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Basis for a Rational Defense: Acquiring the Right Capability

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Preface & Acknowledgements

Welcome to our Ninth Annual Acquisition Research Symposium! This event is the highlight of the year for the Acquisition Research Program (ARP) here at the Naval Postgraduate School (NPS) because it showcases the findings of recently completed research projects—and that research activity has been prolific! Since the ARP's founding in 2003, over 800 original research reports have been added to the acquisition body of knowledge. We continue to add to that library, located online at www.acquisitionresearch.net, at a rate of roughly 140 reports per year. This activity has engaged researchers at over 60 universities and other institutions, greatly enhancing the diversity of thought brought to bear on the business activities of the DoD.

We generate this level of activity in three ways. First, we solicit research topics from academia and other institutions through an annual Broad Agency Announcement, sponsored by the USD(AT&L). Second, we issue an annual internal call for proposals to seek NPS faculty research supporting the interests of our program sponsors. Finally, we serve as a "broker" to market specific research topics identified by our sponsors to NPS graduate students. This three-pronged approach provides for a rich and broad diversity of scholarly rigor mixed with a good blend of practitioner experience in the field of acquisition. We are grateful to those of you who have contributed to our research program in the past and hope this symposium will spark even more participation.

We encourage you to be active participants at the symposium. Indeed, active participation has been the hallmark of previous symposia. We purposely limit attendance to 350 people to encourage just that. In addition, this forum is unique in its effort to bring scholars and practitioners together around acquisition research that is both relevant in application and rigorous in method. Seldom will you get the opportunity to interact with so many top DoD acquisition officials and acquisition researchers. We encourage dialogue both in the formal panel sessions and in the many opportunities we make available at meals, breaks, and the day-ending socials. Many of our researchers use these occasions to establish new teaming arrangements for future research work. In the words of one senior government official, "I would not miss this symposium for the world as it is the best forum I've found for catching up on acquisition issues and learning from the great presenters."

We expect affordability to be a major focus at this year's event. It is a central tenet of the DoD's Better Buying Power initiatives, and budget projections indicate it will continue to be important as the nation works its way out of the recession. This suggests that research with a focus on affordability will be of great interest to the DoD leadership in the year to come. Whether you're a practitioner or scholar, we invite you to participate in that research.

We gratefully acknowledge the ongoing support and leadership of our sponsors, whose foresight and vision have assured the continuing success of the ARP:

- Office of the Under Secretary of Defense (Acquisition, Technology, & Logistics)
- Director, Acquisition Career Management, ASN (RD&A)
- Program Executive Officer, SHIPS
- Commander, Naval Sea Systems Command
- Program Executive Officer, Integrated Warfare Systems
- Army Contracting Command, U.S. Army Materiel Command
- Office of the Assistant Secretary of the Air Force (Acquisition)

- Office of the Assistant Secretary of the Army (Acquisition, Logistics, & Technology)
- Deputy Director, Acquisition Career Management, U.S. Army
- Office of Procurement and Assistance Management Headquarters, Department of Energy
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- Director, Office of Acquisition Resources and Analysis (ARA)
- Deputy Assistant Secretary of the Navy, Acquisition & Procurement
- Director of Open Architecture, DASN (RDT&E)
- Program Executive Officer, Littoral Combat Ships

We also thank the Naval Postgraduate School Foundation and acknowledge its generous contributions in support of this symposium.

James B. Greene Jr.   Keith F. Snider, PhD
Rear Admiral, U.S. Navy (Ret.)   Associate Professor

Panel 11. Getting the Front End Right in Major Defense Acquisition Programs

Wednesday, May 16, 2012	

3:30 p.m. – 5:00 p.m.	**Chair: Lorna B. Estep**, Deputy Director of Logistics, Air Force Materiel Command
	
	Discussant: Katherine Schinasi, Independent Consultant, former Managing Director, U.S. Government Accountability Office
	
	Basis for a Rational Defense: Acquiring the Right Capability
	    J. David Patterson, *National Defense Business Institute, The University of Tennessee*
	
	Analysis of Alternatives: Keys to Success
	    John F. Schank, *RAND Corporation*

Lorna B. Estep—Ms.Estep is the deputy director of logistics at the Directorate of Logistics and Sustainment, Headquarters Air Force Materiel Command, Wright-Patterson Air Force Base, OH. Ms. Estep is a member of the Senior Executive Service. She is responsible for the Materiel Support Division of the Supply Management Activity Group, a stock fund with annual sales of $7 billion. She directs a wide range of logistics services in support of Air Force managed spare parts, to include transformation programs, requirements determination, budgeting, acquisition, provisioning, cataloging, distribution and data management policy. She also provides supply chain management policy, guidance and direction in support of headquarters, air logistics centers, and U.S. Air Force worldwide customers.

