether it is a decision-maker's desire to prevent loss, a strategic leader incentivized to exaggerate risk, or a stakeholder's use of future threats to justify a program, people are listening. Constant polling gauges public sentiment and the will of the nation. While a well-informed public is a good thing, it makes us more susceptible to narratives designed to shape public opinion. Lobby groups, thought leaders, media, politicians, and even military leaders are utilizing strategic communications to sway public perceptions of risk. This makes it more difficult for the military to manage risk, develop strategy, buy things,

and of course, make cuts. Policy makers and defense contractors use military risk assessments to strengthen their arguments for programs and funding. This is clearly demonstrated during posture hearings to congress. Service chiefs and combatant commanders all describe the various threats in their area of responsibility, because articulating risk is essential to making the case for resources. And Congress is not the only consumer of these risk assessments. They are used to shift public perception, lobby for different programs, or to mobilize the international community to action. This provides a strong incentive to exaggerate risk to obtain the best possible outcome.

Bias for Hedges and the Security Dilemma

The U.S. is too weighted toward hedges and underinvests in low-end and offsetting platforms. Since the Cold War the U.S. military has adopted a bias towards exquisite hedges to reduce risk. This was done to counter a much larger, numerically superior, Soviet military. The U.S. military prefers to buy expensive, extremely capable, high-end platforms that hedge against risk.¹⁸ Resourced to fight and win the nation's wars, the U.S. military relies on overmatch capability to decisively defeat potential adversaries.¹⁹ While this force is well suited to defeat near-peer competitors, it may not be as effective against near-term contingencies like the ones playing out today. Military acquisitions appear to have lost the ability to balance between high-end and low-end platforms, opting for the most technologically advanced programs. This is evident in reviewing Major Defense Acquisition Program or (MDAP). The MDAP lists programs that are estimated to cost \$365,000,000 for research, development, test, and evaluation or an eventual program procurement of more than \$2,190,000,000.²⁰ While a number of programs on the MDAP are modernization of existing platforms, the biggest programs involve new, technologically advanced platforms. Each service has examples of

advanced programs that are being purchased, often at the expense of lower end platforms and the development of offsetting technologies. The Army's new armed reconnaissance helicopter, the Marine Corps' new LHA amphibious assault ship, the Air Force's bomber replacement, and the Navy's Littoral Combat Ship are a few of the high-end, technologically advanced, and costly programs being funded today. While all of these programs fill an operational need, they are taking longer to build and cost more. What's the tradeoff? Build fewer platforms. The U.S. military is building a smaller force that is far and away more technologically advanced than any other nation on Earth. But are we trading capacity (quantity) for capability (technology)? A high-end low-end platform mix helps balance capability with capacity in a more cost effective way and provides the means for a flexible response to the security challenges we face.

To illustrate the exquisite hedge bias, imagine shopping for a family car. At over \$300,000, the Bentley Muslanne is an exquisite automobile. While having the Bentley in the garage is very gratifying to the car enthusiast, it may not be the best purchase for daily use. Given the purchase price, operating cost, and vulnerability to damage or theft, the exotic car might not be the best platform for errands. A better strategy is finding a high-end car at a lower price and a lower-end car for daily use. Although this example may seem incongruous, there are parallels to the way the military is procuring some of its biggest programs. The U.S. military opts for the "Bentley" in its major acquisition programs, but military leaders and acquisition officials argue that this is required to lower risk. As Secretary Hagel argues, "[China and Russia] are also developing anti-ship, anti-air, counter-space, cyber, electronic warfare and special operations capabilities that appear designed to counter traditional U.S. military advantages."²¹

Validating that the future threat environment demands all high-end platforms because low-end platforms will be too vulnerable to be effective. While this argument has merit, it ignores offsetting technologies, potential platform upgrades, and balancing what is required now and what will be needed in the distant future. This point is made in a Center for a New American Security report on military sustainability: “DOD should match requirements to likely threats based on holistic analysis of the aggregate capability of the joint force, not on narrow analysis of a single platform, service or domain.”²²



Figure 1. USAF F-35 (Top) Chinese J-31 (Bottom)²³

To justify the need for high-end platforms, their proponents describe threats and cite the unacceptable risk of not purchasing an exquisite hedge. Generally, these arguments are based on comparisons to adversaries' platforms. However, these comparisons often ignore the complementary systems that make U.S. high-end platforms more effective. For example, comparing an F-35 Joint Strike Fighter to a Chinese J-31 fighter aircraft head to head is insufficient analysis. While some of the

technologies might be comparable, the true strength of the F-35 is the joint force behind the airplane. From the level of training and pilot skill to all of the complementary systems that increases the effectiveness and survivability of the jet. When brought together, this platform has no match in the world. That kind of overmatch, however, comes with a hefty price. This to counter what some would say (and hope) is the least likely threat facing the U.S.



