

Getting to Best: Reforming the Defense Acquisition Enterprise

A Business Imperative for Change from the Task Force on Defense Acquisition Law and Oversight

July 2009

Report Documentation Page					Form Approved OMB No. 0704-0188		
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.							
1. REPORT DATE JUL 2009		2. REPORT TYPE		3. DATES COVE 00-00-2009	RED to 00-00-2009		
4. TITLE AND SUBTITLE				5a. CONTRACT NUMBER			
Getting to Best: Reforming the Defense Acquisition Enterprise: A Business Imperative for Change from the Task Force on Defense				5b. GRANT NUMBER			
Acquisition Law and Oversight				5c. PROGRAM ELEMENT NUMBER			
6. AUTHOR(S)				5d. PROJECT NUMBER			
				5e. TASK NUMBER			
				5f. WORK UNIT NUMBER			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Business Executive for National Security ,Washington,DC				8. PERFORMING ORGANIZATION REPORT NUMBER			
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)			
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)			
12. DISTRIBUTION/AVAILABILITY STATEMENT							
Approved for public release; distribution unlimited							
13. SUPPLEMENTARY NO	DTES						
14. ABSTRACT							
15. SUBJECT TERMS							
16. SECURITY CLASSIFIC	17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON				
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	96	RESI UNSIBLE FERSUN		

Standard Form 298 (Rev. 8-98) Prescribed by ANSI Std Z39-18

THE CANONICAL ACQUISITION PROGRAM: A CAUTIONARY TALE

A group of individuals who served their country with distinction in combat is assigned to define requirements for the next generation of a much-needed item of military equipment. Wanting to assure success for U.S. and allied forces in any future conflict and knowing that the item must perform for many years, the group establishes demanding requirements. The engineers, excited by the technical challenges implicit in the requirements, and hoping to substitute technological capital now for troop fatalities later, design a responsive piece of equipment.

Intense but healthy competition ensues among contractors seeking to develop and produce the new item, each needing to win the contract due to the immense pressures of the financial markets in which defense firms, operating in a monopsony, must vie against purely commercial firms for shareholders and access to debt. Each bidder is optimistic that its attractive cost and schedule estimates will win the work. A winning contractor is finally selected by the government, but must endure a one-year delay before beginning work while protests submitted by losing bidders—each of which finds in the labyrinthine Request for Proposal what they believe to be legitimate reasons they should have won instead—are resolved.

Work on the project finally begins, but within a year the Program Manager discovers that the technology needed to meet the established requirements is not yet fully available. Congress had previously declined to appropriate contingency funds for the contract or to pay for schedule slack, so it takes nearly two years to obtain additional resources to bring the technology to maturity. The Program Manager reluctantly proposes a schedule slip—even though this will substantially raise overall costs because of the need to keep the physical plant open and the personnel associated with the project on payroll for a longer time. The senior Defense Department executives overseeing the acquisition process, many of whose positions will be occupied for only a few years by individuals with limited on-the-ground R&D management experience, approve the schedule change. (Well-intentioned conflict-of-interest rules and other obstacles had discouraged individuals with requisite experience from accepting the government positions they had been offered.)

As the development effort stutters and stalls, unforeseen new military threats force modifications in the original requirements for the piece of equipment. It soon becomes apparent that the projected unit cost of the item is significantly underestimated, an outcome exacerbated by unrealistic inflation-rate estimates dictated by the Office of Management and Budget. Senior acquisition managers therefore decide to halve the total number of items to be produced; to reduce the test program; to eliminate the reliability growth program; and to defer the purchase of spare parts and training equipment. Having been in place so long as to jeopardize his military career, the Project Manager moves on and a replacement assumes the position.

Seeking to prevent such problems from recurring, a chastened acquisition bureaucracy establishes new regulations, policies and oversight to better monitor and control future activities, large and small. Seeing this, some politicians who had questioned the need for the project at its outset, and had doubted its eventual success, seize on a new opportunity to reduce further the production buy. Understandably frustrated with the program's progress, Congress also imposes several additional stipulations, reviews and controls, some of a detailed technical nature.

As a consequence of these developments, unit costs skyrocket further due to the now over-capacity production line that had been constructed, the low rate of production, the need to amortize fixed costs over a significantly smaller procurement buy, the need to renegotiate thousands of subcontracts due to schedule changes, the demand for additional reports and reviews, and the inability of the factory to take full advantage of the learning-curve benefits of larger, more rapid and more stable procurement processes. Unit costs also increase because the law stipulates that most component parts be purchased in one-year increments rather than in larger, more cost-effective lots.

While the program has slowed, been diminished and grown more expensive, additional demands on the overall government budget emerge, some due to unforeseeable events and some due to cost overruns in other government programs, both military and civil. There is now significantly less money available for the production program than had originally been hoped (no overall assessment or projection of affordability had been conducted during the initial requirements process), so production is further curtailed as to both rate and quantity. The media begin quoting the unit cost as a fraction of GDP.

The troubled program is finally terminated due to widespread sticker shock, even though the equipment being developed is—belatedly—performing up to and even beyond requirements. Everyone involved with the program is shocked that this could have happened, even though it has happened to program after program for more than fifty years.

The contractor is lucky to break even, and program termination drives experienced personnel away from the defense industry. Meanwhile, the military officers who served as requirements generators return to their field assignments where they prepare their troops to go into combat with 40-year-old equipment.

Getting to Best: Reforming the Defense Acquisition Enterprise

A Business Imperative for Change from the Task Force on Defense Acquisition Law and Oversight

July 2009



LETTER FROM THE CHAIRMAN AND VICE CHAIRMEN

This BENS Task Force on Defense Acquisition Law & Oversight is by no means the first of its kind. Indeed, a recent effort counted that some 262 relevant studies, reports, and publications had been developed and presented on this issue since the landmark Goldwater-Nichols legislation of 1986. Like this one, all of them urged significant reform to the nation's defense acquisition system. Looking even further back, we note the Hoover study of 1949, the Fitzhugh Commission of 1970, the DeLauer panel of 1978, and the Packard report of 1986 (which led to the Goldwater-Nichols reforms), all of which made similar pleas.

Why add, yet again, to this illustrious list? We believe there are two reasons. The first is that we have not often been successful at instituting effective change, or at making effective change stick. If we want to improve the process of acquiring goods and services for our military forces, we must both refine and sustain our efforts. One more report may not accomplish that, but a failure to try, in our view, falls short of our responsibility as citizens.

The second reason is that well-intentioned solutions have sometimes sown the seeds of unforeseen future problems. The acquisition process today does not reflect any rational overall design. It is, rather, a collection of band-aids laid over other band-aids, each an incremental measure intended to fix a narrowly defined problem. Anyone familiar with the unintended consequences of the accumulated complexity of law, regulation, policy and custom over the past quarter century sees the pressing need to simplify a process that has become much less than the sum of its parts.

One key deficiency of the incremental approach to acquisition reform is that effort has too often been directed solely at fixing the process inside the Pentagon. Clearly, the defense acquisition system is an enterprise that critically involves the private sector nationally and globally as well as several branches and agencies of the U.S. Federal government. In essence, the task is to manage a monopsony involving firms required to obey the same profit and loss criteria as any purely commercial firm. To tinker with a subset of the governmental element within the ensemble of interconnected parts without taking into consideration the effects on the whole system is akin to trying to tune a violin by adjusting only one string.

It has become cliché, but we ought not let this nation's current fiscal crisis go to waste. There will be downward pressure on resources for national security, especially as global challenges increase, as national debt service grows and Medicare and Medicaid entitlements consume ever more of the Federal budget. We should use that pressure to generate a sense of urgency in making the acquisition process as effective as our men and women in uniform deserve, and as efficient as the American taxpayer has a right to expect.

Clearly, too, we need to focus on fixing what is broken, not what works. The current acquisition regime does a better job of delivering acceptable supplies and services to the warfighter than it does complying with the clutter of competing legislative mandates it must continuously navigate. It eventually delivers the most sophisticated weapons and comprehensive support services any military force has ever possessed, but it does so far too slowly and at vastly greater cost than necessary. In earlier times we could arguably afford such flaws in efficiency, but we can afford them no longer. We simply do not have the discretion to accept the legal, regulatory, cultural and organizational obstacles that plague the acquisition system. As we urge in this report, we must examine the status quo systematically, in all its aspects, in order to make necessary and long overdue changes. If we do not, we will abet an increasingly sclerotic defense acquisition process that may one day no longer be able to supply American war fighters with the means to assure this nation's freedom and security. If we do not act now, with many advantages still in hand, we will have to act later in far less propitious circumstances.

Norman & Augustine

Gary W. Hart Vice Chairman

Warren B. Rudman Vice Chairman

TASK FORCE ON DEFENSE ACQUISITION LAW & OVERSIGHT

Edward C. "Pete" Aldrigge Jr.

Michael J. Bayer

Haphael Benaroya

Denis A. Bovin

Charles A Gen Charles G. Boyd,

USAF (Ret.)

M Vernon E. Clark,

USN (Ret.)

Mark J Mark VGer

ADM Edmund P. Giambastiani, USN (Ret.)

Jamie Sorlich

. Hamre John

Paule J. Karminske Dr. Paul G. Kaminski

Kent Kresa

Ramon P. Marks

Gen Gregory S. Martin, USAF (Ret.)

Christopher C. Melton Sr.

John P. Morgridge

Gen Dennis J. Reimer, USA (Ret.)

oseph E. Robert

Robert K. Utley III

Josh S. Weston Josh S. Weston

as. L

Frederick W. Smith

effrev H. Smith

David M. Walker

(Note: Gen James L. Jones, USMC (Ret.) and Gen Eric K. Shinseki, USA (Ret.) participated in this project prior to accepting positions in the current administration. Neither participated in the preparation of the recommendations contained herein.)

GETTING TO BEST: REFORMING THE DEFENSE ACQUISITION ENTERPRISE

A Business Imperative for Change from the Task Force on Defense Acquisition Law & Oversight

Letter From the Chairman and Vice Chairmen iii
Task Force on Defense Acquisition Law & Oversightiv
Table of Contentsv
Acknowledgementsvi
Executive Summary 1
Introduction: Business Imperative for Change15
Chapter 1. Principles for Successful Acquisition Outcomes
Chapter 2. Requirements Determination
Chapter 3. Acquisition Workforce
Chapter 4. Program Execution
Conclusion

Appendices

Α.	Task Force Charter	45
B.	Task Force Member Biographies, Advisors and Staff	.47
C.	A Preliminary Pilot Study: The Defense Information Systems Agency Cooperative Review	.57
D.	Synopses of Recommendations from Previous Studies, Analyses, Commissions and Reports	.61
E.	Selected Bibliography	.73
F.	Glossary Of Acronyms	.81
End	Notes	.83

ACKNOWLEDGEMENTS

A list of Task Force members, advisors and staff appears at the end of the report.

In addition, BENS acknowledges the assistance of the following individuals who participated in the development, discussion and review of various portions of this report.

Matthew Ahart, Esq. Sunnygram LLC

Peter Archibald Borland Federal Systems

George Benz George Benz & Sons

Linda Brandt Industrial College of the Armed Forces

Glenn Carle L-1 Identity Solutions

Gen Michael P.C. Carns USAF (Ret.)

Richard Elder McKinsey & Co.

Frank Finelli Carlyle Group

Celeste Ford Stellar Solutions

Ranaan Horowitz Elbit Systems

Tina Jonas Sikorsky

Jeff Kaplan PRTM **Deidre Lee** Professional Services Council

J. Philip Ludvigson DLA Piper

RADM Gerard Mauer Jr., USN (Ret.) Sabre Systems

VADM Dan McCarthy, USN (Ret.) Silver Eagle Consulting

Thomas Modly PricewaterhouseCoopers

Peter Ostrow Technical Communities

Colleen Preston Professional Services Council

Malcolm Quon Elbit Systems

Philip Shiman, PhD Defense Acquisition History Project

Stan Soloway Professional Services Council

Brian Utley Periscope

Jennifer Zucker Patton Boggs

EXECUTIVE SUMMARY

THE DEFENSE ACQUISITION ENTERPRISE CHALLENGE

When a sitting Secretary of Defense says that our country is fighting two wars with a "Pentagon . . . wedded to lumbering peacetime process[es] and procedures, stuck in bureaucratic low-gear," it should portend an organization focused on efforts to budget better, spend smarter and cut waste.¹ Occasionally it does, yet the growth of the defense budget and the supplemental funding provided to fund the Iraq and Afghanistan wars since 2001 has masked the urgency associated with defense management reform in general, and improving the acquisition process in particular.²

This is not to suggest that fixing the acquisition process can solve the nation's budgetary problems, let alone its military challenges. Defense, including the cost of overseas contingency operations, commands only 19.7 percent of the president's proposed 2010 budget, one-third of which (\$198.8 billion) is for defense acquisition. Nonetheless, the nation can ill afford the perpetuation of a defense acquisition process so widely considered to be dysfunctional.

Individuals participating in the defense acquisition process bear a heavy fiduciary responsibility. Not only are they entrusted with billions of taxpayer dollars, but the quality of their work directly affects the very lives of our soldiers, sailors, airmen and Marines, and, in turn, the security of our country and its citizenry. While the overwhelming majority of individuals in the three institutions primarily responsible for the conduct of the acquisition process—the Department of Defense, participating industrial firms, and the Congress, collectively designated as the defense acquisition enterprise—have evidenced extraordinary dedication and ability, dissatisfaction with the acquisition process is nonetheless nearly universal. The extent of this dissatisfaction is reflected in the recent 93-0 vote in the Senate, and 411-0 in the House, in support of a bill to reform defense acquisition.³ All three of the participating institutions share in the responsibility for the above assessment.

The acquisition process is actually not a unified process: It better resembles a collection of band-aids layered over each other, each designed in its time to solve some specific problem, none undertaken in consideration of its eventual impact on the acquisition function as a whole. Defense acquisition revolves around 15-year programs, 5-year plans, 3-year management, 2-year Congresses, 18-month technologies, 1-year budgets, and thousands of pages of regulations.

An effective defense acquisition enterprise must to a considerable degree be trust-based and founded upon ethical comportment by all parties. Today, a lack of trust interferes with the relationships between Congress, the Department of Defense, and the defense industry. While the causes are varied, predominant among them is the adversarial nature of the government-industry relationship that has evolved over the past several decades. The result is a damaging increase in legal wrangling, protests concerning contract awards, and lack of candor between the government and the private sector.

Despite these serious shortcomings, most of the equipment produced by the U.S. defense acquisition process remains the equipment of choice of most of the world's military forces. The acquisition process has produced many important contributions, including stealth, the ability to see in the dark, and aircraft of such capability that U.S. ground forces have not been attacked from the air since the 1950's, to name but a few examples of system successes. The defense acquisition process has also profoundly affected the commercial

"I reject the notion that we have to waste billions of taxpayer dollars to keep this nation secure." —Barack Obama

Defense acquisition revolves around 15year programs, 5-year plans, 3-year management, 2-year Congresses, 18-month technologies, 1-year budgets, and thousands of pages of regulations.



sphere, having provided, for example, the basis of the commercial jet aviation industry, the internet, nuclear power, and the global positioning system, all of which are now in wide-spread civilian use.

Given the myriad problems faced by the nation—including healthcare, the supply of energy, preserving a survivable natural environment, rebuilding the economy, restoring the nation's physical infrastructure, repairing the public school system, and more—it is imperative that national security no longer be burdened with an inefficient defense acquisition process.

A BUSINESS IMPERATIVE FOR CHANGE

Business Executives for National Security (BENS)—a non-partisan organization of individuals with business backgrounds in the commercial sector and a few from the defense sector—was created to provide advice and support to the government on issues in which its members possess particular experience and expertise. BENS thus established in 2008 a Task Force to examine the defense acquisition process from a business perspective and to make recommendations for consideration by Congress and the Department of Defense to improve that process.

Our system of government—established on a foundation of checks and balances crucial to preserving our democratic political traditions—stumbles when the same principles are applied to business functions. The inefficiencies overwhelm the benefits. Today, government too often appears to place more emphasis on not letting anything go wrong than on assuring that most things go right. In doing so, it has produced an acquisition process that is agonizingly ponderous to manage and correspondingly slow to produce desired outcomes. This focus on process contrasts sharply with the demands of the business world, particularly in the high-tech arena where, for example, the Intel Corporation reports that over 90 percent of the revenues it records on the last day of any fiscal year derive from products that did not even exist on the first day of that same year.