Estep started her career as a Navy logistics management intern. She has directed the Joint Center for Flexible Computer Integrated Manufacturing, was the first program manager for Rapid Acquisition of Manufactured Parts, and has served as technical director of Information Technology Initiatives at the Naval Supply Systems Command. In these positions, she has developed logistics programs for the Department of Defense, implemented one of the first integrated and agile data-driven manufacturing systems, and directed the development of complex technical data systems for the Navy.

Katherine Schinasi—Ms. Schinasi is currently an independent consultant. Until its sunset in 2011, Ms. Schinasi was a commissioner with the Commission on Wartime Contracting in Iraq and Afghanistan, a position she was appointed to by the Senate Majority Leader. The bipartisan Commission was established and charged with recommending contract-related improvements in contingency environments. Ms. Schinasi continues to provide advice and assistance to Congress on implementing the Commission's recommendations.

Beginning in 2009, Ms. Schinasi was a senior advisor to The Conference Board, a non-profit research firm in New York. As such she was responsible for conducting and commissioning academic-level research on 21st century information and communications networks and their impact on society and culture. She co-edited *The Linked World: How ICT is Transforming Societies, Cultures, and Economies* and continues to provide assistance to the business community on those issues.

From 1978 until March 2009, she was employed by the Government Accountability Office, serving the last six years as managing director for acquisition and sourcing management. Her portfolio included operations in the Departments of Defense, State, and Homeland Security, and cross-governmental acquisitions. In her position, Ms. Schinasi testified frequently before

congressional committees on topics of defense trade and investment, export controls, the acquisition of services and major developmental systems, and the relationship between government and private sector businesses.

She was a frequent lecturer at the Defense Acquisition University, the Industrial College of the Armed Forces, and the Naval Postgraduate School. Her team of 180 people, based in five U.S. locations, was responsible for recommendations that led to billions of dollars in savings and improved government operations, including those involving government-contractor relationships. She was appointed to the federal Senior Executive Service in 1998.

Ms. Schinasi received an MA in international relations from the School of International Service, American University, and a BA in government and politics from the University of Maryland.

Basis for a Rational Defense: Acquiring the Right Capability

J. David Patterson—Patterson is the executive director of the National Defense Business Institute (NDBI) at the University of Tennessee. He is the former Principal Deputy Under Secretary of Defense, Comptroller, and served as the executive director of the Department of Defense's *Defense Acquisition Performance Assessment* study. He was special assistant to the Deputy Secretary of Defense and held executive positions in the defense industry. Patterson is a retired Air Force officer with 25 years of service. NDBI provides assistance and resources to both the Department of Defense and the defense industry to produce services, systems, and equipment more effectively and efficiently. [dpatterson@utk.edu]

Abstract

Once the Soviet Union was gone, the United States set about adjusting its national security strategy and its planning approach to deal with what appeared to be a void in adversaries. Meanwhile, the United States dealt with the Iraq invasion of Kuwait. The U.S. military and its allies handled the Iraqi invasion quickly and in a manner that appeared effortless. The ease with which the United States and its allies operated in and over Iraq in 1991 was due largely to the formidable conventional capability available, a legacy of the Cold War. The first Gulf War proved to U.S. military planners, if nothing else, that other world actors could be dangerous; but who were they, and where and when might they become a real threat? "Uncertainty" became the focus of tailoring a military capability. However, military planners knew that some level of capability was required for the United States to remain the superpower. Consequently, *threat-based* planning gave way to *capability-based* planning. With the adoption of capability-based planning came problems. The most troubling problem was that capability-based planning drove the planning process to adjust necessary capability to fit a defense budget. This paper suggests that planners consider a more threat-based approach.

Introduction

It was the 1990s. It was a new world. The soviets were no more. The "evil empire" had crumbled, and the well-defined threat that had loomed so large for the better part of eight decades had evaporated almost overnight. Of course, there was China, but China was not the Soviet Union. And there was the problem of Saddam Hussein, but he was pretty much in irons, having been soundly and quickly defeated after Iraq's short-lived invasion of Kuwait. The U.S. Air Force and Navy aviation had Iraq bound on the northern and southern borders with Northern Watch and Southern Watch no-fly zones. The metamorphosis from a clearly understood, unambiguous, focused, and well-defined threat—the Soviet Union and its surrogates—had evolved into something far less obvious. The specter of T-72 tanks and armored personnel carriers lined up on the eastern side of the Fulda Gap as far as the eye could see was a memory, not a reality. The long-feared yet unthinkable nuclear missile exchange, with its mutual, assured destruction, had become a curious notion of the past.