Figure 2. B-52, B-1, and B2 Flying in Formation: High-End Low-End Mix²⁴

What is the long-term result of an acquisition strategy biased toward high-end hedges? The B-2 bomber illustrates where this can lead. The B-2 stealth bomber is an amazingly, technologically advanced, exquisite hedge. It is a strategic platform that is instrumental for nuclear deterrence and force projection. However, as the B-2 ages, its technological edge is reduced. The B-2 is already vulnerable to some of the advanced air defense systems used by other nations. The U.S. Air Force has twenty B-2 bombers in its inventory, costing roughly \$2.2 billion per copy.²⁵ Not only the cost of procurement is problematic; the operating costs of the B-2 also draws attention at approximately \$170,000 cost per flight hour. The B-2 is the Air Force's most expensive plane to fly (even more expensive than the VC-25A, otherwise known as Air Force One).²⁶ Comparatively, the less capable, less expensive, and much older low-end counterpart

B-1 Lancer bomber comes in at about \$58,000 per flight hour, and flew more missions over Iraq and Afghanistan.²⁷ This example is even more apropos as the U.S. Air Force develops the next generation of long-range strike bombers (LRS-B) to replace the B-1 and B-52 bombers.

The U.S. Air Force is in the initial stages of the procurement process for the LRS-B—the exquisite hedge of next generation bomber. Although a closely guarded secret, the LRS-B will possess cutting-edge technology. The plan is to purchase 80-100 bombers.²⁸ To control costs Secretary Gates capped the price at \$550 million per airplane.²⁹ This is called a fixed-price contract. However, the addiction to the exquisite hedge is shining through as the Air Force considers a cost-plus contract for the next generation bomber. This means that the cost of the bomber could far exceed the fixed price that Gates intended. Tom Christie was a Pentagon acquisition official Chief from 2001 until his retirement in 2005. “[Christie] thinks \$2 billion per aircraft is a more accurate estimate.” Testifying to Congress, Assistant Secretary of the Air Force for Acquisition, William LePlante said, “Given the technology development that will need to be done on the LRS-B, a fixed-price contract would likely carry too much risk.”³⁰ LePlante’s statement reveals the intent of adding another high-end and technologically advanced bomber to inventory, thus removing the high-end low-end mix we currently have within the bomber force. However, the LRS-B may not be the bomber the nation needs when it is finally operational in 10-15 years.

Like the family automobile example above, there may be a better approach to purchasing the next bomber. Instead of buying a second Bentley, perhaps we should consider a less expensive second car. The LRS-B will be required to survive in high

threat environments of the next twenty years, but that may be a better requirement for bomber developed after the LRS-B. The LRS-B is not likely to be operational for at least ten years, meaning that the B-1 and B-52 service lives will be extended. Exquisite performance is not only expensive, but also slow in the making. Programs with long development timelines like that of the LRS-B may be obsolescent by the time they are in full production. This is where offsetting programs are so effective. The Air Force could develop a more cost effective platform and produce it more rapidly by balancing existing technology with some cutting edge concepts. Even as a “low-end” platform, the LRS-B would still be a capable weapon system. Improvements to the B-2 where possible, further advancements to unmanned platforms, and continued research and development of long-range hypersonic missiles and standoff precision-guided munitions can offset the risk of employing bombers in non-permissive environments.