While defense acquisition has far more in common with business than with traditional governmental functions, it is not an easily recognized form of business. It consists of a monopsony (i.e., a buyer's monopoly) run by the world's most powerful customer that makes the rules and enforces them. Yet, embedded within this monopsony are occasional monopolies in the private sector affecting specific products. The firms operating in this environment are expected to compete not only against each other but against the myriad of commercial firms around the globe that seek equity and debt from the same financial sources.

How might a business perspective improve the practice of defense acquisition?

First, it would ensure that the interests and incentives of all enterprise stakeholders are communicated, understood and agreed upon.

Second, reform would begin to create an environment where, rather than striving to become error-free on the process side, the acquisition system is aimed at achieving successful outcomes—that is, providing users what they need, when they need it, and at a cost they can afford.

Third, it would open lines of communication between DoD and its suppliers—the defense industrial base in particular as well as the larger commercial sector. The private sector

The acquisition process, unlike most government pursuits, is a business function. It demands skills and talents that are far more common to the business world than to government and military operations. operates as a community of buyers and sellers. In defense acquisition such relationships are at "arm's length" and legally restrained.

The Task Force stresses these attainable values throughout this report. However, the first challenge is to recommit the enterprise to certain principles that provide the foundation on which a sound defense acquisition system and its sustaining enterprise can be built.

CONGRESS NEEDS TO LEAD NECESSARY REFORMS AND OVERSEE THEIR IMPLEMENTATION

A key to fundamental, systemic change lies with the Congress, which, through the body of Federal law and its oversight function, shapes the regulatory framework and influences the culture of defense acquisition. Any attempt to fix the system must first consider the antecedent of today's dysfunctional acquisition system, the body of acquisition law. Fundamental reform of that body of law is clearly something neither the Pentagon, nor even the Executive Branch, can undertake alone. The Task Force believes the impetus for reform must originate with Congress. Through legislation, report language and the power of the purse, Congress sets the tone and shapes the regulatory framework and behavior that follow.

I. LEGISLATION SHOULD UPHOLD PRINCIPLES FOR SUCCESSFUL ACQUISITION OUTCOMES

Successful acquisition outcomes are the result of shared expectations and agreed-upon goals—as enabled by appropriate laws. Based on our deliberations, review of previous studies and a comparison of successful business practices, we suggest a set of principles to underpin the collective acquisition enterprise, which establish the basis for specific changes in the process. In considering future legislation or changes to current law and in the performance of oversight responsibilities, these principles need to be kept in sight:

- Agreement and alignment of interests and incentives of all stakeholders. Achieving this principle requires establishing a transparent system for setting common goals, communicating all necessary information and agreeing, in advance, on metrics for gauging success. Stakeholders are more likely to achieve alignment of interests if they ask the acquisition process to satisfy fewer needs.
- Strategy and Resources: ends matched to means. Today's acquisition process is largely divorced from the security strategy that it should be designed to execute. Further, the strategy process itself is prone to overemphasizing ends while leaving ways and means to an entirely separate process called the Planning, Programming, Budgeting and Execution System.
- Ability to attract and retain able and experienced people. Successful organizations tailor their personnel recruitment strategies to the demands of the institution's mission, put compensation packages in place that mark to marketplace conditions and align compensation policies with performance. In recruiting top professionals to join the acquisition workforce, the disclosure, divestment and potential conflict-of-interest provisions of the federal hiring process remain nearly insurmountable obstacles.
- **Commitment to ethical comportment in all activities**. The ethical sense that must pervade the entire defense acquisition enterprise is based on a foundation of trust. Today, however, the opposite—a lack of trust—reaches into the relationships between Congress, the Department of Defense and the defense industry. Trust is

Through legislation, report language and the power of the purse, Congress sets the tone and shapes the regulatory framework and behavior that follow.



bolstered by frequent free exchange of information, and the forthright resolution of differences.

II. LEGISLATION AND OVERSIGHT ARE NEEDED TO ENSURE IMPLEMENTATION OF AN AGILE AND EFFICIENT ACQUISITION PROCESS

Perhaps the most pertinent summary of the failings of the defense acquisition process is to be found in the Blue Ribbon study of 1970 conducted under the leadership of Gilbert Fitzhugh. It states that the problem is that, "Everyone is responsible for everything and no one is responsible for anything."⁴ While the size of the government's acquisition workforce has declined in recent years, in a few cases perilously so, it still exceeds 125,000 individuals—about the size of eight army divisions. While reinforcements are needed in some areas to make the government a wiser buyer, particularly in engineering and contract and program management, when adding those reinforcements it is important to distinguish between the impact of 20,000 workers each with one year of experience and the impact of 1,000 workers each with 20 years experience. If the objective is to make sound decisions, as opposed simply to processing additional administrative transactions, recruiting more experienced personnel is a far wiser approach. Unfortunately, the government's hiring and employment practices make this a very difficult option to implement.

It is instructive to contrast the scope and size of defense oversight practices with the parallel cadres of major commercial firms—for example, Amazon.com, Procter & Gamble, Boeing Commercial Aircraft, Microsoft or FedEx. One finds that in commercial practice comparable contingents are miniscule, particularly with regard to oversight. This is not to say that things do not go wrong in the commercial sector from time to time—as has been sadly displayed in recent years—but the overall record of U.S. business over the years has been remarkable. This is largely because in the business world a premium is placed on experience, particularly hands-on experience. In the factory, this is admiringly referred to as "touch labor."

When addressing the future of the defense acquisition process it is fundamentally important to recognize that the United States no longer possesses the dominant position it once held with respect to technological leadership. The leading edge of the state of the art in many fields no longer resides within defense-oriented firms but rather within the commercial sphere—and increasingly within the commercial sphere abroad. U.S. firms, having already moved much of their manufacturing capability overseas, are now, under the pressures of the marketplace, moving their research and engineering capabilities overseas, as well. Traditional defense companies in the United States are seeking to diversify into civilian pursuits, and many commercial firms simply decline to conduct business under the government's non-functional acquisition practices. While the defense industrial base is arguably as important to the nation's security as is our Army, Navy, Air Force, Marine Corps or Coast Guard, viability of that base is rarely even addressed in government circles. Certainly, the subject of its health has no voice even vaguely comparable to that of the military services.

In addition, the engineering talent base in the United States is withering at the same time as that base is growing in other countries. Today, nearly two-thirds of the Ph.D.'s in engineering granted by U.S. universities are awarded to non-U.S. citizens. The number of U.S. citizens receiving bachelor's degrees in engineering has declined by approximately 20 percent over the past two decades—a period of burgeoning technological impact. Such trends, if prolonged, will have a profound impact on the defense acquisition process, as well as on the nation as a whole.

"Higher costs, whether based on low estimates or poor enterprise management, is unacceptable and harmful to the defense enterprise."

-John Young, former USD (AT&L)

While the shortcomings of defense acquisition are manifold, the issue that has drawn by far the greatest criticism to date is the high cost, and cost growth, of the products it produces. Simply stated, we are on an unsustainable cost trajectory. In addressing this serious shortcoming it is necessary to understand its underlying causes—which are predominantly attributable to five factors: 1) seeking capabilities that stress, or even exceed, the technological state of the art and then expanding these capabilities as development proceeds; 2) possessing an inadequate understanding of exactly what work is to be performed; 3) producing and accepting unreasonable cost estimates at the outset of development and production; 4) executing the day-to-day aspects of design, test and production in a flawed fashion; and 5) failing to provide funds needed to account for contingencies.

Over the years many "easy"—but abjectly wrong—solutions have been proposed to deal with these challenges, often numerous times. Paramount among these:

- Demanding fixed-price contracts from industry for the performance of R&D. (The impact of this policy has been, in most cases, to encourage excessive cost quotes from responsible firms, and winning cost quotes from irresponsible firms.)
- Automatically canceling programs whose cost increases more than some prescribed percent. (Such actions, absent human judgment, are somewhat akin to dictating to a heart surgeon how much one is willing to pay for surgery with the understanding that the effort is to be terminated if that amount is exceeded.)
- Assuming that everyone is dishonest, and taking protective measures accordingly. (While some individuals—and firms—are, unfortunately, dishonest, the cost of operating under such a broad assumption is staggering.)
- Bringing more of the R&D execution effort inside the government—(The limiting case of this philosophy is to adopt the arsenal system—as was employed in the Soviet Union—and abandon the notion of free enterprise in defense procurement.)
- Never permitting requirements to be modified as development programs progress in order to avoid the appearance of failure, or even collusion. (Such a practice simply seeks to deny the existence of new knowledge.)
- Putting an end to the alleged industry practice of running up costs in order to increase profits. (Cost-plus-percent-of-cost contracts have been illegal for over a half-century.)

The question arises, that if it is so widely recognized that the acquisition process is not performing adequately, why has it not already been fixed? This conundrum is exacerbated by the fact that steps needed to "fix" the process, including most of those included herein, have been widely recognized by many of its participants for many years. The insightful 2009 Defense Science Board report on acquisition provided the answer: "It is in the self-interest of too many people not to fix the acquisition system: they are financially rewarded and their career is sustained by keeping things as they are."⁵ Thus we do the same thing over and over and yet expect a different result—Einstein's definition of insanity.

Breaking the cycle demands above all else resolute leadership. It will largely be up to the Department of Defense, and in particular the Secretary of Defense (because of the factions within the Department itself), to repair the acquisition process. But he will not succeed unless Congress provides him full support against the pushback that will inevitably occur even to reasonable changes that are proposed. The Congress can also help by modifying some of its own traditional practices: not providing stable funding; making it extremely difficult to

While the shortcomings of defense acquisition are manifold, the issue that has drawn by far the greatest criticism to date is the high cost, and cost growth, of the products it produces. Simply stated, we are on an unsustainable cost trajectory.



award multi-year procurements; providing highly detailed guidance with regard to individual programs; demanding numerous reports and hearings; and legislating arcane albeit often well-intentioned personnel practices (for example, in the area of conflicts of interest).

In the rather unique case of acquisition, it is appropriate for the Congress to assume a role more akin to that of a corporate board of directors; i.e., approving objectives and strategies and major projects in support thereof, approving the appointment of senior executives, appropriating needed resources and monitoring progress, intervening only when the failure of other corrective measures leaves no alternative. Congress should not try to micromanage that which it does not adequately comprehend.

The findings and recommendations offered in this report are based on a collection of fundamental perspectives embraced by the Task Force. These include:

- Talented, dedicated, experienced leaders are the underpinnings of success; processes and organization charts are altogether secondary
- Goals must be clear and, to the greatest extent possible, measurable
- Clarity of individual responsibilities is essential—including assuring individual consequences
- Authority must match responsibility
- Means must match ends
- Authority, responsibility and accountability must be delegated wherever practicable—and results monitored
- Organizational and individual overlaps and interfaces must be minimized
- Acquiring the skills sets and expertise required for the acquisition of services and information technology must become an institutional goal

FINDINGS

The Task Force concludes that the process, not the product for the war fighter, has become the principal focus of the acquisition system. Specific problems tormenting the system end-to-end include requirements creep, funding instability, poor initial cost estimating, immature technology and the lack of flexibility to solve problems. These are compounded by the fact that many individuals with little or no accountability can profoundly impact funding, schedule, personnel assignments and administrative demands. Too often the problems that result are not uncovered until operational testing is underway—an activity that frequently overlaps the production tooling effort and thereby greatly increases the cost of correcting deficiencies.

We find that there are three overarching categories of shortcomings to which acquisition failures are largely attributable. These are:

• Requirements: Linkages between the requirements determination, budgeting and acquisition processes. Today's requirements process is a highly formalized pursuit driven by the perceived needs of war fighters and accommodated by engineers in which the suppliers of financial resources are not consulted. It needs to become an iterative process involving war fighters who understand the nature of combat, engineers who understand the limits of technology, and financial experts who can accurately estimate costs and assess consequences for future budget scenarios.



The Task Force concludes that the process, not the product for the war fighter, has become the principal focus of the acquisition system.

- **Personnel: Constraints to defense acquisition workforce excellence**. Today, the government too often finds itself with minimally experienced and transient individuals leading major acquisition programs, able to attract new people only after long delays, unable to couple rewards to performance, and with many senior positions simply unoccupied. Talented and dedicated people can often overcome a poor organizational structure, but a good organizational structure cannot overcome inadequate performance. When qualified people are combined with sound organizations and practices, success is virtually assured. The acquisition process, unlike most government pursuits, is a business function. It demands skills and talents that are far more common to the business world than to government and military operations.
- Execution: Adherence to program execution processes aimed at satisfying the needs of the war fighter. Today, programs are begun without resources to address contingencies, with often unproven technology, poor estimates of production volumes, and no funding flexibility—and are revised frequently. Programs should not be initiated until: 1) the requirement is clear; 2) funding, including adequate reserves, is available; 3) the technology is proven; and 4) the system concept is well-defined. It should be difficult to start new programs and it should be difficult to change or stop them, once started, absent truly compelling reasons. Failure to respect the latter has historically led to large sums of money wasted on half-completed programs found to have problems so as to chase new opportunities presumed not to have problems.

These findings are discussed below. An overarching recommendation will then be presented for each, followed by a number of implementing actions.

REQUIREMENTS DETERMINATION

The initial step in the acquisition process is the establishment of the requirement for the goods or services to be provided—and a bad beginning nearly always portends a bad ending. A major problem with requirements definition is implicit in its very name: "requirements"—which seems to imply a certain sacrosanct quality or rigidity. A better term would be "capabilities," a term that more readily allows for tradeoffs as additional information is gained concerning cost, schedule and technical feasibility.

The principal shortcomings of the existing requirements process are that: 1) it does not couple needs for specific future systems to an overall national defense strategy; and 2) requirements are largely determined by the military services without realistic input as to what is technically feasible from an engineering perspective, and without adequate input as to what is affordable from a planning, programming and budgeting perspective. As a result, performance overshadows cost, and affordability is rarely considered at all.

It is important that the Combatant Commanders (COCOMs), who are indeed the ultimate capability users of the products of the acquisition process, have an important role in requirements definition. However, the COCOMs are extremely focused on current operations, particularly in wartime, and in general do not possess systems engineering enterprises, future technology assessment capabilities, or cost analysis expertise. There needs to be a balance struck between determination of short-term capabilities where the COCOMs' views should be preeminent, and the long-term force-shaping developments, which can be done most responsibly under the guidance of those with enduring institutional responsibilities: the Service Chiefs. When qualified people are combined with sound organizations and practices, success is virtually assured.

The initial step in the acquisition process is the establishment of the requirement for the goods or services to be provided—and a bad beginning nearly always portends a bad ending. Fixing workforce problems is a leadership issue far more than a process issue.

ACQUISITION WORKFORCE

Today's acquisition workforce is in many areas highly competent, but understaffed in comparison to its workload. It is also organizationally misaligned to permit it to feel appreciated as a professional component, and it faces an unprecedented loss of expertise due to aging and the pull of private sector opportunities. Fixing workforce problems is a leadership issue far more than a process issue. In this regard the Packard Commission stated that acquisition leadership should have "a solid industrial background." Unfortunately, individuals with such backgrounds cannot—or will not—accept positions in the government acquisition process. Restoring acquisition workforce to excellence requires, above all, the right people. There are many good people in the system, but that does not make them the right people. In optimizing the management of relevant skill sets, the flexible, innovative, cost-effective workforce needed for the 21st century can emerge. It cannot occur on the quick or the cheap, and could take a decade to restore. The bottom line for the acquisition enterprise is to recognize and reconstitute a professional acquisition workforce working side-by-side with its contractor support—and, most importantly, its operational counterparts.

PROGRAM EXECUTION

Most of today's program execution failures are already well-documented and well-examined. They tend to be the result of a system that substitutes oversight for insight; confuses management with rules; is risk-averse and failure-intolerant; is unnecessarily adversarial; is too often hidebound and encrusted in layers of legislative and policy guidance; and is administered by bureaucracies better suited to a slower-moving, more resource-rich era.