So what was the United States to do with all of the capability built over many years to address a threat that didn't exist anymore? Because describing a new threat was proving difficult, the Department of Defense and its planners elected to eliminate the planning steps of describing a threat and developing requirements to meet the threat and go right to describing "capabilities" that the United States must pursue.

The explanation for this approach was that rather than facing a "clear and present danger," the United States was faced with having to plan for uncertainty. This meant that planners had to provide capabilities that would address a "wide range of modern-day

challenges" in a limited-resource environment that demanded making choices. Capabilities-based planning (CBP) was the formal name given to this approach of defense planning.

What follows is an argument that suggests that the CBP model should be re-thought. Does CBP provide a rational approach to planning and thereby establish a defensible logic for acquiring the right quantities and types of weapon systems? The argument is based on a premise that if CBP were rational, it would have achieved the purpose for which it was developed, and the Department of Defense would be acquiring the right weapons and services in the right quantities. The thinking is that it would be irrational or unreasonable to purposefully and knowingly adopt a planning methodology that would not achieve its stated objective.

Additionally, CBP may be found wanting on the basis that it's foundational reasoning is not internally consistent. As an alternative, returning to more of a threat-based planning may be more likely to achieve its purpose and may be more internally consistent. More to the point, historically, threat-based planning enabled the Department of Defense and the military departments to make the if-then argument, that is, *if* an enemy has the will and the means to inflict harm on the United States or its allies, *then* the United States must accurately describe, meet, and defeat that threat with the right capability in numbers that are sufficient.

Additionally, the argument posits that without basing the requirement on a defined threat for a specific capability, advocates for a specific capability have no evidence on which to build a case for the capability. The Service chiefs and Department of Defense supporters are left very vulnerable to the obvious question: "why?" Why does the Air Force require 187 F-22s; why does the Navy need 11 carrier battle groups? Why does the Army need 45 brigade combat teams? Without threat-based planning, the military advocates are left with the not-so-compelling answer: "Well, because."

The United States is once again faced with the specter of a declining budget. Weapon systems being developed currently and being considered for future development are expensive and not likely to get less expensive. Having a rational view of acquiring these systems is critical and must give more importance to a well-reasoned understanding of the threats the United States faces.

Origin of Capability-Based Planning

Understanding the evolution in thinking that produced CBP is helpful in appreciating why the CBP process misses the mark in providing a tool for weapon system and national security strategy advocacy. CBP did not happen overnight. As early as 1987, when Admiral William J. Crowe, Chairman of the Joint Chiefs of Staff, began an unprecedented, candid series of discussion with his counterpart, Chief of the Soviet General Staff Sergie Akromeyev, there were indications that the decades-long military standoff between the United States and the Soviet Union was ending ("Biographies," 2007).

The disappearance of the Soviet Union and its surrogates with the attending existential threats came relatively suddenly. While Americans were celebrating Christmas in 1991, the golden hammer and sickle was raised above the Kremlin in Moscow for the last time (History Channel, 2012). The United States' national security establishment did not have much time to warm to the idea of not continuing to face a potential, enormous, conventional, as well as nuclear threat. The Russian bear, a formidable foe for nearly 46 years, disappeared as T. S. Eliot would have described it: "not with a bang, but a whimper" (Eliot, 1925).

The fall of the Soviet Union was for Kremlin watchers probably an event that was expected as inevitable, but the swiftness with which the decomposition took place was surprising for most of us. The breakup of the Soviet Union did not come from a dramatic, precipitous, and internal upheaval that spread outward; rather, it started at the periphery with Poland's and Czechoslovakia's peaceful revolutionary movements that inspired independence movements throughout Easter Europe. Inexorably, the march for freedom from the shackles of the Soviet sphere of influence produced one independent government after another until all but Georgia, the Soviet, and Warsaw Pact nations were on their own (History Channel, 2012).

Though the world shouted its approval, with the United States leading the cheering section, the disappearance of the monolithic and focused Soviet threat presented the United States with an unanticipated dilemma: What now? Is it necessary to maintain the most powerful military capability in the history of mankind? To answer these questions, it is instructive to look at some of the thinking that went on in the Joint Staff regarding the dissolution of the Soviet Union. To be fair, the joint planning community had been considering "what if" options should the Warsaw Pact no longer presented a threat.