The Air Force is not the only service exhibiting the hedge bias. All of the services seek more technologically advanced programs (capability), while trading off quantity (capacity). The Navy prefers technologically advanced ships, all with price tags in the billions, like the destroyer Zumwalt, the aircraft carrier Ford, and the LCS program to a less advanced but larger fleet. The Army is looking at technologically advanced tactical vehicles and armored platforms to modernize aging vehicles. The Marines have significantly reduced F-18 funding to pay for the F-35B Short Takeoff/Vertical Landing Variant, resulting in lower operational readiness rates of their flying squadrons. The services’ major acquisition programs illustrate a trade for advanced technology over a high-low mix. This is not a call to end the procurement of high-end platforms, or to cease research and development funding. It is, however, suggesting a balanced

acquisition strategy that distributes procurement money across high and low-end programs. Today's acquisition strategy is based on a future conflict with near-peer adversaries while seemingly ignoring the more likely near-term operational needs. Building a force based on the wars we have previously fought will leave us unprepared for the next war we are in. Said differently, the wars we are preparing for are not the wars we end up fighting.

In many ways, the U.S. military's acquisition strategy is contributing to a security dilemma. Increased military power leaves potential adversaries feeling less secure. To compensate, states invest in more or better military equipment and force structure. For example, China builds the J-31 to counter the F-22, which leads to further U.S. investment in high-end air-to-air platforms. The very weapon systems intended to increase U.S. security may increase instability and risk.

The effects of the security dilemma are most visibly playing out in U.S. relations with Russia and China. An increasingly aggressive Russia leaves many perceiving a return to a Cold War posture that must be countered militarily. And the U.S. pivot to the Pacific through the eyes of the Chinese is viewed as a revival of American containment strategy. In response, China and Russia have both increased defense spending and the investment in high-end platforms to counter U.S. advantages. A rising China "says its military budget will increase by 10.1% in 2015, the latest in a series of double-digit increases that will narrow the still-significant gap with the United States on defense spending."³¹ The weapon systems that the Chinese are developing are specifically designed to counter the U.S. military's advantage.³² While the U.S. military needs to maintain a comparative advantage over potential adversaries, we must be mindful of

provocative rhetoric and behavior. The security dilemma created by the hedge biased risk reduction strategy of the U.S. may actually be increasing the probability of miscalculation. At a minimum, our exquisite hedges may create a false sense of security, causing us to exhibit riskier behavior.

Approaches to Risk Management

The U.S. is at an inflection point with regard to national security. As threats continue to evolve, the U.S. must adapt its risk management framework. Only a balanced approach that lowers probability and consequence, and increases strategic understanding will effectively reduce risk. The investments in hedges such as nuclear deterrence, force posture and forward presence, and high-end capabilities reduce risk. Continuing to invest in pledges like ballistic missile defense, alliances and security agreements, and building partnership capability will also reduce risk. Lastly, leveraging the element of time will benefit the U.S. in many of the risks faced today. While the U.S. could place less emphasis on hedges and remain committed to pledges, it is the element of time that should be better used to lower risk.

Time as an instrument to reduce risk is often overlooked. When taken in combination with the hedge and pledge, time allows space for increased strategic understanding, the further development of nascent technologies to reduce technology risk in development, the more efficient application of resources, and may provide greater flexibility in responding to a crisis. This final “may” is important, because adversaries can use time to their advantage, as well. The Nazis exploited time in the run-up to the Second World War, while the British and the French were better-equipped to confront Germany during the Rhineland crisis of 1936 than during the Sudetenland crisis two years later.³³ Yet when threats to an advantageous status quo can be

preserved and when existing conditions are to the U.S.' advantage, time is a powerful ally. Current relations with China may fall into this category.

During the Cold War, time was on the side of the U.S. because it occupied the center of a sustainable economic system. The U.S. could simply wait out the Soviet Union, using hedges and pledges to encourage stable relations between the two nations and avoid war. At the end of the Cold War, Francis Fukuyama argued in *The End of History and the Last Man* that liberal democracy is fundamentally the best system and given time it will eventually spread throughout the world.³⁴ The increase in world democracies since the end of the Cold War seems to support this argument. The Democratic Peace Theory that posits mature democracies do not go to war with each other, which suggests that time and the spread of democracy, increases American security.³⁵

However, time also requires a level of patience that is lacking in the U.S. system. Strategic impatience encourages a bias to hedge, while reducing the employment of preventive measures and time to reduce risk. The hedge in the military instrument of power satisfies the immediate gratification for action, but often at the expense to a longer-term strategy that promotes stability. The call for quick and decisive military action often drowns out the options that place military power in a supporting role, and prevents the balanced application of the instruments of power across the diplomatic, informational, military, and economic elements.