As a result of imperfect law and misplaced oversight, the acquisition system is at odds with best practices in the business world. The system has insufficient systems engineering capability; cost estimating that injects unrealistic optimism into early program definition; dependence on many individuals with limited relevant experience; and little management flexibility to fix problems as they occur. And when dealing with development—that is, providing something that has never existed before—problems will occur, even in the best -managed programs.

RECOMMENDATIONS

When prescribing modifications to the existing system it is important to recognize that one size does not fit all. Some acquisitions are more urgent than others, some are of more modest cost than others, some contain less risk, and some are of a fundamentally different character (product upgrades, commercial items or services, international programs, and information technology). Each acquisition needs to be treated in a fashion befitting its nature—making it important to have a "fast track" available for the prosecution of some programs. Past developments have on occasion been "excused" from the regular acquisition process, but this was usually because they were considered too important to entrust to "the system." (The latter category has included classified space programs, gunships during the Vietnam War, counter-IED measures in Iraq, and others.)

In general, Congress must insist on and DoD must adopt basic, proven business practices relating to specific aspects of managing the acquisition process. These fundamental practices generally do not require changes in law:

 Conduct program reviews only at major milestones or when significant deviations from the plan have occurred

As a result of imperfect law and misplaced oversight, the acquisition system is at odds with best practices in the business world.

- Provide sufficient funds and schedule time in program plans to assure intensive testing, appropriate training and the provision of logistics support
- Prohibit systems engineering contractors from participating in program execution, other than in their role as the systems engineering contractor, in order to avoid conflicts of interest
- Make changes only for the most compelling reasons when adopting commercial products
- Invest substantially in basic and applied research, focusing on potential breakthrough areas even though substantial risks may be present
- Establish development planning functions to coordinate the concept development and refinement phases of all programs to ensure that the capabilities required by the military as a whole are considered and that interoperability is addressed
- Produce end-items at an efficient rate unless a conscious decision is made that a warm base must be maintained. In the latter instance, the cost of such should be treated as the premium on an "insurance policy," not as a cost overrun

However, the Task Force believes that specific changes are needed to fundamentally correct the system's deficiencies. In some cases, legislation will be necessary and the Task Force indicates where that may be required; in others, Congress needs to establish its expectations for the acquisition system and through oversight ensure that such change occurs.

Our suggested changes can be categorized as those that: 1) are relatively easily made but produce marginal improvements to current practices; 2) are more difficult to make but lead to a substantively improved acquisition process; and 3) would result in the best system we know how to produce but would be very difficult to implement. *It is the role of the Congress and the Department of Defense to make judgments as to which recommendations fall within the various categories and which, therefore, are worthy of priority implementation.*

The report's recommendations are summarized below. The justification for the recommendations can be found in Chapters 2-4 of the report.

IMPLEMENTING ACTIONS: REQUIREMENTS DETERMINATION

The requirements process must be fundamentally changed to emphasize early consideration of affordability, schedule compatibility and technical feasibility, and responsibility for establishing requirements must be assigned according to time-urgency.

Modify the existing requirements establishment process to make it highly iterative and interactive as opposed to declaratory, but with strong inputs from the systems engineering, cost analysis and program planning and budgeting communities. (Implementing Action R-1)

Reconstitute a strong systems engineering capability within each of the Military Departments; i.e., within the Service Chiefs' chain of responsibility. (Implementing Action R-2)

Require the major decision support systems in the Department to harmonize the relationship between national security strategy, military strategy, requirements determination and fiscal constraints. (Implementing Action R-3)

Congress needs to establish its expectations for the acquisition system and through oversight ensure that such change occurs. **Modify** legislation to codify current processes, such as Joint Urgent Operational Needs (JUONS), to maintain the influential role of COCOMs in setting and achieving near-term requirements for the warfigther in both wartime and peacetime. Sustaining needs should remain with the Service Chiefs (and Defense Agencies, as appropriate). In each case the "other" party should provide input but not have primary responsibility for the initiation of requirements. In either case, it should be the responsibility of the JROC to assure operational compatibility among the Services, working through the joint requirements organizations with special attention and rapid action for the near-term requirements. (Implementing Action R-4)

Establish an authority to conduct tradeoffs and, where appropriate, modify requirements as additional information is gained on cost, technical risk, schedule and external factors (e.g., threat changes) during the Pre-Milestone A (Material Solutions Analysis Phase). (Implementing Action R-5)

Make explicit the consideration of time-value in fielding capabilities as a prelude to defining requirements. (Implementing Action R-6)

Provide appropriate capacity, when establishing new program requirements, for future upgrades (space, weight, power, etc.). In seeking new or additional capabilities, preference should be given to upgrading existing systems as opposed to initiating all-new systems. Upgrades should be introduced in discrete "blocks," not in a piecemeal fashion. An aggressive but sensible prototyping program should be incorporated to build and test non-production prototypes of reasonable scale that offer significantly enhanced capabilities. This would have the additional benefit of preserving difficult-to-rebuild design teams in periods when all-new developments are not being actively pursued. (Implementing Action R-7)

Strengthen the communication of government needs to the industrial sector and encourage the exchange of technical information between the private sector and the government within the bounds of security and competitive propriety. It is the private sector that provides the overwhelming share of the goods and services used by the government and owns most of the nation's research, development and production assets. (Implementing Action R-8)

RECOMMENDATIONS: ACQUISITION WORKFORCE

The defense acquisition personnel management system should be modified to assure that key positions in the process are filled by individuals who are knowledgeable and experienced in acquisition, and who remain in place long enough to achieve at least major intermediate milestones (e.g., completion of development, establishment of rateproduction, etc.).

Assign to the Service Chiefs responsibility for establishing, managing and maintaining a highly competent acquisition workforce, including education, training, career path development and succession planning—the latter is rarely done today in any institutional fashion. Appropriate staffing standards should be created for all critical positions. (Implementing Action P-1)

Streamline the hiring and rewarding of key acquisition personnel, including providing appropriate compensation and other forms of incentives. Authority to quickly employ qualified individuals as well as to dismiss individuals who are not performing in their assigned responsibilities should be vested in the Secretary of Defense. While the intent of government ethics regulations is to be applauded, those aspects that

"The ability to compete based on time can also be used as a weapon."

—Andrew F. Krepinevich, Executive Director, Center for Strategic and Budgetary Assessments unduly discourage individuals from accepting government employment (extensive paperwork, financial burdens, redundant security clearance processes) should be reevaluated as to their necessity. (Implementing Action P-2)

Amend the Goldwater–Nichols legislation to reinstate the Service Chiefs in the chainof-responsibility over the Program Executive Officers (PEOs) and Program Managers (PMs). Program Managers are the heart of the defense acquisition process and should be granted commensurate authority. They should be required to have corresponding training and experience. Career paths should be established that permit program managers and other key personnel to remain in their positions at least from one major milestone to the succeeding major milestone. Service in the acquisition process must not damage a military career. (Implementing Action P-3)

Establish standards for workforce skills and attention to detail for service contracts and information technology (IT) programs that are equivalent to those required for major weapon systems. (Implementing Action P-4)

RECOMMENDATIONS: PROGRAM EXECUTION

The acquisition process should be modified to incorporate relevant practices widely acknowledged in the commercial sector as essential to successful program execution.

Employ a set of system acquisition processes tailored to match capability development and implementation durations to the threat-response cycle and urgency of operational needs (currently permitted in the DoD 5000-series documents). Revisit the dollar-value of a program as the sole criterion associated with designating a Major Defense Acquisition Program (MDAP). (Implementing Action E-1)

Sustain development planning capabilities throughout a system's life to permit periodic insertion of new technology. Related systems engineering capabilities should be consolidated in the Services and resident in the program offices throughout the system life cycle. (Implementing Action E-2)

Initiate Milestone B (Engineering and Manufacturing Development) only after: 1) the need is firm; 2) the system concept is clear; 3) the necessary funds are likely to be available throughout the proposed effort; and 4) the technology is proven. Do not enter serial production until operational testing is satisfactorily completed, including reliability demonstration. (Implementing Action E-3)

Establish major program milestones and measures of success and approve advancement past milestones only when such measures are satisfied. Systems tests normally should not begin until key component tests have been satisfactorily completed; and low-rate initial production normally should not be initiated until key systems tests have been satisfactorily completed. Whenever feasible, properly monitored development tests should be used to augment operational tests in order to reduce costly, redundant testing. (Implementing Action E-4)

Reinforce reliability as a bona fide performance parameter as current regulation requires. Reliability should be considered to be on a par with such performance parameters as range, payload, accuracy, etc. This will demand substantial component environmental testing as well as extensive system tests. (Implementing Action E-5)

Delegate primary responsibility for the execution of a project to the Program Manager, subject to periodic review by a highly limited number of senior officials within the chain of command. (Implementing Action E-6)

"You must have a solid, mature design before you start construction. You cannot be negotiating standards and adding new technical requirements while you are building a ship. And if you have to make major changes, you need to stop and get them right, because rework kills productivity."

-Rear Admiral William Landay, USN



Congress, in its constitutional role to raise and support an army and navy, et seq., sets the expectations and tone for the entire enterprise and must be at the forefront of any change. **Amend** Goldwater-Nichols legislation to reinstate the Service Chiefs in the chain of responsibility for executive management of acquisition programs. (Implementing Action E-7)

Grant authority to the appropriate configuration steering board to modify requirements, as appropriate, when new information becomes available during development. The intent of this recommendation is to adapt requirements to evolving realities, not to open the floodgates to an avalanche of additional requirements. (Implementing Action E-8)

Provide resources to deal with contingencies. Funding reserves should be provided in all program plans, sized according to the risks entailed. Backup technical approaches should be provided for risky components, and plans should be prepared for the identification, amelioration and monitoring of program risks. (Implementing Action E-9)

Maintain program stability: minimize changes to requirements, funding, schedule and personnel. Fund programs incrementally from major milestone to major milestone rather than on a year-by-year basis. (Implementing Action E-10)

Maintain competition among industry suppliers to the greatest extent possible recognizing that in a few cases (e.g., small buys of items requiring major tooling expense) competition may be inappropriate. Under the latter circumstances it may still be possible to compete for components or subsystems. When conducting competitions, past performance and capability should be important considerations, particularly as they relate to specific individuals assigned to the project at hand. Independent (of both the contractor and the project office) government-performed cost assessments should be generated to accompany all contractor proposals. (Implementing Action E-11)

Use, as current law provides, appropriate contract types for all acquisition pursuits: fixed price instruments for work whose scope is well-defined and cost-reimbursable instruments (including incentive- and award-fee types) for work that cannot be precisely defined, such as research and development. Multi-year fixed-price contracts should be used for production procurements to the greatest extent possible but only after a proven data package is available. (Implementing Action E-12)

Continually assess adequacy of the future defense industrial base and take appropriate actions to maintain its ability to support the nation's military needs. (Implementing Action E-13)

CONCLUSION

Congress, in its constitutional role to raise and support an army and navy, *et seq.*, sets the expectations and tone for the entire enterprise—and must be at the forefront of any change. Once established either by law or sense of Congress, the acquisition enterprise must follow the resulting regulations and policies rigorously, but with common purpose.

The Task Force believes implementing its recommendations will lead to fundamental changes in the way the enterprise acquires defense goods and services. The Task Force urges Congress to adhere to the principles we have defined and vigorously pursue its oversight of the process to ensure that it embeds and promotes the equities of all members of the enterprise and, above all, serves the needs of the war fighter. For reforms to be implemented successfully, the Task Force believes that consistent leadership, accountabili-

ty and effective oversight must prevail across the entire enterprise—Congress, the Defense Department, and industry.

An appropriate rallying cry is the statement of David Packard, who conducted the seminal study⁶ of acquisition reform over 20 years ago: "We all know what needs to be done. The question is why aren't we doing it?"





INTRODUCTION: BUSINESS IMPERATIVE FOR CHANGE

For more than a quarter century, Business Executives for National Security has served as the primary channel through which senior private sector executives can help build a more secure America. BENS is a national, non-partisan, non-profit organization that harnesses successful business models from the private sector to help strengthen the nation's security.

BENS formed its Task Force on Defense Acquisition Law & Oversight to review the defense acquisition system and recommend to Congress and the Defense Department specific and practical steps to systemically reform the governance and oversight of the process. To do so, the Task Force brought together in synergy senior business leaders and former government professionals from both civilian and military spheres. Business leaders understand organizational dynamics and best business practices; those experienced in government comprehend the legal and regulatory environment in which the acquisition system must operate; and those who have served in military leadership positions grasp the war-fighting impact of effective acquisition of systems and services. These groups, working collaboratively, were supported in turn by a small army of subject-matter experts and advisors who gave generously of their time and expertise.

Unlike most prior efforts at addressing the acquisition system, the Task Force's focus includes the Congress. That is because more than any other single participant in the acquisition system, Congress shapes the regulatory framework and culture of defense acquisition through the mandates of Federal law and its oversight functions. We were encouraged in this focus by the leadership of both the Senate and House Armed Services Committees. House Armed Services Committee (HASC) Chairman Ike Skelton urged BENS to "contribute to the next important chapter in applying best business practices to correcting the problems that beset our Defense Acquisition System."⁷

And Senator Carl Levin, Chairman of the Senate Armed Services Committee (SASC), also wrote on behalf of the BENS effort: "At a hearing of the [Committee] earlier this year [2008]...testimony reinforced our long-standing concerns regarding the inability of the Department of Defense to field new weapons systems or provide needed services in a timely manner, contain program costs, and adhere to promised deadlines.... I welcome any constructive effort to make recommendations on how best to improve the processes that govern the acquisition of goods and services for our armed forces."⁸

In addition to such exhortations about the problems we face, over which there is near universal agreement, new challenges increased our sense of urgency. The Task Force went to work against the backdrop of an unprecedented confluence of global financial and trade disruptions with manifest implications for global and national security. This circumstance has led the Director of National Intelligence to add the economy to the list of threats to U.S. national security.⁹ We were also mindful of the impact that the nation's fiscal crisis will likely have on the resources available for national security. As our definition of threat broadens, competition for resources among worthy claimants will intensify. That puts a premium on efficiency as well as effectiveness as we contemplate the reform of the defense acquisition process.

THE BENS TASK FORCE: OBJECTIVE, SCOPE AND METHODOLOGY

In August 2008, BENS President and CEO General Charles G. Boyd, USAF (Ret.), reported to the Deputy Secretary of Defense that, in a pilot study BENS had completed with the Deputy Secretary's endorsement,¹⁰ BENS had identified several key downstream effects of law and regulatory policy on cultural and organizational aspects of the defense acquisition

House Armed Services Committee (HASC) Chairman Ike Skelton urged BENS to "contribute to the next important chapter in applying best business practices to correcting the problems that beset our Defense Acquisition System."

"I welcome any constructive effort to make recommendations on how best to improve the processes that govern the acquisition of goods and services for our armed forces."

-Carl Levin, Chairman, Senate Armed Services Committee So confusing and timeconsuming is the current legal and regulatory environment for defense acquisition that it suffocates its own reason for being: aiding the war fighter.



system. He reported further that BENS planned to pursue a more comprehensive review focused on acquisition law; regulation and policy; and the oversight roles of the Congress and the Defense Department.¹¹ In late October 2008, BENS convened the Task Force to fulfill this objective.

As a critical component of national security, an effective and affordable acquisition system underlies the U.S. military's ability to maintain, restore and improve its capabilities. Taking that characterization of the acquisition system's preeminent purpose as its guiding principle, the Task Force focused on the unsettling fact that two decades worth of accumulated incremental acquisition system process adjustments have produced a system in which concern with process has displaced concern with outcomes. So confusing and time-consuming is the current legal and regulatory environment for defense acquisition that it suffocates its own reason for being: aiding the war fighter.

We needed to know how this happened before we could recommend ways to repair the problem. We began by conceptualizing the subject in its proper, broad scope. A major vector for this Task Force—one not typically taken in more process-oriented studies—is directed at what we call the defense acquisition enterprise. We define this enterprise as a national phenomenon whose many "owners" include all three branches of the Federal government, the private sector (both as contractor support and as seller), and a large cast of external advocates and critics ranging from associations and public interest groups to Federally Funded Research and Development Centers (FFRDCs), think tanks and academia. These externalities create an environment for the defense acquisition enterprise that is rarely if ever confronted by purely commercial ventures.