In late 1989, the Joint Staff was aware of and making force and capability planning decisions prompted by "favorable threat trends" (Larson, Orletsky, & Leuschner, 2001). Additionally, there were "soaring" budget deficits and congressional enthusiasm for a "peace dividend"[1] that was pressuring the Administration to reduce defense spending. The Joint Chiefs of Staff proposed a 2% annual rate of growth, but the tide of advocacy for reducing the Department of Defense's budget to a flat line of no growth and the Administration could not overcome the momentum of cutting defense. It was clear that it was during the early 1990s that the beginning of the build-to-budget approach had gained traction. The ubiquity of vagaries of the defense budget cannot be over emphasized. The specter and anticipation of reduced defense funding accelerated the need for a concept of establishing a force structure that met the challenge of defense budget reality.

In the 2001 RAND study *Defense Planning in a Decade of Change*, the researchers describe the attempt by then-Chairman of the Joint Chiefs, General Colin Powell, to establish a baseline force structure that would be the lowest level of capability that would maintain a prudent level of post-Cold War capability (Larson et al., 2001). There was the potential, albeit slight, that there could be a resurgent "Soviet/Russian threat." But if a "Base Force" were to be established, it would be defined as a "flexible" force capable of meeting a full "spectrum of threat" (Larson et al., 2001). Without a clear understanding of what the threat was that the Base Force had to deal with, the Base Force was subject to the budget. From 1990 to 1995, the Base Force was defined by an ever-decreasing defense budget. The foundational thinking was that, without a Soviet threat, some level of capability had to be established that would be able to meet whatever emerging hostile force it encountered. It was the precursor to CBP.

For context, and by way of comparison, as the case for a Base Force emerged, cuts in force structure were understood. The Joint Staff developed a briefing that established the Base Force military end strength to meet whatever opposing force the United States might encounter. The Base Force military manpower levels would be achieved over several years with the objective force structure achieved in 1994. A Base Force would be the minimum required in a non–Soviet-threatened world. As Lorna Jaffe from the Joint History Office explained in *The Development of the Base Force 1989–1992*,

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[1] It would be some years later that the Congress would conclude that the "peace dividend" was "peace."

For an interim force structure to be reached by 1994, the briefing proposed an active strength of 630,000 for the Army; 520,000 for the Navy; 500,000 for the Air Force; and 170,000 for the Marine Corps--a total reduction of 287,000 from current strength, with corresponding cuts to be taken in reserve forces. For the minimum forces required for the United States to carryout its superpower responsibilities, it projected an active strength of 560,000 for the Army; 490,000 for the Navy; 490,000 for the Air Force and 160,000 for the Marine Corps—a total reduction of 407,000 from current strength, again with corresponding cuts to be taken in reserve forces. (Jaffe, 1993)

Contrast these force structure numbers with the 2013 President's Defense Budget Request, funding active duty forces for an Army end strength of 490,000, a Navy end strength of 319,000, an Air Force end strength of 328,000 and a Marine Corps end strength of 182,000 by fiscal year 2017 (DoD, 2012). These end strength numbers are a 381,000 reduction in end strength from what was considered the Base Force necessary in 1994.

Gregory Treverton's 1989 article "The Defense Debate" in *Foreign Affairs* put the nexus of budget pressure and reduced Soviet threat succinctly:

The string of incredible events in Eastern Europe has only given credibility to U.S. intelligence estimates of a less menacing Soviet Union. The reduced Soviet threat, combined with pressure from budgeteers, prompted Secretary of Defense Dick Cheney to try to head off the defense debate for 1991. The Pentagon was told to plan for a budget cut by several percent and to look for continued savings-as much as $180 billion during 1992-94. (Treverton, 1989)

The 1990s saw a precipitous decline in defense spending without much reference to threat or strategy. Funding levels mostly drove defense program activity. In a General Accounting Office[2] (GAO) December 1992 report, "Weapons Acquisition: A Rare Opportunity for Lasting Change," the authors made a comment that was certainly prescient and may well be most characteristic of the evolving nature of force planning in the 1990s. The researchers stated,

Weapon system acquisitions involve highly leveraged decisions with significant consequences for the budget and national security. A few discrete decision on weapon systems can commit the nation to spending tens of billions of dollars, can represent national security policy choices, can shape how wars are fought, and can effect the relative roles and functions of the military services. (GAO, 1992)

The choice of weapon systems, according to the GAO, because of the levels of spending, drives national security policy. This is the priority order of decision-making: first the capability, then fitting the capability to a declining budget, and then developing a policy to make use of the capability. It may seem backwards, but it is the sequence of thinking that comes when there is little acknowledgement of a defined threat to build a national security policy to counter. There was another problem. How was the Department of Defense going to maintain a force structure with a declining budget? As mentioned earlier, it wasn't. Force structure would have to match reduced spending.