Accepting some level of risk coupled with a balanced approach to risk management that evenly leverages hedges, pledges, and time is required for the U.S. to effectively and efficiently counter the future security environment. The current risk

management approaches the U.S. employs today is unsustainable and may actually increase overall risk in the long term. As defense expert Richard Betts wrote in *American Force: Dangers, Delusions, and Dilemmas in National Security*, “Threats, opportunities, and risks are always uncertain, but the economic costs of maximum preparedness are definite.”³⁶ Maintaining maximum preparedness against all of the diverse set of threats the U.S. faces today is unsustainable. To preserve the solvency of the defense enterprise, military leaders must make hard choices to set a new strategic direction. As Betts writes, “Translating a change of direction into specific spending cuts of more than a token size would involve hard choices, rough bargaining, and much blood on the floor of the political arena but should flow as much as possible from the sensible strategic and operational analysis.”³⁷ In other words, while change will be very difficult, the first step is through the development of a strategy that accepts risk where possible, finds innovative offsets like a high-low end mix of technologies, and relies more on friends and partners to produce security and not just consume it.

Emerging Strategy

Wars’ end marks a time of transition from a mobilized force to a peacetime military. While these periods are times of reductions, they also present opportunities to innovate and reset. After the wars in Korea, Vietnam, and even Iraq, the U.S. military implemented strategies to better address the security environment of the time. Elements of those strategies were effective in changing the strategic direction of the military to account for security and budgetary realities, and enabled the military advantage the U.S. has today.

The U.S. changed its military strategy with the New Look policy in 1953 and the Offsetting Strategy in 1976. These strategies are referred to as offsetting because they

made tradeoffs in other areas to ultimately reduce risk. These strategies took measures that attempted to address the future security environment while recognizing the need to, as Betts put it, “economize and make hard choices.”³⁸ Elements of these previous defense reviews enabled cuts to defense budgets while balancing the need for a strong military instrument. The security and fiscal environments during these reviews are similar to the challenges we face today. In speaking about the next strategy, Secretary Chuck Hagel said:

This new initiative is an ambitious department-wide effort to identify and invest in innovative ways to sustain and advance America’s military dominance for the 21st century. It will put new resources behind innovation, but also account for today’s fiscal realities—by focusing on investments that will sharpen our military edge even as we contend with fewer resources.³⁹

Deputy Secretary of Defense, Bob Work, leads the effort of building the next defense strategy. Mr. Work recognizes the need for the U.S. military to adopt a new strategy. He recently remarked, “I believe we need to develop a third offset strategy to sustain what Bill Perry called the American military’s ‘unfair competitive advantage.’”⁴⁰ Applying the lessons learned from New Look and The Offset strategies will be critical as the Department of Defense considers at the next strategy and a new strategic direction for the military.

New Look 1956

President Eisenhower’s New Look policy forced the military to explicitly accept some level of risk in order to become more affordable and sustainable. With the end of the Korean War, a downturn in the economy, and a rising and spreading threat from the Soviet Union, Eisenhower recognized the need for a shift in strategy. Central to his vision was to “cut spending while maintaining the commitments he inherited, and he did

so by adapting strategy and accepting greater risk.”⁴¹ While President Eisenhower appreciated a strong military, he knew the U.S. economy could not absorb the cost a large military instrument that overmatched the Soviet Union. His administration adopted the New Look policy based on two main principles: “(1) maintaining the vitality of the U.S. economy while still building sufficient strength to prosecute the Cold War; (2) relying on nuclear weapons to deter Communist aggression or, if necessary, to fight a war.”⁴² This translated to reducing defense budgets and reinvesting in domestic economic development, and using the nuclear deterrent to offset the increased risk incurred by a smaller force. Eisenhower recognized the difficulty with his proposed cuts in his words “The problem in defense is how far you can go without destroying from within what you are trying to defend from without.”⁴³ Eisenhower cut the defense budget by 40% between 1952 and 1956.⁴⁴