Midway through our assessment we asked the Task Force, along with its subject-matter experts and advisors, to rank the top conceptual issues in acquisition that had emerged from our review of earlier analyses and critiques. From a list of over one hundred such conceptual issues, four emerged (see below) as consensus selections for principles that underpin the entire defense acquisition enterprise.

Having defined our objective, established the scope of our effort and constructed a conceptual foundation for it, we devised a comprehensive study approach to proceed. We examined the full array of causal factors involved—law; regulation; policy; departmental cultures; and, not least, the organizational structure in each segment of the congressional-defense-industrial base triangle—through intensive study, discussion, and debate. The Task Force carefully analyzed findings from past studies that proposed reforms focused on the war fighter as customer. We chose the Goldwater-Nichols legislation of 1986 as a logical starting point, since it is the genesis of today's defense acquisition process.¹²

Early in our deliberations, we whittled down the range of "pressure points" in the current DoD system to three areas that we believe, if changed, could fundamentally alter for the better the operation of the defense acquisition process. They are:

- Requirements: Linkages between the requirements determination, budgeting and acquisition processes
- Personnel: Constraints to defense acquisition workforce excellence
- Execution: Adherence to program execution processes aimed at satisfying the needs of the war fighter

We questioned numerous expert witnesses—including some Task Force members—and, based on their evidence, we then devoted much attention to recent assessments that concentrated on analyzing these three identified "pressure points." We believe these analyses contain the seeds of corrective action that can be applied to restore functionality and efficiency to the system, if leadership is willing to make the effort. We are a bit nonplussed that these recommendations have not gained better traction. The reports include:

- 1. Defense Acquisition Performance Assessment (DAPA), January 2006 <u>http://www.afei.org/documents/DAPA-Report-web-feb21.pdf</u>
- Invigorating Defense Governance, A Beyond Goldwater-Nichols Phase 4 Report, CSIS, March 2008 <u>http://www.csis.org/component/option.com_csis_pubs/task,view/id,4380/type,0/</u>
- 3. Creating an Effective National Security Industrial Base for the 21st Century: An Action Plan to Address the Coming Crisis, DSB, July 2008 <u>http://www.acq.osd.mil/dsb/reports/2008-07-DIST.pdf</u>
- 4. Report of the Defense Science Board Task Force on Developmental Test & Evaluation, DSB, May 2008<u>http://www.acq.osd.mil/dsb/reports/2008-05-DTE.pdf</u>
- 5. Pre-Milestone A and Early-Phase Systems Engineering: A Retrospective Review and Benefits for Future Air Force Acquisition, National Research Council, National Academies of Science, 2008 <u>http://www.nap.edu/catalog/12065.html</u>

The Task Force also recognizes and commends the Department of Defense for contemporaneous attempts within the Department to right the process. Of note are:

- 1. Department of Defense Directive 7045.20, Capability Portfolio Management, September 25, 2008 <u>http://www.dtic.mil/whs/directives/corres/pdf/704520p.pdf</u>
- Chairman of the Joint Chiefs of Staff Instruction, CJCSI 3170.01G, Joint Capabilities Integration and Development System, March 1, 2009 <u>http://jitc.fhu.disa.mil/jitc_dri/pdfs/3170_01g.pdf</u>

The work of the U.S. Government Accountability Office, too, should not go unremarked. We relied on it extensively, and made our own efforts to extend it by constructing a matrix of all recent GAO reports dealing with the topics of requirements, workforce and program execution. The list of reports ran to more than 50, encompassing worthy observations reaching into the hundreds. Of particular import is Defense Acquisitions: Perspectives on Potential Changes to Department of Defense Acquisition Management Framework, GAO-09-295R, February 27, 2009 (<u>http://www.gao.gov/new.items/d09295r.pdf</u>).

A comprehensive list of materials reviewed, including all relevant GAO studies, can be found in the bibliography that accompanies this report.

ORGANIZATION OF THE REPORT

The chapters that follow faithfully reflect the Task Force's objective, definition of scope and study methods. Beyond that, they also reflect our conviction that an efficient, affordable acquisition system is both essential and possible as a critical component of the nation's security. We do not have such a system today, but rather one that can be fairly characterized as distorted and inefficient.

As our definition of threat broadens, competition for resources among worthy claimants will intensify. That puts a premium on efficiency as well as effectiveness as we contemplate the reform of the defense acquisition process.

...an efficient, affordable acquisition system is both essential and possible as a critical component of the nation's security. We begin our assessment in Chapter 1, "Principles for Successful Acquisition Outcomes," by defining how stakeholders in the defense acquisition enterprise must press for specific changes in the process. To achieve the acquisition process we need, the Task Force identified "defining attributes" of the process to serve as a litmus test for fundamental reform. The findings and recommendations offered in this report are based on these defining attributes:

- Talented, dedicated, experienced leaders are the underpinning of success; formal processes and organizational charts are secondary.
- Goals must be clear and, to the greatest extent possible, measurable.
- Clarity of individual responsibilities is essential—including assuring individual consequences.
- Authority must match responsibility.
- Means must match ends.
- Authority, responsibility and accountability must be delegated wherever practicable—and results monitored.
- Organizational and individual overlaps and interfaces must be minimized.
- Acquiring the skills sets and expertise required for the acquisition of services and Information Technology must become an institutional goal.

Our findings and recommendations are then laid out in Chapters 2-4. All are directed specifically at processes internal to the Defense Department, but all take fully into consideration the leading role of Congressional initiative and oversight, and also the roles of other actors.

Chapter Two focuses on the requirements determination process for defense acquisition. Chapter Three examines the critical issue of enhancements to defense acquisition workforce strategies. Chapter Four concentrates on the application of best business practices to program execution to ensure that capabilities delivered to the war fighter are timely and broadly affordable within the framework of both the Defense and overall Federal budget.



CHAPTER 1. PRINCIPLES FOR SUCCESSFUL ACQUISITION OUTCOMES

Successful defense acquisition outcomes are the consequence of shared and well-understood expectations, as well as agreed-upon goals, on the part of all three major institutional elements in the defense acquisition enterprise: the Defense Department, industry, and the Congress. Shared expectations and sound goals are enabled in turn by a legal and regulatory environment conducive to cooperation, an environment for which all three sides of

PRINCIPLES UNDERPINNING SUCCESSFUL OUTCOMES IN THE DEFENSE ACQUISITION ENTERPRISE

- A. Agreement and Alignment of Interests and Incentives of all Stakeholders
- B. Strategy and Resources: Ends Matched to Means
- C. Ability to Attract and Retain Able and Experienced People
- D. Commitment to Ethical Comportment in all Activities

Figure 1

the defense acquisition triangle have some responsibility. Consistency in achieving successful outcomes rests on adhering to a set of principles that establish the basis for specific changes in the process. Therefore, we begin our assessment by defining a list of principles that underpin successful outcomes (Figure 1). In considering future

legislation, in changes to current law and in the performance of oversight responsibilities, these principles need to be foremost in the minds of legislators.

A. AGREEMENT AND ALIGNMENT OF INTERESTS AND INCENTIVES OF ALL STAKEHOLDERS

The alignment of interests and incentives in defense acquisition is largely a question of gaining and sustaining consensus on what is "right" and what rewards will accrue to various stakeholders for achieving alignment. This objective is easy to comprehend, but it has proven difficult to achieve because each participant in the process tends to adopt positions that best protect what they perceive as their own equities.

Of course, everyone agrees that the ultimate goal is to assure that America can defend itself and its founding principles. But the military services, civilian decision-makers at the Defense Department, the Congress, and the defense industry differ on how to pursue that goal because each stakeholder in the process has parochial interests as well as transcendent, national ones. The inevitable result of these imperfectly overlapping interests is that each stakeholder must be willing to settle for less than it seeks as a satisfactory outcome. That, in turn, means that while the defense acquisition system ultimately meets the needs of its participants and, above all, its ultimate customer—the war fighter—it usually does so more slowly and at vastly higher cost than necessary. Thus the process is eventually effective for the most part, but not efficient.

Perhaps the best discussion of the cultural phenomena that defines the defense acquisition process was offered by the then General Accounting Office in 1992.¹³ Its conclusion, which still resonates, is that stakeholders are more likely to achieve alignment of interests if they ask the acquisition process to satisfy fewer needs; if, in other words, they pursue fewer and smaller programs with less ambitious requirements. The reason for this conclusion, however, is that the more demands placed on a weak and inefficient acquisition process, the less well it performs. What best serves the war fighter is problematic. However, the Task Force believes that providing a 70 percent solution on-time is preferable to possibly no solution at all because the requirements could not be met or costs have become prohibitive.



The alignment of interests and incentives is elusive because today's acquisition culture lacks meaningful consequences for failure. Management weakness, in turn, results from an excessive diffusion of responsibility. As the old saw says, when everyone is accountable, no one is accountable. Oversight, usually conducted in an ex post facto manner, has led one critic to characterize program management in the Department of Defense as a "spectator sport."¹⁴

The alignment of interests and incentives is elusive because today's acquisition culture lacks meaningful consequences for failure. This problem can be traced to the fact that most of the Department's procurement programs stretch out for so long. The need to meet key performance parameters is projected so far into the future that current managers know they will not be around to be held accountable for achieving them. Therefore, consequences are rarely imposed for bad judgment. In the private sector, the time horizons of programs are much shorter: often measured annually or more often. Further, managers are generally appointed for the life of the program and, thus, more likely to be cognizant of the performance measures they will be expected to achieve over the program cycle.

Finally, promoting transparency and accountability throughout the acquisition chain is an enabler of alignment. It is also related to the establishment of trust throughout the organization, which must go hand-in-hand with reinforcing leadership's culture of consequences at the Defense Acquisition Executive (currently the Under Secretary of Defense for Acquisition, Technology and Logistics) level. If the process is so complex and protracted as to obscure transparency and accountability, trust will invariably suffer.

B. STRATEGY AND RESOURCES: ENDS MATCHED TO MEANS

Co-equal with misalignment of interests is the serious and persistent mismatch of ends and means. Today's acquisition process is largely divorced from the security strategy it should be designed to execute. A concurrent problem is that the strategy process itself—a White House-driven interagency effort by definition and law—is prone to overemphasize ends, while leaving ways and means to an entirely separate Defense Department process called the Planning, Programming, Budgeting and Execution System (PPBES).

Similarly, the elements of strategic discourse, including the Congressionally-directed Quadrennial Defense Review (QDR) and the President's National Security Strategy (NSS), DoD's National Defense Strategy (NDS) and National Military Strategy (NMS), occur on a timetable that is out of sequence with the cycle of the PPBES process. This lack of order yields an incoherent method of aligning ends and means, and leads to an array of counter-productive consequences. If any major private corporation tried to run its affairs in such a manner, it would quickly go broke.

The Task Force believes the Defense Department needs the equivalent of a business plan that connects strategy to resources. A recent Defense Science Board study¹⁵ echoes that conclusion, and a recent CSIS series of reports offers a guide to remedying the strategy/ resources imbalance.¹⁶ The reports suggest improving on capabilities-based planning approaches to properly link desired ends to ways and means. They also urge establishing a routine governance tempo inside the Pentagon "that makes use of some unchangeable elements of the American political landscape, namely quadrennial presidential elections and annual federal budgeting" as a way to achieve stakeholder consensus.

The Defense Department has initiated a stream of recent changes that may begin to resolve its most pressing acquisition challenges. In addition to enhanced capability-portfolio management skills¹⁷ it has moved to:

...the Defense Department needs the equivalent of a business plan that connects strategy to resources.

- Implement a material development decision effort as a starting point for all programs
- Conduct more robust Analysis of Alternatives (AOA) to develop potential material solutions to the Joint Capabilities Integration and Development System (JCIDS) validated capability requirements
- Require a cost estimate to accompany the AOA
- Ensure that systems engineering teams are included in early program reviews
- Re-establish competitive prototyping where practicable
- Require (under Federal legislation) that certifications be met for entry into the technology development, system development and production phases
- Ensure that preliminary design reviews be conducted before the start of systems development when appropriate
- Stand up configuration steering boards to review changes to requirements or technology that could affect cost and schedule

As necessary as these new steps are, they will only add to the complexity of the process unless the fundamental approach to acquisition policy is changed and applied to the entire defense acquisition enterprise. Once again, the GAO, echoing the conclusions of its 1992 report, is leading the way. In recent testimony to the SASC, Michael J. Sullivan, GAO's Director of Acquisition Sourcing and Management, noted to the committee that the Defense Department must adopt a more realistic approach to acquiring new systems. This approach would include: "Resisting the urge to achieve revolutionary but unachievable capability, allowing technologies to mature in the science and technology base before bringing them into programs, ensuring that requirements are well-defined and doable, and instituting shorter development cycles would make it easier to estimate costs accurately, and then predict funding needs and allocate resources effectively."¹⁸

GAO's recommendations, we think, apply not just to the Defense Department, but to the fundamental way that all stakeholders must view the acquisition process. It is a change in acquisition culture that, starting at the top, might tip the balance in favor of reduced cycle times and better outcomes. That said, there will be times when technologically discontinuous efforts must be made: One cannot, for example, make a gradual transition from a strategic bomber to an ICBM.

DoD texts often depict the three components of the "Big A" acquisition system—The JCIDS process, the PPBES, and the Defense Acquisition System—as a Venn diagram with the circles overlapping at the edges, indicating some sort of essential harmony. In reality, the three barely touch, coming together only at the Deputy Secretary level. The customers—in this case the war fighters acting through the military services as chief buyers—are rarely constrained in their thinking by the question of availability of resources.

The problem is one of operational alignment. What we actually have are three separate communities: the operators (the professional military); the buyers (the combined military and civilian acquisition community); and the programming and budgeting community (who are aided and abetted by the President's Office of Management and Budget and the authorizers and appropriators in the Congress). Each community is driven by a different sense of value that defines their own contribution to the organization.

"The past erratic patterns of funding for our national defense that we have sought to avoid are again a reality, resulting in program stretch-outs, increased acquisition costs, and instability in defense planning." —Ronald Reagan Misalignment of ends and means starts with the customer. The customer is generally driven by a threat scenario or series of scenarios that demand either a material or non-material (i.e., change in doctrine or tactics) solution. The material solution, by definition, seeks to overwhelm the threat and is most likely to be a technology application that, in current parlance, is "exquisite." Too often this means that the solution is both beyond current technological limits and liable to be very expensive. This requirements culture—virtually all capability proposals are approved by the JCIDS process¹⁹—then cascades through the system.

Too many programs attract constituencies that, once formed, build an iron-clad case around the requirement. The PPBES community then instates these programs, with the improbable costs associated with them, because it fails to account for the high probability of programmatic changes, delays, technological uncertainties and budget volatility. And once they become programs of record at the Milestone B (Engineering and Manufacturing Development Phase), they are nearly impossible to terminate.

Today we have a DoD portfolio of 95 major defense acquisition programs, totaling \$1.6 trillion, that is now forecast to cost \$295 billion more than originally projected.

-US Government Accountability Office The problem stems in part because the customer is unable to distinguish needs from wants through the lens of resource availability. The discussion on requirements in Chapter 2 of this report describes in more detail how a return to systems engineering, in which developmental planning occurs before requirements determination starts, may provide a fix to this problem. There is no doubt that it needs fixing. Today we have a DoD portfolio of 95 major defense acquisition programs, totaling \$1.6 trillion, that is now forecast to cost \$295 billion more than originally projected.²⁰ All things considered, an 18.4 percent cumulative cost overrun may not be outlandish, but a \$295 billion cumulative price tag definitely qualifies as sticker shock.

C. ABILITY TO ATTRACT AND RETAIN ABLE AND EXPERIENCED PEOPLE

In 2003, Paul A. Volcker, who served as Chairman of the Federal Reserve under both Presidents Carter and Reagan, presided over a national commission charged with considering the reorganization of the Federal government: "bringing government into the 21st Century." One of its conclusions was that the Federal government is not performing as well as it can or should, in least part, because "the difficulties federal workers encounter in just getting their jobs done has led to discouragement and low morale." It is small wonder that the government has difficulty attracting and holding onto top talent.²¹

The Volcker Commission recommended abolishing the General Schedule and replacing it with a recruitment and retention system based on pay-for-performance principles widely employed in the private sector. Congress initially warmed to the concept and pay-forperformance programs were started in various agencies, notably at the GAO, the FAA and the IRS, in the Pentagon and at the Department of Homeland Security. They flourished for a while, but strong Federal union opposition eventually forced the initial pay-for-performance systems to retrench. Despite early indications in the Obama Administration that the effort is not dead, there is a sense that it will be a long time before their use will spread further in the government.