Technology was to be the means of accommodating declining force structure. The idea was beguiling and played to the United States' formidable technological capability and to a defense industry more than adequate to the task. Applying rapidly growing technology

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[2] The General Accounting Office (GAO) in 1992 was renamed the Government Accountability Office (GAO), effective July 7, 2004.

to weapon systems development invoked a historically apt concept of Revolution in Military Affairs (RMA). As Murray (1997) explained in "Thinking About Revolutions in Military Affairs," "Yet one must also admit that military events of late suggest major changes in technology and weapons with substantial implications for conducting war in the next century." *Revolution in military affairs* would be the buzzwords to fill the void until military planners could build a planning framework that would acknowledge an unpredictably hostile world, while living within an uncertain level of defense funding. CBP was just such a framework.

The 2001 QDR established CBP as the Department of Defense's official force planning process, replacing the threat-based construct. Additionally, the focus of the planning was "non-country-specific continuum of capabilities from minimal force to nuclear weapons" (Zavadil, Tindal, & Kahan, 2003). Lamb, Lutes, Bunn, and Cavoli (2008) pointed out that CBP incorporated a point of view regarding how an enemy would fight with what capability:

> Arguing that the United States could not know the origin of threats decades from now, QDR 2001 focused instead on the idea of anticipating the kinds of capabilities that an adversary might employ. A capabilities-based model would focus more on 'how an adversary might fight than who the adversary might be and where a war might occur,' and it would require identifying capabilities that U.S. military forces would need to deter and defeat adversaries who will rely on 'surprise, deception, and asymmetric warfare to achieve their objectives.

The cornerstone of CBP is to determine and plan for the tactics (i.e., the how and the what) a potential enemy might employ rather than attempt to identify the enemy and where, as well as when, that enemy might threaten U.S. national security.

The Tenets of Capabilities-Based Planning

The Defense Acquisition University (DAU; 2011) definition of CBP is "an overarching framework for planning under uncertainty that provides capabilities suitable for a wide range of modern-day challenges and circumstances while working within an economic framework that necessitates choice." The DAU (2011) definition expanded puts emphasis on five elements:

1. The construct that CBP is a "process" incorporating "existing processes into a single framework."
2. An admission that it is not possible to "predict every threat scenario. Planning under uncertainty forces us to plan for the most dangerous and most likely threat capabilities."
3. An exhortation to "provide capabilities that let us prevail against the most likely threats."
4. Our "capabilities must face a wide range of challenges and circumstances."
5. An acknowledgement that "we live under an economic framework that simply cannot provide everything. We must prioritize problems, and we must recognize excesses that waste taxpayer dollars."

The DAU (2011) definition goes on to explain that CBP is not just "reform or simple change from old ways of thinking," but rather that CBP provides (a) "the reorganization needed to meet the new and emerging threats to the United States," (b) "extensive support to the warfighters," and (c) "new resources and support for the managers who develop the requirements for U.S. forces."

The DAU explains that the resulting CBP process "combines existing processes" that will be able to make available "better products" with reduced 're-work' of the 'systems' developed." Additionally, this new "approach" takes advantage of the "strengths of organization, teamwork, and depth of resources" available to the Department of Defense. In short, CBP will be a hedge against not knowing what threat the United States might face, while planning for and being prepared for the widest imaginable variety of opposing capabilities, all while realizing there would be constrained resources.

Weaknesses in CBP

As mentioned, there are two principal weakness or flaws in CBP. First, the reasoning in CBP is not internally consistent. As a framework or planning construct, CBP cannot logically achieve what it purports to achieve. Second, in practice, CBP has not achieved what framers of the CBP construct had promised because the outcomes that they hoped would improved by CBP were influenced by other pressures or drivers.

To be internally and logically consistent, a concept must not have an internal contradiction. CBP begins with a contradiction. The Department of Defense cannot identify and adequately characterize a specific threat and therefore has described the national security environment as one of uncertainty. Consequently, the Department of Defense will plan for uncertainty. In other words, the planning will be for a variety of potential eventualities that may be certain to occur. Though the notion is that CBP is addressing a resource-constrained environment, CBP is not bound by a funding ceiling at the outset; but rather it is limited by congressional budget limitations after the fact. This thinking, applied to developing national security capability, is inefficient at best and could leave the United States vulnerable to attack from an enemy with a capability that was outside the potential eventualities.