Critical to the New Look strategy was Eisenhower’s acceptance of risk. Cutting ground and Naval forces while investing in strategic weapons was controversial in the face of the existential threat posed by the Soviet Union. It was unpopular with NATO partners who felt over-exposed to the threat of a conventional war with Russia. They questioned U.S. resolve to escalate to nuclear conflict in response to a conventional war in Europe. This was a valid concern. Military leaders here at home were also concerned that the strategy accepted too much risk and left the nation vulnerable. Eisenhower persisted and the New Look policy was implemented. Eisenhower explicitly accepted the risk of conventional war with Russia, offset by a reinvigorated U.S. economic power and the deterrence effect of the nuclear triad. Army leaders like General Ridgway and his successor as Army Chief of Staff, General Maxwell Taylor, were vocal critics of New

Look. They feared the strategy accepted too much risk by cutting the Army, leaving the U.S. vulnerable to conflicts that would not warrant the use of nuclear weapons.⁴⁵

General Taylor argued for using conventional forces as a “flexible response” to deter crisis instead of increased reliance of nuclear weapons.⁴⁶

Zachary Keck points out another problem with New Look and a potential vulnerability with offset strategies. “Although Eisenhower’s nuclear investments allowed him to drastically reduce defense spending in the early to mid-1950s, the Soviet Union had largely caught up a decade or so later.”⁴⁷ So any offsetting strategy must be continually assessed and adjusted to ensure the offsets remain viable. Thankfully the military did not end up fighting the war that it had prepared for. While the criticisms of New Look exposes concerns with offset strategies, they do not negate the benefits. New Look explicitly accepted a higher level of risk offset through other means. The same must be achieved if the next strategy is going to be sustainable.

The Offset Strategy

At the end of the Vietnam War, the U.S. once again needed a new strategy. As with the end of the Korean War, the U.S. was demobilizing the military, experiencing a downturn in the domestic economy, and facing an evolving security environment. In a report to Congress, Defense Secretary Harold Brown said: “Technology can be a force multiplier, a resource that can be used to help off-set numerical advantages of an adversary. Superior technology is one very effective way to balance military capabilities other than matching an adversary tank-for-tank or soldier-for-soldier.”⁴⁸ The investments resulting from this strategy gave the U.S. military a comparative advantage that remains today. Most notably, this strategy invested in stealth technology, remotely piloted aircraft as intelligence, surveillance, reconnaissance (ISR) platforms, precision guided

munitions, and communications and navigation technology.⁴⁹ Deputy Secretary of Defense Robert Work said the Second Offset Strategy, "proved far more enduring than the first, providing the U.S. military with a decisive operational advantage that has lasted for nearly four decades."⁵⁰ The investments made during the late-1970s paved the way for the military superiority that the U.S. enjoys today. It was the tradeoffs through the offset of a high/low mix that freed the funding for research and development of the very platforms that gives the U.S. military superiority. And even though the second offset strategy is most recognized for the investment in technology, the call for an appropriate mix of high-end and low-end platforms made the strategy affordable and the research and development sustainable.

Finding the appropriate mix between high-end and low-end platforms is critical for a sustainable defense budget, and not something the U.S. military is doing well in today's acquisition programs. While the Second Offset Strategy is credited with trading smaller force structure for technology, it more importantly balanced research and development funding for high-end platforms with less advanced and more affordable low-end platforms. A clear example of a high-end and low-end mixed procurement is the U.S. Air Force's purchase of the F-15, F-16, and A-10 nearly simultaneously in the late-1970s. The F-15 was an extremely capable, twin-engine air superiority platform that represents the high-end fighter. Recognizing that the Air Force could not afford the number of F-15's required, they decided to offset quantity with the less expensive F-16. The F-16 was a lighter, single-engine multirole fighter that represented a lower-end platform. The A-10 was a low-end platform designed for close air support against armored formations. All three of these platforms remain operational today and exemplify

the value of high-end and low-end mix of upgradeable platforms. These platforms were developed and produced relatively quickly compared to the long timelines associated with today's acquisitions. The offsetting mentality in the Defense Department during the 1970s enabled the affordable development of technology, balanced acquisition, and a capable force all with sustainable budgets. While there were cost differences in these platforms, the technology was very similar. Today, it appears to be much harder to balance high-end low-end mix, when our high-end is so technologically advanced. An F-16 was in many ways an F-15-lite, with smaller radar and one less engine. In contrast, an F-35-lite would still be an expensive and exquisite proposition. Despite the fact that it may not be practical to perfectly recycle the high-low strategies of the 1970s, the concepts that drove these approaches are still applicable today.