Nevertheless, the underlying rationale that drove the Commission to its conclusions still applies. Agencies would perform better if they could tailor their personnel recruitment strategies to the demands of the agency's mission, offer compensation packages that reflect "mark to marketplace" conditions and align compensation policies with performance, hire

and re-train or reduce employees as agency workloads change, and contract-out when that is the most effective way to meet mission objectives.

The Defense Department needs to be recruiting on college campuses to replace its current workers, who have not left as rapidly or in the numbers predicted, but will with certainty eventually depart and take their experience with them. The time to recruit is now so that experience can be captured and transferred. However, the workers of the future will be driven by different motivations from those of the past, a change we see occurring before our eyes. The Department will have to recruit for clear and compelling missions, not just for "a Federal job." It will have to acknowledge that applicants are not interested in jobs-for-life, and so will have to craft personnel policies to let them leave government service and re-enter without penalty. Compensation does not have to be market-driven in all cases; some point to being able to compete with the "dot-edu's and dot-org's" rather than with the "dot-coms." Finally, with respect to the acquisition workforce of the future, as we point out in Chapter 3, the key to getting the right talent may lay in making the program cycle time short enough so that acquisition professionals can see the results of their labors within a few years rather than over an entire career.

A huge obstacle to attracting and retaining talent is the disclosure, divestment and potential conflict-of-interest provisions of the hiring process that have become ever more onerous over time. The current approach errs significantly on the side of excess caution. We need a more balanced and rational approach. People who willingly take government positions do so largely for public service reasons, not personal aggrandizement; comparing monetary remuneration between government and the private sector should make this obvious. Congress should reformulate the law in such a manner that common sense prevails. As things stand, we are protecting ourselves right out of our own best interests.

D. COMMITMENT TO ETHICAL COMPORTMENT IN ALL ACTIVITIES

Ethical standards that must pervade the entire defense acquisition enterprise are based ultimately on a foundation of trust among institutions. Today, however, a lack of trust reaches into the relationships among Congress, the Defense Department and the defense industry. The causes are varied, but at the top of the list is the increasingly adversarial nature of the triangular relationship, where the divergent interests and equities natural to the acquisition enterprise are magnified rather than ameliorated by the legal and regulatory environment in which they now find themselves. Over time, the result has been an increase in legal wrangling and a growing lack of communication between the government and the private sector.

The current lack of trust is not inherent to the process. Government can communicate its needs to the private sector, and the private sector, which provides the overwhelming majority of the goods and services consumed by government each year, can respond to supply what is asked of it. Everyone understands the need to establish appropriate prices despite the truncation of market influences in a monopsony, and everyone understands the transcendent purpose—aiding the war fighter—that the system ultimately serves.

A new culture should emphasize restoring trust. To do so, however, it must spell out who is responsible for what, and stipulate how accountability flows from one management layer to the next. Accountability is hierarchical, not horizontal. Transparency will be achieved when overseers and managers know their exact relationships to one another and behave as a team rather than adversaries or competitors. Finally, failure must have con-

People who willingly take government positions do so largely for public service reasons, not personal aggrandizement; comparing monetary remuneration between government and the private sector should make this obvious.



sequences clear to all; agreed-upon standards must be rigorously enforced. This can only happen, however, if leadership sets time horizons that are within the manager's tenure and the managers know, in advance, that they will be held to account.

Ethics cannot be legislated, but an ethical sense of doing business can be sustained if the culture understands and practices trust, accountability, transparency and the enforcement of consequences. It is a question of leadership.

CONCLUSION

Of the principles noted above, the first two—agreement and alignment of stakeholder interests, and matching ends to means—are fundamental to reframing the defense acquisition enterprise. While changes in law, regulation, culture and organization will be needed to put such principles into effect, it takes leadership to embed them and force change in the system.

If the Congress sets as its expectation the four underpinning principles iterated above, trust can be restored. A major part of the solution requires increasing transparency and accountability in the Defense Department and in industry, which has already been mentioned. In well-run firms in the private sector, occasional problems are reluctantly tolerated, but not disclosing them to management is a crime.

In the early part of this decade, the Office of the Deputy Under Secretary of Defense for Industrial Policy published a roadmap it hoped would provide "more transparency into the programs and processes that constitute the military enterprise."²² More recently, the Defense Science Board produced an action plan aimed at securing the U.S. industrial base for the 21st century.²³ The difficulty is that these rather lengthy treatises read like directives not really the stuff of true dialogue.

Changes in law and policy have made it very difficult for discussions and meetings between government and industry officials to take place outside of formal, open-to-the-public fora. This kind of distancing would not happen in the private sector if a business wanted to get to know its customer or resolve a problem. Congress and the Defense Department (and their lawyers) need to breach the walls that prevent forthright dialogue. Only more direct and genuine exchanges can give all parties insight into future defense needs and industrial capabilities, so that both can make the wise investment decisions that serve a common goal.

In well-run firms in the private sector, occasional problems are reluctantly tolerated, but not disclosing them to management is a crime.

CHAPTER 2. REQUIREMENTS DETERMINATION

FINDINGS: Today's requirements process is a highly formalized pursuit driven by the perceived needs of war fighters and accommodated by engineers in which the suppliers of financial resources are not consulted. It needs to become an iterative process involving war fighters who understand the nature of combat, engineers who understand the limits of technology, and financial experts who can accurately estimate costs and assess consequences for future budget scenarios.

ESTABLISHING ENDURING LINKAGES BETWEEN THE REQUIREMENTS DETERMINATION, BUDGETING AND ACQUISITION PROCESSES

The main obstacle to making realistic trade-offs on cost, schedule and performance as requirements emerge and are turned into programs is that the three parts of the DoD decision support system—JCIDS, the Defense Acquisition System, and PPBES—run along tangential paths. They touch, but are not linked in a way that enables informed determinations on what ought to be acquired. These determinants include: resource availability, producibility, technical capacity, the threat-response cycle (agility), strategic relevance, and contribution to joint-warfare capabilities.

Failure to consider each of these determinants results in an incoherent and insufficient requirements-setting process that ultimately steers the course of the entire DoD acquisition process. Establishing closer formal linkages among stakeholders early in the cycle would enhance the system's ability to make trade-offs so that the Initial Capabilities Document (ICD) will be resource-constrained, within likely technical capabilities, and reasonably time-certain on its development schedule from the start.

A more agile and efficient requirements-determination process would:

- Eliminate resources-requirements-producibility mismatches earlier than in today's system
- Strengthen relationships between strategy and requirements determination
- Clarify roles for all stakeholders in the requirements generation, acquisition and programming processes
- Provide early validation of technical maturity and industrial base capability

Consistent with our findings, the Task Force recommends that Congress establish its expectations for the acquisition system and through oversight—legislation where indicated ensure that the following changes occur:

Modify the existing requirements establishment process to make it highly iterative and interactive as opposed to declaratory, but with strong inputs from the systems engineering, cost analysis and program planning and budgeting communities. (Implementing Action R-1)

Reconstitute a strong systems engineering capability within each of the Military Departments; i.e., within the Service Chiefs' chain of responsibility. (Implementing Action R-2)

The purpose of reinstituting a systems engineering capacity is to synthesize candidate systems and conduct tradeoffs among capability, schedule, cost and technical risk. In doing so, alternative concepts should be made available that include upgrading existing systems,





developing all-new systems, adopting commercial products, and procuring foreign-made military products.

Systems engineering capabilities reduce technical risk because they enable a process to conduct development planning well before the initiation of a formal requirement or need. Systems engineering focuses on the development of underlying technologies for eventual integration into future systems, skill sets associated with the activities of the Service Systems Commands whose existence, unfortunately, was abandoned during the 1990's largely as a cost-saving measure. The capabilities subsequently atrophied in the Services.

Conceptually, developmental planning employed analysis to identify gaps in accomplishing military strategies; defined concepts to address those gaps; employed modeling, simulation and, occasionally, prototyping to refine and test concepts; and provided early systems requirements to the developers for specific capabilities. "Inherent in this role was the ability to understand the state of the art of the technical possibilities available from technology centers (laboratories, universities, industry, and so on), as well as to understand the needs of the user community (war fighters)."²⁴

A robust systems engineering capacity was required to pursue development planning throughout the course of a weapon's development, so it is heartening to see the acquisition community and the Congress regaining their appreciation of the need for strengthened systems engineering capabilities in the Department—although there is still some inconsistency in the definition of "systems engineering."²⁵ The Task Force strongly believes that the military services should reconstitute these capabilities, thus ensuring an institutional memory that can be transferred from program-to-program and can readily draw on existing technical capacities almost entirely within the military services.

Require the major decision support systems in the Department to harmonize the relationship between national security strategy, military strategy, requirements determination and fiscal constraints. (Implementing Action R-3)

Today, the development of requirements through the capabilities-based assessments (CBAs) process has no apparent, structured relationship to the development of the National Defense Strategy (NDS) or the National Military Strategy (NMS). Nor are any of these processes tied in a phased sequence to an overarching National Security Strategy (NSS), which is produced by the Executive Branch "only as needed." The time horizons and sequencing of the JCIDS process and development of the strategy documents do not appear to be in sync, nor does the QDR occur in sequence with the other planning documents. The lack of rigor and logical sequence in the nation's strategic planning process increases the difficulty in integrating JCIDS, JROC, the Defense Acquisition System and PPBES.

To re-emphasize adherence to the "ends matched to means" principle discussed in Chapter 1, the Task Force supports the remedy proffered in the Center for Strategic and International Studies Beyond Goldwater-Nichols series of reports, which suggest improving on capabilities-based planning approaches to properly link desired ends to ways and means.²⁶

A strategy that cannot be implemented or resourced is not a strategy, but rather a critical failure in leadership and management. It is nothing more than a statement of hopes and good intentions without credibility.

-CSIS, Abandon Ships: The Costly Illusion of Unaffordable Transformation **Modify** legislation to codify current processes, such as Joint Urgent Operational Needs (JUONS), to maintain the influential role of COCOMs in setting and achieving nearterm requirements for the warfigther in both wartime and peacetime. Sustaining needs should remain with the Service Chiefs (and Defense Agencies, as appropriate). In each case the "other" party should provide input but not have primary responsibility for the initiation of requirements. In either case, it should be the responsibility of the JROC to assure operational compatibility among the Services, working through the joint requirements organizations with special attention and rapid action for the near-term requirements. (Implementing Action R-4)

Establish an authority to conduct tradeoffs and, where appropriate, modify requirements as additional information is gained on cost, technical risk, schedule and external factors (e.g., threat changes) during the Pre-Milestone A (Material Solutions Analysis Phase). (Implementing Action R-5)

A better balance needs to be struck between determination of short-term requirements where the COCOMs' views are preeminent and the long-term force-shaping developments, which can be done most responsibly by those with enduring institutional responsibilities: the Service Chiefs.

The JROC is piloting a change in the JCIDS process to strengthen the role of the COCOMs in the requirements generation process through delegating the Joint Capabilities Board (JCB) authorities to the functional combatant command that is the war fighter's representative in the respective capability portfolio management (CPM) sector.²⁷

The most recent change to the JCIDS process provides a less formal seat at the table for the COCOMs but recognizes their responsibility to lead or support "Senior Warfighting Forums" to identify capabilities, advocate and prioritize those needs through their Integrated Priority Lists (IPLs), i.e., their "want" lists, and act as advocates and advisors to the JROC.²⁸

The Secretary of Defense has complained that "until recently, there has not been an institutional home in the Defense Department for today's war fighter." We agree and propose that the COCOMs be given a statutory role in determining short-term requirements.

There have been many approaches to the challenge of linking the requirements determination process more productively to the overall process of acquiring goods and services. The most recent commissioned report, the DAPA panel, supports a Joint Capabilities Acquisition and Divestment Plan, in which the Combatant Commands (COCOMs) would take the lead in producing 5-, 10-, and 15-year annexes for each of their operational plans that would define the capabilities required at each of these points.³⁰ The JROC process would then integrate these requirements across the Combatant Commands. The resulting "timephased" plan would in turn guide the Services and other agencies to propose fiscally-constrained material solutions to address the needs.

The GAO³¹, Defense Business Board³², and recent legislation³³ have all indicated a preference for fuller COCOM input into the requirements determination phase.

The Task Force believes that these reports and recommendations point to a solution—that is, greater COCOM participation—but that in and by itself such COCOM participation is insufficient to correct the inadequacies summarized in our findings. It is true that COCOM participation may contribute to accurate assessment of the threat cycle, to joint warfare

Today's acquisition process is largely divorced from the security strategy it should be designed to execute.


capabilities, and, to a lesser extent, bring strategy into account (although different COCOMs have different strategic intents). However, too many of the considerations needed to bridge disconnects in the process, as it exists today, and the rest of the acquisition system are left unresolved if the only change is to give added weight to the COCOMs' viewpoints.

To ensure that early consideration of resource availability, producibility, technical capacity, and the threat-response cycle (by which we mean agility) become part of the requirements determination process, the stewards of these determinants—namely the USD(AT&L)/DDRE, the Director of PA&E, the Comptroller, and the Director of NII—must be involved in the establishment of requirements before the Milestone A (Material Solutions Analysis Phase) marker. The DAPA panel report contains the most compelling solution we have seen to this problem.

"Today's acquisition system should be replaced with one that recognizes both the importance of time-to-need and the critical role that technical maturity plays in achieving program success."

-Lt Gen Ron Kadish, USAF (Ret.), Chairman, Defense Acquisition Performance Assessment panel **Make explicit** the consideration of time-value in fielding capabilities as a prelude to defining requirements. (Implementing Action R-6)

When the objective is to field capabilities quickly, meeting time constraints would seem most crucial to the post-technology development (Milestone A-B) phase of the acquisition process. However, the Task Force views that the consideration of time as a key performance parameter must be considered much earlier—before a capability need enters in to the requirements determination process.

Many considerations—and resulting outcomes—are set in motion by the dictate of time from drawing board to field. For example, an urgent need would more likely be identified by the COCOMs in response to an existing threat. That may lead in turn to an analysis of alternatives that includes only existing off-the-shelf technologies, adaptations of current designs or even pre-militarized commercial solutions. By contrast, the threat-response cycle (defined as the time it would take a competitor to develop a future capability, us to recognize it, and then develop a suitable countermeasure) may be long enough to allow immature technologies to be brought along or even non-material solutions—changes to strategy or diplomatic solutions—to be considered.

The explicit consideration of time also informs setting priorities and selecting a tailored business stream acquisition approach (discussed further in Chapter 4).

Today's system is not geared to time velocity. Getting through the JROC process alone often takes twelve months, sometimes considerably longer. Consequently, many ad hoc processes, such as the Rapid Equipping Force and the Joint Improvised Explosive Device Defeat Office (JIEDDO) have sprung up as workarounds.

The Task Force believes that if "need by" time considerations were realistic and made more specific, considering the threat-response cycle, at the very beginning of the requirements determination process, not only would time-certain development targets be possible, but that the bureaucracy itself would respond by moving the requirements generation process along.

Provide appropriate capacity, when establishing new program requirements, for future upgrades (space, weight, power, etc.). In seeking new or additional capabilities, preference should be given to upgrading existing systems as opposed

to initiating all-new systems. Upgrades should be introduced in discrete "blocks," not in a piecemeal fashion. An aggressive but sensible prototyping program should be incorporated to build and test non-production prototypes of reasonable scale that offer significantly enhanced capabilities. This would have the additional benefit of preserving difficult-to-rebuild design teams in periods when all-new developments are not being actively pursued. (Implementing Action R-7)

Strengthen the communication of government needs to the industrial sector and encourage the exchange of technical information between the private sector and the government within the bounds of security and competitive propriety. It is the private sector that provides the overwhelming share of the goods and services used by the government and that owns most of the nation's research, development and production assets. (Implementing Action R-8)

Because the current process for requirements determination is unconstrained in most of its aspects, both the program office and the contractor are encouraged to overpromise to get a program started. This sets them both on a course to underperform as the program is executed. This is what comes of not making an evaluation of technical maturity and industrial capabilities part of the requirements setting process.