Turning again to Lamb et al. (n.d.) and their monograph in "Transforming Defense Strategy and Posture," they made the following point: "First, the assumption that it is easier to anticipate the tactics an adversary will use than it is to predict the identity of the adversary is open to challenge." Clearly, a case could be made that it would have been easier to predict where the threats to the United States might have originated for Operation Enduring Freedom and Operation Iraqi Freedom. Furthermore, one could argue that if the identity of a prospective adversary were believed to be accurate, then the time, place, and capability to be faced would be known with more accuracy.

At the beginning of the President George W. Bush Administration, most inside the Pentagon took the position that promised "a future force that is defined less by size and more by mobility and swiftness, one that is easier to deploy and sustain, one that relies more on stealth, precision weaponry, and information technology" (Lamb et al., 2008). However, turning to the most recent defense strategy, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense,* a primary mission for the U.S. armed forces is the ability to "Project Power Despite Anti-Access/Area Denial Challenges" (DoD, 2012). CBP does not necessarily prompt the Pentagon point of view. The conclusion that what the United States requires is a capability to deploy "advanced remote sensing, long-range precision strike, transformed maneuver and expeditionary forces and systems, to over come anti-access and area denial threats" does not absolutely follow from a capability-based focus. It may increase the potential that defense planners will evaluate more positively those capabilities. But it is not a certainty (Lamb et al., 2008).

In his paper written for a National War College assignment "Capabilities-Based Planning: The Myth," Jeffrey Kendall (2002) addressed the weakness of CBP to accommodate fiscal realities. Kendall (2002) asserted that the "theoretical assumption" on

which CBP is based fails to meet what he described as the "ways" (i.e., capabilities) that are "severely mismatched" with the "means," the resources available to fund the capabilities. In CBP, it may be tempting to assume that describing a capability needed to address a potential adversary's capability would be immediately embraced by congressional check-writers, but it is not supported historically. Congress seldom provides the Department of Defense blank checks. It seems reasonable that if a planning construct is to be internally consistent, it should deal sensibly and practically with budgetary and fiscal realities.

The second major weakness in CBP is that, as a framework and process, it is not capable of achieving what it was meant to achieve. The basic tenets of CBP hold that it will provide "better products and less re-work of the systems developed" (DAU, 2011). How CBP provides "better products" is unclear. The acquisition community has not seen significant improvements in terms of cost, schedule, and performance.

Kratz and Buckingham (2010) described the Joint Capabilities Integration and Development System (JCIDS) as the enabler of CBP "based on strategic direction and priorities defined in the National Military Strategy and National Defense Strategy." The strategic direction, however, is not directly connected to the acquisition system that the CBP process depends on to acquire the "better products."

In fact, the real irony is that, according to the "Defense Acquisition Performance Assessment (DAPA) of 2006," "the Joint Capabilities Integration and Development System, like its predecessors, is slow and complex. It is particularly ill-suited to respond to urgent needs arising from current operations and is structured for a 'Cold War,' traditional opponent" (Kadish, 2006). The process that was developed to meet the needs of "uncertainty" and address a potential adversary that is unknown is now judged to be more appropriate for the Cold War, which doesn't exist anymore (Kadish, 2006).

In the DAPA report, Kadish (2006) went on to say,

> Most of the comments that the Panel received concerning the Joint Capabilities Integration and Development System found it too complex, with little added value in defining capabilities that require Material Solutions or that establish actionable parameters to guide program definition. The consequence is a widely-held doubt that the Department is acquiring the "right things" in the "right quantities."

If Kadish is correct, then getting the right things in the right quantities to the warfighter has little to do with CBP as a process.

Lastly, the CBP as process is incapable of managing the vagaries of the realities of acquiring capability. Because capability is not tied to a specific threat through a requirement, deleting the capability or reducing the quantity through senior military actions or congressional funding reductions cannot easily be assessed in terms of risk to national security. In a system where the threat is well described as country- or region-specific failure to fund a capability to address a requirement to meet a threat, a threat can be legitimately argued as increasing risk to national security. A case is more easily made that increasing the funding lowers the risk.

A basis for a more rational defense force structure can be made by recognizing that there is ambiguity in the exact nature of the threats facing the United States, but taking a more immediate view of what impacts force structure will help.

Basis for a Rational Defense

The basis for a rational defense is proposed to prompt thinking about a better, more logical way to go about planning for and acquiring weapon systems capability. The current assault on the defense budget requires a more substantial and reasoned foundation for advocacy of acquiring capability.