Next Strategy

Drafting the next U.S. defense strategy is a daunting task for sure. It must build the joint force the nation needs tomorrow while reducing today's force in a responsible way. A force capable of providing military options to the nation; protect national security interests and global commitments; and do all of this in an economically sustainable way. Richard Betts writes, "The best strategy does so not just effectively but efficiently as well—at the lowest cost of any option."⁵¹ The cost of defense matters today and will for the foreseeable future. So the next strategy must go beyond budget cuts and set a course that efficiently counters the strategic environment the U.S. faces.

Three pillars from previous U.S. defense strategies are key elements to developing the next strategy. These pillars will enable making the hard choices between what we can do, what we want to do, and what we can afford to do as a nation.

First, as in the New Look policy, the U.S. must find an acceptable level of risk and associated offsets. The U.S. can no longer afford to counter risk the way it has in the past. Decision-makers will need to explicitly accept risk by stating what the U.S. will and will not do militarily. This may have the added benefit of forcing other nations to increase their commitments to global security. Explicitly accepting risk also enables a realistic prioritization of national security interests and an alignment of strategic ends, ways, and means. However, determining “what amount of risk is strategically sensible”⁵² is extremely difficult and fraught with danger. Such decisions require a strategic vision, effective communication, and, most of all, political courage. Betts acknowledges this difficulty, writing, “Among practitioners and observers of military affairs there is no consensus whatever on the absolutely judgmental question of what degree of risk is acceptable.”⁵³ Regardless of the degree of difficulty, accepting strategic risk is critical to an effective strategy moving forward.

The second essential ingredient to the next strategy is that the U.S. military must find affordability through offsets. Offsets may include technology, other instruments of power, reliance on partners, or other innovative ways to counter security threats. Offsets also include high-end/ low-end platform mix, and the use of complementary platforms. Instead of investing in redundant high-end capabilities to counter future threats, the military can find more affordable offsets that will reduce overall risk.

The third essential ingredient to the next strategy is that the U.S. must build partnership capability to get our friends and partners to contribute more in countering global threats. Moving countries from consumers of security to producers of security will be critical if the U.S. is going to reduce reliance on its global military commitment. BPC

requires a strong military-to-military relationship and includes investments of equipping, training, and conducting exercises with partner nations.⁵⁴ Countries will also be more willing to contribute to security within the construct of a regional approach or within coalitions. The U.S. strategy must seize on opportunities to operate multilaterally with regional partners. Examples of regional partners forming a coalition countering threats are seen in Africa against extremist organizations, in the Middle East countering Islamic State of Iraq, and in NATO's response to the Ukrainian crisis. Contributions from partner nations reduce demand on U.S. resources and increase the investment, or skin in game, of other countries. Last, the U.S. may encourage partner nations to commit to contingency operations by providing enabler support. Intelligence fusion, ISR platforms, strategic and operational lift are just a few areas the U.S. military can support partners conducting operations to lower risk.

Conclusion

Fundamental changes must be made to the way the military manages risk, allocates resources, and develops strategy. First, we must identify and determine an acceptable level of risk while finding innovative and balanced approaches to risk management. The balanced application of hedges, pledges, and time will effectively and efficiently reduce risk. Secondly, we must adjust our acquisition strategy and resource allocation model to allow for offsetting ways and means. This includes a healthy high-end/low-end platform mix. An offset mentality will help build the joint force that the nation needs while preserving military options for future decision-makers. Third, we must develop a strategy that aligns ends, ways, and means in a realistic and prioritized manner. This may require adjustments to desire ends, innovative use of reduced means, and ways that share the burden with friends and partners around the globe.

Although these changes may seem overly simplistic, taking these steps will reduce national security risk in a more efficient, flexible, and sustainable way. While this is not roadmap for solving all of the world's security woes, it begins the conversation on how the U.S. can better adapt to today's environment. The challenges we face today may seem insurmountable and new, but they are not. The U.S. military has previously navigated reduced resources in complex security environments while maintaining a strong military instrument of power. We can do it again. To do so will require leadership and courage in the face of hard decisions.

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