Our earlier call for increased developmental planning and systems engineering expertise can be very useful in assessing the readiness of technology when evaluating requirements proposals. However, knowing the capability—and the capacity—of the industrial base remains a weak spot in Defense Department planning.

A 2008 Defense Science Board report points the way forward, however, to overcome this weakness.³⁴ It recommends that DoD and Congress shift from a posture of "maximum risk avoidance" to an objective of "effective and efficient acquisition risk management." Their model is "a partnership between government and industry, with both striving for an industry that is competitive, flexible, adaptive, agile, innovative, low-cost and high-quality." Our Task Force believes, as does the DSB, that re-establishing industrial base CEO meetings with the Secretary and Deputy Secretary of Defense and the Service Chiefs would shore up expectations and uncover concerns. Communications at the top would encourage better relations at all levels of the Defense Department with their industry colleagues. Industrial-base capabilities would be better understood and, in the process, industry would have a clearer view of where to put their research and development dollars in anticipation of future defense needs.³⁵

"Taxpayers are charged too much for weapons systems that too often come too late." —Barack Obama

CHAPTER 3. ACQUISITION WORKFORCE

FINDINGS: Today the government too often finds itself with minimally experienced and transient individuals leading major acquisition programs, able to attract new people only after long delays, unable to couple rewards to performance, and with many senior positions simply unoccupied. Talented and dedicated people can often overcome a poor organizational structure, but a good organizational structure cannot overcome inadequate performance. When qualified people are combined with sound organizations and practices, success is virtually assured. The acquisition process, unlike most government pursuits, is a business function. It demands skills and talents that are far more common to the business world than to government and military operations.

CONSTRAINTS TO DEFENSE ACQUISITION WORKFORCE EXCELLENCE

The acquisition workforce is the backbone upon which the entire defense acquisition enterprise rests. However, both through conscious job cutting and uncoordinated organizational tinkering, the workforce has atrophied.

The perilous status of the workforce today is the result of intentional downsizing in the 1990's mandated by the Congress and abetted by the military services.³⁶ Gaps in acquisition workforce skills are the proximate cause of most of the system's ills. However, the Task Force feels justified in making these points: The workforce did not make the decisions to reduce itself; did not place non-acquisition certified people in key decision-making acquisition positions; did not place multiple and conflicting policies and laws in the field; and did not cut funding for training and education.

Despite all these considerations and others not mentioned, the existing workforce has nonetheless provided equipment and services to help the U.S. military remain the most capable, powerful and respected military power in the world. And the workforce does this with little acknowledgement or appreciation.

Today's acquisition workforce is in many areas highly competent, but it is understaffed in comparison to its workload. It is also organizationally misaligned to permit it to feel appreciated as a professional component, and it faces an unprecedented loss of expertise due to aging and the pull of private sector opportunities.³⁷ Thus, we believe that fixing workforce problems is a leadership issue far more than it is a process issue.

In his FY 2010 budget announcement Defense Secretary Robert Gates called for "increasing the size of the defense acquisition workforce, converting 11,000 contractors to fulltime government employees and hiring 9,000 more government acquisition professionals by 2015."³⁸ This is a step in the right direction. However, we distinguish sharply between the impact of 20,000 workers each with one year of experience and the impact of 1,000 workers each with 20 years experience. We also recognize the need and flexibility that a contract workforce offers the Defense Department and national security. Contractors have been a part of our national defense team from our founding, and with good reason. In addition to serious consideration of what skill sets and capabilities need to be brought in house to ensure inherently governmental work is being conducted by the government, it is equally imperative that the legitimate roles and capabilities of a contract workforce be preserved.





To restore the defense acquisition workforce to excellence, the Task Force believes that above all, the right people are needed. There are many good people in the system, but that does not make them the right people. In optimizing the management of relevant skill sets, the flexible, innovative, cost-effective workforce needed for the 21st century can emerge. It cannot occur on the quick or the cheap, and could take a decade to restore. The bottom line for the acquisition enterprise is to recognize and reconstitute a professional acquisition workforce working side-by-side with its contractor support—and, most importantly, its operational counterparts.

To restore vigor and flexibility to a recapitalized acquisition workforce, the Task Force recommends that Congress establish its expectations for the acquisition system and through oversight—legislation where indicated—ensure that the following changes occur:

Today the government too often finds itself with minimally experienced and transient individuals leading major acquisition programs, able to attract new people only after long delays, unable to couple rewards to performance, and with many senior positions simply unoccupied.

Assign to the Service Chiefs responsibility for establishing, managing and maintaining a highly competent acquisition workforce, including education, training, career path development and succession planning—the latter is rarely done today in any institutional fashion. Appropriate staffing standards should be created for all critical positions. (Implementing Action P-1)

A key question is: Who exactly comprises the acquisition workforce? Many yardsticks have been used.³⁹ We prefer the definition of the Congressionally-chartered Acquisition Advisory Panel.⁴⁰ Included in their definition are personnel responsible for:

- Determining and defining agency requirements for goods and services
- Gaining intimate familiarity with the markets in which the agency will seek goods and services to meet agency needs
- Monitoring and measuring contract performance, including testing of goods, auditing, contract administration, and evaluation of contractor performance
- Managing the programs in which the goods and services acquired are employed

Once the defense acquisition workforce is properly delineated, the Secretary should resurrect, in concept, the Policy Guidance Council (PGC) that operated under the auspices of the then USD(A) in the late 1980's. The PGC reviewed what was being taught to the workforce and provided the Defense Systems Management College (DSMC) Commandant guidance and direction to change/update course content as necessary. PGC membership commanded the attention of DoD's highest acquisition enterprise leaders. Those legally charged with overseeing the DoD acquisition workforce—the DAE, SAEs, Service senior acquisition leaders—regularly engaged in this important activity.

When Congress passed the Defense Acquisition Workforce Improvement Act (DAWIA) in November 1990, the PGC was discontinued. DAWIA specified training and certification for some acquisition workers, but not for the breadth of membership we today consider and should consider—as part of the overall acquisition workforce cohort. For the past 18 years, senior leaders have not had a formal mechanism to review collectively and with regularity the health and development of the DoD acquisition workforce.

The first order of business is to define the acquisition workforce in the broad categories noted above. Recall the "Big A"-"Little a" characterization. Most training, education

and certification programs today are aimed at the "Little a" workforce. For the workforce occupying the requirements, resourcing, test (except test pilots and test engineers) and sustainment processes no requirements exist for concerted acquisition education, training or experience beyond a one-week orientation course. The planning, programming and budgeting workforce has no acquisition-specific training requirements at all. In effect, we are trusting hundreds of billions of dollars to a large percentage of the "Big A" team that is poorly or not skilled at all in acquisition procedures.

It is worth noting that in the April 6, 2009, press briefing in which Defense Secretary Gates announced his Fiscal Year 2010 proposed budget, his reasons for program terminations and changes focused on the "Big A" overruns and stretch-outs—areas in which the work-force is not trained, in particular, in the requirements and resourcing functions.⁴¹

The main means of motivating and retaining a professional acquisition workforce do not have to be solely monetary. Rather, they may lay in creating the environment described elsewhere in this report that calls for fewer and shorter programs. The ability of acquisition professionals to see the results of their efforts and to gain experience from a wider range of programs over a career, as well as see more frequent promotions as they move from one completed effort to the next, could be as strong an incentive, if not stronger, than pay. Newer workers have consistently ranked having a challenging job over compensation as their chief motivation.

Streamline the hiring and rewarding of key acquisition personnel, including providing appropriate compensation and other forms of incentives. Authority to quickly employ qualified individuals as well as to dismiss individuals who are not performing in their assigned responsibilities should be vested in the Secretary of Defense. While the intent of government ethics regulations is to be applauded, those aspects that unduly discourage individuals from accepting government employment (extensive paperwork, financial burdens, redundant security clearance processes) should be reevaluated as to their necessity. (Implementing Action P-2)

The Task Force recognizes that Congress has renewed interest in workforce issues and, as recently as 2008, has enacted a requirement for a defense acquisition workforce section in the Department's Strategic Human Capital Plan. It has also established a Department of Defense Acquisition Workforce Development Fund (\$3 billion over the five-year period 2008-2012).⁴² Results, thus far, have not been obvious. Those legally responsible for the workforce need to ensure that it is properly trained and equipped to do its job. Given that this workforce manages over 30 percent of the DoD budget, it makes sense to give it senior leadership attention—including the Secretary of Defense and the Service Chiefs and Secretaries themselves.

The challenge of removing disincentives to acquisition-workforce excellence also faces the whole of Federal government human-capital management. Indeed, over the years, the Government Accountability Office has put a great deal of effort into assessing best practices in the field of human capital management. To create incentives in the working population to seek Federal employment, the GAO urges that government managers adopt the same organizational concepts that private-sector managers use: become less hierarchical, processoriented, stove-piped, and inwardly focused and more flat, results-oriented, integrated, and externally focused. The major problem is not unmotivated Federal employees but rather the The ability of acquisition professionals to see the results of their efforts and to gain experience from a wider range of programs over a career, as well as see more frequent promotions as they move from one completed effort to the next, could be as strong an incentive, if not stronger, than pay.



With respect to conflictof-interest and ethics rules that apply to potential appointees and senior officials, no fewer than 79 provisions in law limit, dissuade or otherwise constrain such workers from accepting or continuing service. lack of a consistent strategic approach to marshaling, managing, and maintaining the human capital needed to maximize government performance and ensure its accountability.⁴³

The GAO contends that much of the authority agency leaders need to manage human capital strategically is already available under current laws and regulations. However, they point out that implementation requires sustained and inspired efforts by many parties, including the President, department and agency leaders, the Office of Management and Budget, the Office of Personnel Management, Congress, and others. Engaged leadership is the overriding key to success, and that includes Congressional leadership.

Congress needs to work with all involved parties to identify comprehensive legislative reforms in the human capital area. These reforms should emphasize the assessment of skills, knowledge, and performance in connection with Federal employment and compensation decisions, rather than non-competitive General Schedule "step" increases and inflation adjustments, as is often the case today. Policymakers should pursue legislative reforms to give agencies additional flexibility to hire, manage, and retain the human capital they need, particularly in critical occupations.

With respect to conflict-of-interest and ethics rules that apply to potential appointees and senior officials, no fewer than 79 provisions in law limit, dissuade or otherwise constrain such workers from accepting or continuing service.⁴⁴ The Federal application for politically appointed positions currently runs to over 60 pages. Granted this illustrates the best of intentions, but this is absurd. It drives away significant numbers of talented, public-spirited people.

Combining incremental legislative reforms to the hiring process with relief from the onerous disclosure, divestment and potential conflict-of-interest provisions that prevail, would improve the overall hiring climate for the Defense Department.

Amend the Goldwater–Nichols legislation to reinstate the Service Chiefs in the chainof-responsibility over the Program Executive Officers (PEOs) and Program Managers (PMs). Program Managers are the heart of the defense acquisition process and should be granted commensurate authority. They should be required to have corresponding training and experience. Career paths should be established that permit program managers and other key personnel to remain in their positions at least from one major milestone to the succeeding major milestone. Service in the acquisition process must not damage a military career. (Implementing Action P-3)

The Packard Commission, which presaged the Goldwater-Nichols reforms of 1986, envisioned streamlined chains of command and gave greater management control to program managers. The actual legislation, however, did not follow through on those principles. Instead, it stripped the Service Chiefs from the acquisition chain-of-responsibility by creating a DAE-SAE-PEO-PM reporting line. While Goldwater-Nichols did embed the concept of "jointness" in the acquisition system—since reinforced by the evolution of the JCIDS and JROC processes—it has had over time the deleterious effect of damping the career progression paths for officers in PEO and PM positions within their own services.

While 4 years is the regulatory requirement for time-in-position for Program Managers,⁴⁵ many seek to limit their tenure to minimum time-in-service using waivers and exceptions,



averaging only some 17 months in position before moving back into operational jobs.⁴⁶ An additional consequence is that the acquisition career field is not viewed as a profession in the same sense as are operational billets.

The Task Force therefore recommends that the Goldwater-Nichols legislation be revised and that the PEO and PMs revert to the reporting chain-of-responsibility under their respective Service Chief.⁴⁷ This move would reconsolidate the Service Chiefs' control over both resource allocation (which they already possess) and the acquisition processes, help to re-establish a more attractive career progression path for officers in the acquisition career field, and go a long way toward restoring the professionalism of the career field, putting it on par with the operational side of the Service. The Service Secretaries would continue their oversight through the Service Chiefs.

Establish standards for workforce skills and attention to detail for service contracts and information technology (IT) programs that are equivalent to those required for major weapon systems. (Implementing Action P-4)

In Fiscal Year 2008 the Department of Defense obligated about \$200 billion for contractorprovided services.⁴⁸ It also spent \$32.1 billion on information technology.⁴⁹ As a percentage of all procurement spending, Pentagon spending for services approaches the 60 percent mark. Nevertheless, the defense acquisition system remains a one-size-fits-all process designed around buying major weapon systems.

The issue is further complicated by the fact that the acquisition workforce, including both those working in contract development and, later, on contract management, is trained mostly on the procurement of goods rather than services.

The problems with IT procurement are two-fold. According to General James Cartwright, USMC, Vice Chairman of the Joint Chiefs of Staff, the challenge facing the Department is not that the technology is too advanced, it is that the culture for procurement is not working and needs to change. Acquisition authority and expertise are spread across several organizations, resulting in lack of timely enterprise-wide architecture and coordination, and subject-matter competencies required for successful IT acquisition are too often missing. Funding from Congress is also a problem. The speed with which Congress acts often leads to procurement of IT that is out-of-date by the time it is purchased.⁵⁰

The solution lies in educating the acquisition workforce of the future to become better buyers of products and services. The question of whether the current acquisition system has enough flexibility to accommodate IT technology cycles and the unique requirements of service contracting also needs a conclusive answer. In the Task Force's view, the answer is that it currently does not.

Of primary importance will be determining the skill-sets workers involved in services and IT acquisition need to have. Defining skill-sets for different positions and functions will be required, and appropriate training and certification regimes developed. Finally, a process to evaluate worker performance should be developed, as well.

Passage of the Services Acquisition Reform Act of 2003 (SARA) acknowledged the government-wide need to enhance the skills of and help the government hire workers with serWe are trusting hundreds of billions of dollars to a large percentage of the "Big A" team that is poorly or not skilled at all in acquisition procedures.

As a critical component of national security, an effective and affordable acquisition system underlies the U.S. military's ability to maintain, restore and improve its capabilities. vice contracting experience.⁵¹ However, a recent survey indicated that from fiscal years 2000 to 2005 DoD contracts of all types increased by 100 percent, while its acquisition workforce remained static, leading one to surmise that the effects of SARA have been underwhelming at best.⁵²

Similarly, in response to Congress⁵³, the Defense Science Board was asked to review DoD procedures and policies for the acquisition of information technology. It recommended that a separate process specifically tuned to the acquisition of IT be developed based on current DoD-series 5000 guidelines.⁵⁴

The Task Force recognizes that interest is being generated in the area of service contracting—especially with respect to wartime contracting in Iraq and Afghanistan⁵⁵—and, as noted earlier, on the subject of the special requirements for the acquisition of IT. However, we find very little to support an assessment that "help is on the way" anytime soon. We believe that fast-tracking workforce training to improve oversight of service contracting and the procurement of IT would significantly improve system performance, particularly since these functions continue to claim an increasing share of defense procurement dollars.

CHAPTER 4. PROGRAM EXECUTION

FINDINGS: Today programs are begun without resources to address contingencies, with often unproven technology, poor estimates of production volumes, and no funding flexibility—and are revised frequently. Programs should not be initiated until: 1) the requirement is clear; 2) funding, including adequate reserves, is available; 3) the technology is proven; and 4) the system concept is well-defined. It should be difficult to start new programs and it should be difficult to change or stop them, once started, absent truly compelling reasons. Failure to respect the latter has historically led to large sums of money wasted on half-completed programs found to have problems so as to chase new opportunities presumed not to have problems.