The premise that drives a rational defense is that there are state and non-state actors whose worldviews are inimical to the interests of the United States and its allies. These state and non-state actors have the means and the will to endanger the United States and its allies and therefore represent definable but multiple threats that drive requirements that must be addressed with a weapon system capability. This construct allows for an acquisition system that is tailored to satisfy requirements to address threats that are met with discreet or generalized capabilities.

A rational defense gives appropriate weight to the capabilities necessary to counter hostile state and non-state actors and the specific capabilities they bring to the threat arena. What is proposed here is not a purely threat-based planning approach, but rather an approach to planning that is constructed and adopts an understanding of threat as the antecedent in the force structure-planning process. Additionally, this force structure-planning proposal is more focused on informing the weapon system acquisition process in a practical, streamlined, and effective way than is the CPB.

First, to understand where this proposal fits, a look at the *was*, *as is*, and *to be* broad view will be helpful. Figure 1 shows graphically how the basis for rational defense planning (BRDP) compares what has gone before with a purely threat-based planning approach and the current planning methodology relying on the JCIDS for capability development (Kratz & Buckingham, 2010). Several differences are evident. There is an integrated bottoms-up explanation of the threat as seen and assessed by the combatant commanders (COCOM), the warfighters most intimately familiar with the threats manifested in the areas for which they are responsible. The COCOMs are also in the best position to describe both the warfighting requirements and when the latest time a capability must be fielded to meet the requirements. The time-to-field is all too often lost in the process of developing capabilities. Time-to-field is integral in identifying and assessing the threats in the COCOMs area of responsibility because it answers the question of when the threat will manifest itself in a way that must be dealt with actively and with a military capability.
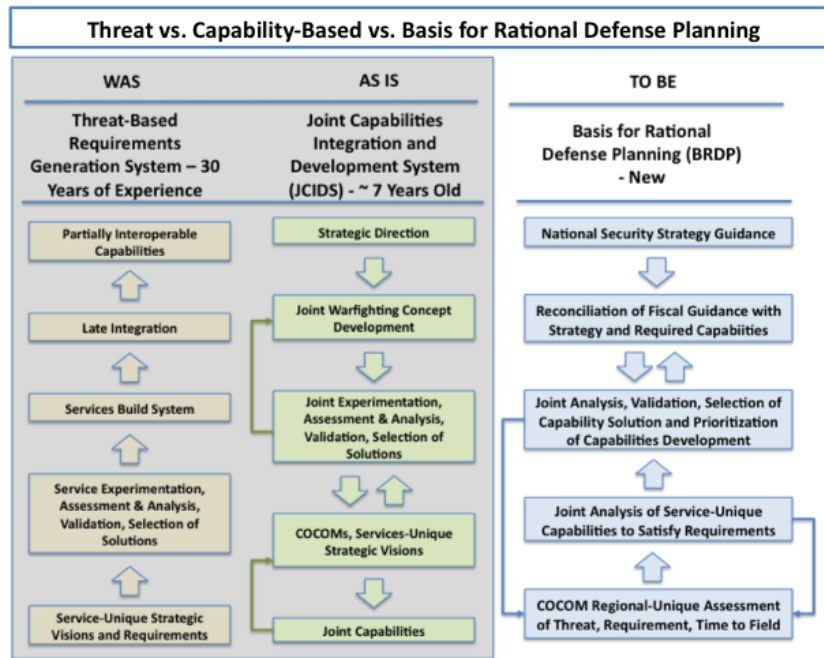
Threat vs. Capability-Based vs. Basis for Rational Defense Planning

WAS	AS IS	TO BE
Threat-Based Requirements Generation System – 30 Years of Experience	Joint Capabilities Integration and Development System (JCIDS) - ~ 7 Years Old	Basis for Rational Defense Planning (BRDP) - New

Figure 1.

Figure 1.   Threat vs. Capability-Based vs. Basis for Rational Defense Planning
Note. This figure was adapted from a chart developed by Steven Chadwick in a June 20, 2007, Congressional Research Service Report for Congress entitled *Defense Acquisition: Overview, Issues, and Options for Congress* and used by Kratz and Buckingham (2010).

The as-is approach places the COCOMs' inputs to the capabilities development process with the Service-unique strategy visions. Combining the train, organize and equip responsibilities of the Services with the unified command responsibilities of execution makes the process confusing and often does not give the COCOMs ample voice in the capability development process.