ADHERENCE TO PROGRAM EXECUTION PROCESSES AIMED AT SATISFYING THE NEEDS OF THE WARFIGHTER

Some question why it is crucial or even sensible to change the acquisition process in the middle of fighting two wars. Some doubt that it is even possible. The Task Force believes it is both possible and sensible. The reason to change is two-fold.

First, the wars we are now fighting have demonstrated that our current acquisition system is not agile or efficient in the face of rapidly emerging requirements. Second, we return to the observation that law and polices enacted in recent years have put the focus on "administration" of the system itself over the core purposes of the acquisition enterprise. The system needs to refocus on outcomes rather than process.

To be clear, we are talking about the "Big A" acquisition process, that is, budget, requirements, and acquisition; and the "Meta A" defense acquisition enterprise—the Congress, the military and civilian employees of the Defense Department and the private sector.

Just as the acquisition workforce needs to regain its professionalism by becoming associated with the ethos and motivations of the operational side of the Department, the acquisition process needs to emulate the operational side of the military. The operational military "trains the way it fights," but the acquisition process and workforce are not similarly exercised or encouraged. We are using processes to support the war fighter during time of war for which the defense acquisition enterprise, organic industrial base and defense industrial base do not receive adequate policy guidance, training, or resources. For example: Joint Urgent Operational Needs (JUONS) are the norm during war but the JCIDS is the documented process; supplemental appropriations are the norm during war, not the PPBES; Service developmental testing and operational testing are the norm during war, not organic depots. Ironically, the one sequence that remains unchanged in war is the "Little a" acquisition process. The reason is that that segment of the acquisition workforce is educated, trained and experienced to manage and execute programs in a number of environments. For everyone else, it's a "pick-up" game.

The war fighter and the taxpayer deserve better. We require an environment where, rather than striving to make the "on-paper" administrative processes error-free, the acquisition process aims at achieving successful outcomes. As the Task Force has noted previously, we need to better align the interests and incentives of all enterprise stakeholders and expand the lines of communications between DoD and its suppliers—the defense industrial base in particular, and the larger commercial sector in general.





"We need to figure out how to build within the structure of the services, and the Department of Defense in general, the structural capability to be able to wage war on a current basis where we settle for 75 percent solutions in a matter of months or weeks, rather than the long lead-time." —Robert M. Gates "Why was it necessary to bypass existing institutions and procedures to get the capabilities needed to protect U.S. troops and fight ongoing wars?" —Robert M. Gates

The Task Force believes that the primary causes of delay are a culture that strives to deliver one hundred percent capability on the first article delivered, and turbulence in the funding and requirements processes. With those objectives in mind, an efficient, flexible program execution process would be characterized by adaptable acquisition processes tailored to differing procurements (e.g., systems, services, information technology), velocity and the threat-response cycle.

Consistent with our findings, the Task Force recommends that Congress establish its expectations for the acquisition system and through oversight—legislation where indicated ensure that the following changes occur:

Employ a set of system acquisition processes tailored to match capability development and implementation durations to the threat-response cycle and urgency of operational needs (currently permitted in the DoD 5000-series documents). Revisit the dollar-value of a program as the sole criterion associated with designating a Major Defense Acquisition Program (MDAP). (Implementing Action E-1)

A key finding of the DAPA Panel was that "acquisition programs need to deliver timely products."⁵⁶ Yet major programs consistently miss their target completions. The GAO notes that current programs are experiencing an average delay of 22 months in delivering initial capabilities to the war fighter.⁵⁷ The Task Force believes that the primary causes of delay are a culture that strives to deliver one hundred percent capability on the first article delivered, and turbulence in the funding and requirements processes.

Innovation cannot be forecast, so the acquisition process must have the capacity to adapt to surprise. We recommend a tailored business stream approach that realigns the process to match capability development and implementation durations to the threat-response cycle and urgency of operational needs.

In such a tailored business stream approach, time becomes a Key Performance Parameter (KPP) in an agile and efficient acquisition program. If KPPs are limited in number, the chances increase that they will be met.

Basing the acquisition-categories (ACAT)⁵⁸ designations on dollar thresholds no longer makes sense when the preponderance of programs is for services and IT. If the determination were based on another standard or set of metrics—say, time-to-field, technology cycle or urgency—the culture defined by the JCIDS-PPBES-Acquisition System, which values adherence to process above all else, would begin to change. The Task Force believes that the problems with lethargy and risk avoidance in the system do not stem from any basic fault in the guidance. Rather, it is rote adherence to the guidance that causes the system to underperform.

To succeed we need fewer and simpler procedures. If we propose less, we arrive at more. In a way, the vast resources of DoD are a deterrent to agility and efficiency: the mere size of the Department warps the development process. The focus should be on smaller groups making decisions, with a premium on addressing important needs.

The acquisition system's goal should be to design mechanisms that work inside the threatresponse life cycle, essentially fitting development time within the cycle (defined as the period of time we assess that it would take a competitor to develop a future capability, us to recognize it, and then develop a suitable countermeasure). One way to do this would be to create a correspondence between the cycle time of a threat and a domain, where a domain is defined as a function or a grouping of related capabilities (not unlike the portfolio management concept) such as C^2 or space.⁵⁹

Starting with the shortest threat-response cycle (today, IED refresh cycles come to mind) you legitimize the current process-circuiting models, like the JIEDDO and REF, and build a range of mechanisms of progressively longer threat cycles. The threat time should not just consist solely of the cycle time, but also be domain specific (cyber would have a short cycle time as opposed to the cycle of tactical fighters or surface combatants).

Major domains such as space or cyber could be given general cycle times with the intent that they will be discarded after a shorter number of years. In the space program, for instance, there are large redundancies and "space qualified" equipment routinely lasts 15-20 years—yet what we really need is the ability to refresh the technology more frequently. The mindset that we are building for forever needs to change. Perhaps, some systems need only be made to last 5 years, suggesting a far shorter cycle time for replacement.

Recent upgrades to the JCIDS process begin to account for the need for flexibility and velocity in the requirements determination process. Our criticisms have not been on the "how" of that part of the system, but on the "who and when," as discussed in Chapter 2.

The procurement of IT may require a different set of rules altogether. The Defense Science Board concluded that a new acquisition process modeled on commercial practices should be developed. They indicate that such an IT acquisition process should be agile and "geared to delivering meaningful increments of capability in approximately 18 months or less."⁶⁰

We also believe that there is enough flexibility in the 5000-series documents to operate acquisition processes of varying threat-response cycles simultaneously. The deterrent to doing so is the culture and organizational arrangements that make the bureaucracy a slave to process. Regulatory bodies make for less time working and more time reporting. The oversight layers in the Defense Department need to be reduced and oversight burden shifted to Congress and related domains.

The least flexible part of the system is probably the PPBES. As we begin to shift away from the wartime procedure of funding near-term requirements and reset within supplemental appropriations, toward including these necessities in the base budget, the PPBES will have to accommodate a tailored approach that realigns the acquisition process to match threat cycles and management of domains.

Sustain development planning capabilities throughout a system's life to permit periodic insertion of new technology. Related systems engineering capabilities should be consolidated in the Services and resident in the program offices throughout the system life cycle. (Implementing Action E-2)

Development planning is a continuous process throughout the entire life cycle of a system. We have already made a case for reconstituting systems engineering and development planning capabilities to reconcile potential requirements-technology-resources mismatches early



"[The Rapid Equipping Force] provides a great model for how we might improve the effectiveness and efficiency of the current procurement system in the future. Rather than waiting seven years for 95 percent solutions, we should work to get capabilities out to the warfighter as quickly as possible."

— General Peter Chiarelli, USA in the process—preferably, pre-Milestone A. Such capabilities need to be established and applied throughout the life of a program, as well. By doing so, they will complement and, to a great extent, complete the goal of moving to a time-value acquisition process approach.

The value of maintaining a continuous systems engineering capability throughout the program development cycle enables deep insight into maturity issues and reduces risk. Technology that is not ready is discarded and the program's capabilities are readjusted accordingly—giving us, for example, the 70 percent solution, but on-time and on-cost. Conversely, development planning can identify technical maturity tipping points, help-ing to forecast when a technology can be put to use. This ability might allow additional requirements to be added or permit a "block" upgrade program schedule to be employed.

"There is no one silver bullet that will correct all of the DoD acquisition problems. But I believe that good systems engineering coupled with effective development planning are the two most important contributors to successful acquisition."

-Paul G. Kaminski, former USD (AT&L) Development planning should be based on the risk environment, size of the program, threat cycle and domain of the acquisition. As with the requirements determination phase, the Task Force believes that the development planning function should reside with the military services so that expertise and knowledge can be institutionalized and transferred from program to program.

Initiate Milestone B (Engineering and Manufacturing Development) only after: 1) the need is firm; 2) the system concept is clear; 3) the necessary funds are likely to be available throughout the proposed effort; and 4) the technology is proven. Do not enter serial production until operational testing is satisfactorily completed, including reliability demonstration. (Implementing Action E-3)

Establish major program milestones and measures of success and approve advancement past milestones only when such measures are satisfied. Systems tests normally should not begin until key component tests have been satisfactorily completed; and low-rate initial production normally should not be initiated until key systems tests have been satisfactorily completed. Whenever feasible, properly monitored development tests should be used to augment operational tests in order to reduce costly, redundant testing. (Implementing Action E-4)

Reinforce reliability as a bona fide performance parameter as current regulation requires. Reliability should be considered to be on a par with such performance parameters as range, payload, accuracy, etc. This will demand substantial component environmental testing as well as extensive system tests. (Implementing Action E-5)

The current acquisition structure values performance over cost and schedule concerns. Yet, the rush to get programs past the Milestone B phase—done mostly to get a program fully-funded—has created a chokepoint where, instead of the tough technical maturity decisions being made, programs move forward with unresolved performance risks and less-than-objective cost projections. For example, in the past seven years the total acquisition budget for all MDAPs has more than doubled from \$783 billion to \$1,702 billion. About 44 percent of that growth (\$410 billion) is attributed to program cost growth—essentially "cost overruns"—as viewed from the standpoint of the overall acquisition enterprise. However, 36 percent (\$328 billion) comes from changes to program baselines—in other words, "requirements creep." The combination of these two factors consume money that "otherwise could be used to increase quality/quantities of systems [that] war fighters need now and in the future."⁶¹

A key aspect of restoring the development planning capability mentioned earlier is that it imposes a "time-value of capability" standard at the creation of the system concept (pre-Milestone A). The standard seeks concepts that can deliver initial operational capability (IOC) within relatively short cycle times, thus avoiding the risk that of the system becoming technically obsolete before deployment. Successful development programs that are timely at IOC often provide platforms for adding further capabilities on successive cycles. Avoiding excessive cycle times also precludes the temptation to add new emerging technologies and requirements leading to further increase in the development cycle.⁶²

The current process of requiring program certifications at various milestones attempts to force the tough decisions that need to be made, but all too often its effect is to hold up the entire program over a technical shortcoming in one area while other areas could conceivably have proceeded into the next phase.⁶³ Certification regimes have to be reasonably flexible based on the overall effect their strict enforcement would have on the program.

Delegate primary responsibility for the execution of a project to the Program Manager, subject to periodic review by a highly limited number of senior officials within the chain of command. (Implementing Action E-6)

Amend Goldwater-Nichols legislation to reinstate the Service Chiefs in the chain of responsibility for executive management of acquisition programs. (Implementing Action E-7)

Grant authority to the appropriate configuration steering board to modify requirements, as appropriate, when new information becomes available during development. The intent of this recommendation is to adapt requirements to evolving realities, not to open the floodgates to an avalanche of additional requirements. (Implementing Action E-8

Provide resources to deal with contingencies. Funding reserves should be provided in all program plans, sized according to the risks entailed. Backup technical approaches should be provided for risky components, and plans should be prepared for the identification, amelioration and monitoring of program risks. (Implementing Action E-9)

Maintain program stability: minimize changes to requirements, funding, schedule and personnel. Fund programs incrementally from major milestone to major milestone rather than on a year-by-year basis. (Implementing Action E-10)

If we accept the Milestone B decision point as the "make or break" event in a program's life cycle, then the Task Force believes that better oversight of the Engineering and Manufacturing Development Phase has to be employed. Program Managers have few defenses against users adding requirements here. The current use of configuration steering boards is to be commended. However, this is an area where incentives have to be developed to hold to schedule and cost.

The preference should be to award resources to programs that are performing well against their schedule and cost goals. More "off-ramps" need to be provided during this phase so that program characteristics and capabilities can be re-adjudicated based on the development planning assessments. It is also at this point that industry needs to work closely with program management to ensure that objectives and expectations are aligned.

"...the Service Chiefs should have primary responsibility for acquisition management and the execution of acquisition programs. Holding the Service Chiefs... responsible for both resource allocation and acquisition should... clarify responsibilities and [increase] the Chiefs' incentives to reduce program instability."

-CSIS, Beyond Goldwater-Nichols Phase 2 Report



"It is critically important for DoD to articulate a National Security Industrial Vision and to: adopt government policies to implement the Vision, structure incentives for industry to achieve the Vision, and monitor ongoing industrial dynamics to ensure its realization."

- Defense Science Board, Creating an Effective National Security Industrial Base for the 21st Century

"Successful acquisition requires a stable environment of trust and confidence between government and an industrial base that is responsive and healthy."

- Defense Acquisition Performance Assessment Returning the Service Chiefs to their pre-Goldwater-Nichols roles will align responsibility and accountability to this crucial phase of the acquisition system.

Maintain competition among industry suppliers to the greatest extent possible—recognizing that in a few cases (e.g., small buys of items requiring major tooling expense) competition may be inappropriate. Under the latter circumstances it may still be possible to compete for components or subsystems. When conducting competitions, past performance and capability should be important considerations, particularly as they relate to specific individuals assigned to the project at hand. Independent (of both the contractor and the project office) government-performed cost assessments should be generated to accompany all contractor proposals. (Implementing Action E-11)

Use, as current law provides, appropriate contract types for all acquisition pursuits: fixed price instruments for work whose scope is well-defined and cost-reimbursable instruments (including incentive- and award-fee types) for work that cannot be precisely defined, such as research and development. Multi-year fixed-price contracts should be used for production procurements to the greatest extent possible but only after a proven data package is available. (Implementing Action E-12)

Continually assess adequacy of the future defense industrial base and take appropriate actions to maintain its ability to support the nation's military needs. (Implementing Action E-13)

The changing shape of resource allocation also affects the supplier base. A competitive defense industrial base needs to be the goal of any meaningful contract and financial policy change. The direction of recent changes in government policy in these areas is not encouraging. Contract incentives and award fees have been cut, certain pass-through charges have been renegotiated, and several overhead categories disallowed.⁶⁴

A recent special report from the Aerospace Industries Association asserts that "the U.S. aerospace and defense industry must be able to earn a fair and reasonable profit in the defense marketplace in order to attract capital and skilled employees and provide competitive returns to investors."⁶⁵ We agree, and for a compelling reason: For the technologically sophisticated systems that the Pentagon procures, no other source exists outside of a healthy domestic market.

Recent deliberations over the expanded use of fixed-priced contracts should be a cause for concern. Testifying before the Senate Armed Services Committee, former DoD procurement chiefs Jacques Gansler and Paul Kaminski noted that the use of fixed-price contracts in developmental programs where cost and schedule are uncertain is not always in the government's best interest.⁶⁶ The Task Force asserts that under those circumstances it is never in the government's best interests if it seeks reliable contractors and reasonable prices.

It is reasonable for DoD incentives policies to reward performance and allow industry to earn a fair return on its investment. At the same time, industry should expect to pay a financial penalty for poor performance on its part. The choice of contract type should depend on the maturity of the program and the amount of remaining risk. At times it seems as if DoD contracting policies seek to shift the entire risk to the contractor. This is not only illogical, but, taken to its conclusion, would drive industry out of the defense business— clearly not an option we should wish to seriously pursue.

Instead, Congress and the Department should recognize that in some areas—research and development, for example—they should attempt to leverage the incentives that are available in cost-plus acquisition contracts. Fixed-price contracts become attractive when there is stability and technical maturity in the design and the validated requirements and specifications permit the contractor and the government to establish a reasonable fixed price.