The Joint Staff then analyzes the COCOM-developed requirement to assess which of military Service-unique capabilities meets the requirement. Additionally, when more than one capability solution is available, the Joint Staff analyzes and validates the capability that best meets the requirement. Where more than one COCOM has identified the same or similar requirement, the Joint Staff prioritizes which COCOM will receive the capability first and in what quantity. There is a feedback step to ensure that the Joint Staff assessment in fact meets the requirement as described by the COCOMs.

With the National Security Strategy providing the overarching guidance from the top and the COCOMs describing the threats to national security, what is required to meet the threat and when the requirement must be satisfied in the field comes up from the bottom, and the joint capability required is identified in the middle step.

The JCIDS process, with its 161 pages of instructions and explanations, its multitude of reviews, its documents, and its oversight processes, needs to be re-engineered with fewer moving parts. Starting with the COCOMs' assessment of threats to U.S. national security emanating from their areas will drive capability decisions to a more streamlined process. Sponsorship for defined requirements and time-to-field capabilities to address the requirements are the warfighters with the most at stake. Time-to-field assessments will motivate capabilities development timeframes that have a basis in a warfighter's real need. Reducing non-value added administrative processes would be a logical outcome.

Budgets and funding are entrenched facts of life that need to be taken into consideration at the highest levels. Fiscal guidance from the Office of Management and Budget (OMB) must be considered when determining what capabilities necessary to meet requirements will also satisfy the National Security Strategy.

This proposed construct benefits from the ability to tie strategy to budgetary realities to satisfy a warfighter's requirement for a given capability. If funding realities are such that Congress does not wish to fund a capability in deference to other priorities, then the consequence can be established as increased risk to national security. The BRDP establishes the clear link between defense spending and a reduced threat to national security.

There is another benefit to the BRDP. It establishes threats to national security in a larger context with the U.S. domestic agenda, as well as with the nation's industrial base capacity, to meet the demand for weapons to satisfy national security needs. When reduced to basics, three key factors impact national security, as illustrated in Figure 2. The interdependence of the key factors is important in advocating for national security programs.

The Threats Facing The US Fit Into The National Security Context

1. US Economic Agenda
2. National Debt
3. Unemployment
4. National Security Strategy
5. Effective Efficiency Initiatives
6. Congressional Appetite
7. International Economic Pressure

The Money

Willingness To Fund Defense Supports Industry

Perceived Threat Increases Willingness To Fund Defense

National Security

1. Experienced, Formed Developmental Engineering Design Teams
2. Highly-skilled Touch-labor Workforce
3. Corporate Financial Capability to Compete for Future Contracts

The Industry

The Threat

1. Terrorism
   a. State-sponsored
   b. Domestic/Ad Hoc
2. China, Iran, N. Korea, Russia
3. Cyber Warfare
4. Regional – Non-specific
   a. N. Africa Islamic Belt
   b. Pakistan
   c. Pacific – Islamic Countries
   d. Failing Alliances
5. Critical International Competition
   a. Competition for Space
   b. Competition for Energy, Critical Natural Resources

Figure 2.

Figure 2. The Threats Facing the U.S. Fit Into the National Security Context

With the shadow of very draconian cuts to the defense budget hanging over defense planners, if there is a reduced willingness to fund defense capability programs, then the defense industry is weakened and the critical aspects of the industrial base are difficult to sustain. Particularly fragile is the number of formed and experienced developmental design teams. The money to sustain the industry is driven by the larger national agenda, both national security and domestic economy. Budget cuts prompt the aerospace and defense industry to reduce workforces at worst and freeze hiring at best (Aerospace Industry Association, 2011). If the perception is that a highly probable threat exists, then the need to address that threat will be more competitive with the domestic economic agenda and there will be a greater willingness to fund defense capability supporting the defense industry.

Figure 2 does not explain every dynamic taking place, but it is useful in describing how the threat is a factor in sustaining industry and competing with other elements of the

national agenda. The threat in this larger context is helpful in advocating for defense programs in a way that simply explaining the need to fill a capability gap is not.

Conclusion

CBP was an expedient and useful force structure and capabilities planning tool during a period when defense funding was on the rise and was used to address the existential threats of combat operations in Iraq and Afghanistan. However, as those operations are winding down and national domestic funding imperatives are taking center stage, a more concrete link between potential hostile actions from state and non-state actors whose purposes are inimical to the U.S. national security and planning to address those threats is needed.

The BRDP, as an alternative to CBP, is one approach that provides threats that the United States faces a more prominent role in defense planning. It links the threats to necessary funding to pay for the capability that meets the requirements that counter the threats. Giving the threats that the United States faces around the world a more prominent position in defense planning is worth considering and will give defense advocates a more compelling case in defending defense spending.

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