"[W]e raised to highest priority the 'gunsmithing' of the acquisition process, but we lost the 'marksmanship' of purpose—what are we trying to accomplish?" —John Hamre, former DEPSECDEF

CONCLUSION

Throughout the assessment we chose to view acquisition outcomes in three baskets: 1) those that are relatively easily made but produce marginal improvements to current practices; 2) those that are more difficult to make but lead to a substantively improved acquisition process; and 3) those that would result in the best system we know how to produce but would be very difficult to implement. We began by defining "principles for successful acquisition outcomes" in the current enterprise and, in the forgoing chapters, suggested possible ways forward for the major stakeholders to consider. While there are many business examples on how to use best practices to improve cultural and organizational relationships, the unique nature of the defense acquisition enterprise means that some issues don't yield easily to business solutions. Therefore, we did not attempt to force-fit a business best practice (except where a business solution fell readily to hand). Instead we chose to observe, from our perspective, certain key areas and their shortcomings, and, in most cases, propose solutions suggested in earlier studies and reports.

Seeking value for money and existing to satisfy the customer ...translate as reconciling strategy with resources and focusing, within current and expected resource levels, on the war fighter as customer. We take as the enterprise's overriding challenge the need to return the acquisition process to organizational equilibrium. This will require aligning the interests of all enterprise stakeholders—meaning, in specific reference to defense acquisition, establishing a process built on two basic best practices from the business community: seeking value for money and existing to satisfy the customer. In "Pentagonese" these translate as reconciling strategy with resources and focusing, within current and expected resource levels, on the war fighter as customer.

Congress in its constitutional role to raise and support an army and navy, *et seq.*, sets the expectations and tone for the entire enterprise—and must be at the forefront of any change. The acquisition enterprise must with common purpose rigorously follow the regulations and policies established either by law or sense of Congress.

The Task Force believes implementing its recommendations will lead to fundamental changes in the way the enterprise acquires defense goods and services. The Task Force urges Congress to adhere to the principles we have defined and vigorously pursue its oversight of the process to ensure that it embeds and promotes the equities of all members of the enterprise and, above all, serves the needs of the war fighter.

The stakeholders, to reiterate, are the branches of the government—with particular focus on the Congress—the private sector (both as support contractor and as seller) and the large cast of external advocates and critics, from associations and public interest groups to FFRDCs, think tanks and academia. With Congress and the Defense Department at the forefront, it is their charge to change the fundamentals.

In conclusion, we return to David Packard's rallying cry: "We all know what needs to be done. The question is why aren't we doing it?"

APPENDIX A – TASK FORCE CHARTER

OCTOBER 2008

CHARTER

BENS Task Force on Acquisition Law and Oversight: Business Executives for National Security has formed a Task Force to review the defense acquisition system and recommend to the Congress and U.S. Government steps to systematically reform the governance and oversight of the process. Congress, through their body of law and oversight capacity, has shaped the regulatory framework and culture of defense acquisition. As a critical component of national security, an efficient, affordable acquisition system enables the military's ability to restore and improve its capabilities. The time to fix the process is short as unprecedented near-term fiscal challenges will strain the nation's resources available to develop and procure the major weapons systems over the next 30 years in the Department's proposed \$1.6 trillion acquisition portfolio.

Task Force membership is comprised of senior business leaders, and former and military government professionals. Business leaders bring to bear an understanding of organization and best business practices; while those experienced in government recognize the legal and regulatory environment in which the acquisition system must operate.

BENS: For more than 25 years, Business Executives for National Security has served as the primary channel through which senior executives can help build a more secure America. BENS is a national, non-partisan, non-profit organization that harnesses successful business models from the private sector to help strengthen the nation's security.

Scope: The Task Force will focus on the past two decades of accumulated acquisition system processes and the consequences—intentional and unintended—as antecedents of today's practices where the process—not the war fighter— has become the client of the system. The review will examine causal factors: law; regulation; policy; actions; the culture within the Department; and, the organizational structure in each segment of the congressional-defense-industrial base triangle.

Process and final report: The Task Force will analyze findings from past studies to recommend reforms that will enable an improved focus upon the war fighter as customer. It will investigate the application of best business practices to ensure capabilities delivered to the war fighter are timely and within cost, integration of the requirements determination and acquisition processes, and enhancements to defense acquisition workforce strategies. The Task Force will propose process changes that will harness the value inherent in an acquisition system prescribed in law while ensuring public accountability, and will offer policy recommendations to improve oversight and organizational relationships of all stakeholders.

Timing: The Task Force intends to complete work within approximately 90 days from the start date, with an additional period to circulate its draft recommendations widely throughout the defense acquisition community in anticipation of constructive feedback. Members of the Task Force may revisit the target audience at additional 60-90 day intervals as new administration and congressional officials begin their roles in government.

APPENDIX B – TASK FORCE MEMBER BIOGRAPHIES, ADVISORS AND STAFF

TASK FORCE



Norman R. Augustine (Chairman)

Norman R. Augustine is the former chairman and CEO of the Lockheed Martin Corporation. He served as Assistant Secretary of the Army, Under Secretary of the Army, and Acting Secretary of the Army and received the Defense Department's civilian Distinguished Service Medal five times. He was CEO and chairman of Martin Marietta Corporation; Vice President, Advanced Programs and Marketing at LTV Missiles and Space Company; and served in the Office of the Secretary of Defense as Assistant Director of Defense Research and Engineering. He is a member of the guiding coalition of the Project on National Security Reform and the Advisory Board to the Department of Homeland Security, and was a member of the Hart/Rudman Commission on National Security.



The Honorable Gary W. Hart (Vice Chairman)

Since retiring from the United States Senate, Gary Hart has been a strategic advisor to major U.S. corporations and a teacher, author and lecturer. He is currently Scholar in Residence at the University of Colorado and Distinguished Fellow at the New America Foundation. He was recently named chairman of the Council for a Livable World and is chairman of the American Security Project. Senator Hart is currently a member of the National Academy of Sciences task force on Science and Security. During his 12 years in the Senate, he served on the Armed Services Committee.



The Honorable Warren B. Rudman (Vice Chairman)

Warren Rudman is Co-Chairman of Stonebridge International, where he provides clients with strategic advice on business development, risk assessment and solving corporate problems worldwide. He previously served two terms in the U.S. Senate representing New Hampshire, was Chairman of the President's Foreign Intelligence Advisory Board during the Clinton Administration and was Co-Chair of the U.S. Commission on National Security, which called for a department of homeland security six months prior to the 9/11 attack.



The Honorable Edward C. "Pete" Aldridge Jr.

As Undersecretary of Defense for Acquisition, Technology, and Logistics from May 2001 to May 2003, Edward C. "Pete" Aldridge Jr. oversaw the Department of Defense's contract decision-making process. He is a member of the Board of Directors at Lockheed Martin. He has served as President and Chief Executive Officer of The Aerospace Corporation; President of the McDonnell Douglas Electronic Systems Company; Secretary of the Air Force; Under Secretary of the Air Force; and director of Global Crossing Ltd. and Alion Science and Technology Corporation.



The Honorable Michael J. Bayer

Michael J. Bayer is the President and CEO of Dumbarton Strategies, Washington, D.C., a provider of strategic planning and merger and acquisition counsel. Mr. Bayer also serves as the Chairman of the Defense Business Board, and is a member of the Sandia National Laboratory's National Security Advisory Panel, the Defense Science Board and the Chief of Naval Operations Executive Panel.



Raphael Benaroya*

Raphael Benaroya is Managing Director of Biltmore Capital Group, LLC., a financial company which invests in secured debt and Managing Director of American Licensing Group, L.P., a company specializing in consumer goods brand name licensing. He is an advisor to D.E. Shaw & Co., L.P., a private investment fund and Chairman of Russ Berrie and Company (NYSE). Mr. Benaroya was Founder, Chairman and Chief Executive Officer of United Retail Group, Inc. (NASDAQ), which operated 500 stores until it was recently sold to a French retail conglomerate. Mr. Benaroya is Vice Chairman of Business Executives for National Security (BENS).



Denis A. Bovin*

Denis A. Bovin is Co-Chairman and Co-CEO of Stone Key Partners LLC, a strategic and financial advisory investment bank. Prior to forming Stone Key Partners, Mr. Bovin was Vice Chairman – Investment Banking, Senior Managing Director and Chairman of the Global Technology, Media and Telecom Group at Bear Stearns & Co. Mr. Bovin had previously spent more than two decades at Salomon Brothers, Inc., and headed that firm's Investment Banking Corporate Coverage and Capital Markets Divisions.



General Charles G. Boyd, USAF (Ret.)* (ex officio)

General Charles G. Boyd, U.S. Air Force (Ret.), is president and chief executive officer of Business Executives for National Security (BENS). Before joining BENS, he served as senior vice president and Washington program director of the Council on Foreign Relations. Following his 35 years active duty service, he served as the Director, 21st Century International Legislators Project for the Congressional Institute, Inc. and strategy consultant to then Speaker of the House Newt Gingrich. In 1998 he served as executive director of the Hart-Rudman National Security Commission.



Admiral Vernon E. Clark, USN (Ret.)

Admiral Clark operates a private management consulting company, CVC Associates, and serves as a member of the Board of Directors of Raytheon Company, Rolls Royce North America, Stanford Research Institute and the Armed Forces YMCA. Admiral Clark retired in 2005 after completing the Navy's second-longest tenure as Chief of Naval Operations (CNO). He served aboard naval destroyers and commanded the Carl Vinson Battle Group/Cruiser Destroyer Group Three, the Second Fleet, and the Atlantic Fleet.



Mark J. Gerencser*

Mark J. Gerencser, a Senior Vice President at Booz Allen Hamilton, has led the firm's Global Government business and has served on its Board of Directors. He has spent more than 27 years addressing National Security and Homeland Security issues, including, terrorism, weapons of mass destruction, critical infrastructure protection, and cyber. He also created the commercial Enterprise Resilience Practice for clients in the consumer, financial services, energy and healthcare industries. He now advises government, private, non-profit sectors and academia on how to create "megacommunities" to address complex problems in energy, environment and transportation.



Admiral Edmund P. Giambastiani, USN (Ret.)

Edmund P. Giambastiani, Jr., is Director of SRA International and chairman of the board of directors for Alenia North America, Inc., and non-executive director at QinetiQ Group. In 2007, Adm. Giambastiani retired from the United States Navy after 41 years of service. Between 2005 and 2007, he was the second-highest ranking military officer in the United States, serving as the seventh Vice Chairman of the Joint Chiefs of Staff. His distinguished naval career included assignments as Special Assistant to the CIA's Deputy Director for Intelligence; Senior Military Assistant to the United States Defense Secretary; and Commander of United States Joint Forces Command. He also served as NATO's first Supreme Allied Commander Transformation.



The Honorable Jamie S. Gorelick

Jamie S. Gorelick is Chair of the Public Policy and Strategy Practice Group and Co-Chair of the Defense, National Security and Government Contracts Practice Group at WilmerHale. Previously, Ms. Gorelick was one of the longest serving Deputy Attorneys General of the United States. Ms. Gorelick has also served as General Counsel at the Department of Defense. She was a member of the 9/11 Commission; the CIA's National Security Advisory Panel; President Bush's Review of Intelligence Committee; and co-chair of President Clinton's Advisory Committee to the Presidential Commission on Critical Infrastructure Protection.



The Honorable Dr. John Hamre

John Hamre was elected Center for Strategic and International Studies president and CEO in January 2000. Before joining CSIS, he served as the 26th U.S. Deputy Secretary of Defense. Prior to that , he served as undersecretary of defense (comptroller). In 2007, Secretary of Defense Robert Gates appointed Dr. Hamre to serve as chairman of the Defense Policy Board. Before serving in the Department of Defense, Dr. Hamre worked for 10 years as a professional staff member of the Senate Armed Services Committee. During that time, he was primarily responsible for the oversight and evaluation of procurement, research, and development programs, defense budget issues, and relations with the Senate Appropriations Committee.



Dr. Paul G. Kaminski

Dr. Paul G. Kaminski is Chairman and CEO of Technovation, Inc., an advanced technology consulting company. He is Chairman of the Boards of RAND, Exostar, and HRL, and serves on the boards of General Dynamics, Bay Microsystems, and CoVant Technology. He serves on the FBI Director's Advisory Board, the Defense Science Board, and the Senate Select Committee on Intelligence Technical Advisory Board. He served as the Under Secretary of Defense for Acquisition and Technology from 1994 to 1997. Prior to that he was Chairman and CEO of Technology Strategies & Alliances, and before that served as an Air Force officer for 20 years, where he was involved in program management of several advanced technology programs including a National Reconnaissance Satellite program and stealth programs including the F-117 and B-2.



Kent Kresa

Kent Kresa is currently the Interim Chairman of General Motors. He was previously a Senior Advisor to the Carlyle Group's aerospace and defense group and CEO and Chairman of the Board of Directors of Northrop Grumman Corporation. Prior to joining Northrop Grumman, Mr. Kresa served with the Defense Advanced Research Projects Agency, where he was responsible for broad, applied research and development programs in the tactical and strategic defense arena.



Ramon P. Marks*

Ramon Marks is a partner in the New York office of Arnold & Porter LLP with over 30 years of experience representing and counseling a diverse group of American, European, and Japanese clients on varied matters including complex litigation, major regulatory investigations, and international corporate transactions. In recent years, he has been involved with federal and state investigations, and related lawsuits in the mutual fund and insurance industries. He has frequently counseled foreign clients and government organizations on trade and national security law issues and has testified before Congress on trade sanctions.



General Gregory S. Martin, USAF (Ret.)

General Gregory S. Martin retired from the United States Air Force in 2005 after thirty-five years of active commissioned service. He was the Commander of the Air Force Materiel Command, where he commanded nearly 80,000 personnel who are charged with the responsibility for the Air Force Science and Technology, Acquisition Support, Test and Evaluation and Weapons Systems Sustainment and Logistics missions. Prior to that assignment he was the Commander of the United States Air Forces Europe. Since retiring, General Martin has been a Senior Mentor with the Joint Forces Command. He is Chairman of the Durango Group, the MITRE Air Force Advisory Board, and the National Academies Air Force Studies Board.



Christopher C. Melton Sr.*

Christopher C. Melton Sr. is a co-founding Partner of The White Oak Group and currently serves as Co-Chairman, Finance and Operations for Dataline, Inc. He also served as Vice Chairman of Finance and Operations for DataPath, Inc. Prior to the founding of White Oak, he was Chief Executive Officer of CNP, Inc., a business-to-business technology and service provider. Prior to his post at CNP, he was CEO of Amplified Holdings, a leading provider of digital technology to the retail and media industries. Mr. Melton is a member of the Board of Directors of Business Executives for National Security.



John P. Morgridge*

John P. Morgridge is Chairman Emeritus of Cisco. Morgridge joined Cisco in 1988 as President and CEO, and grew the company from \$5 million to more than \$1 billion in sales and from 34 to more than 2,250 employees. In 1990 he took Cisco public, in 1995 was appointed chairman, and in 2006 became chairman emeritus. He teaches management at Stanford University's Graduate School of Business and serves on its School of Business Advisory Council. In 1996, he received Stanford's Arbuckle Award for excellence in management leadership. Morgridge serves on the Board of Directors of Business Executives for National Security.



Arnold L. Punaro

Arnold Punaro is Executive Vice President for Science Applications International Corporation (SAIC), which he joined in 1997. He worked on Capitol Hill for 24 years for Senator Sam Nunn, serving as his staff director of the Senate Armed Services Committee for 14 years. He chaired the Defense Reform Task Force for then Secretary of Defense William Cohen (1997), was a member of the independent commission assessing the Iraqi security forces (2007), and chaired the Commision on the National Guard and Reserves (2006-2008). He is a retired Marine Corps Major General who served as Commanding General of the 4th Marine Division (1997-2000) and Director of Reserve Affairs and Headquarters Marine Corps during the post-9/11 peak reserve mobilization periods.



General Dennis J. Reimer, USA (Ret.)

General Reimer served in the U.S. Army for 29 years, serving as vice chief of staff; commanding general, U.S. Army Forces Command; and Chief of Staff. After retirement, Reimer served as director of the Oklahoma City National Memorial Institute for the Prevention of Terrorism, testifying before the Congressional Subcommitee on National Security, Emergency Threats and International Relations. He has also served on the boards of Microvision, DRS Technologies, Plato Learning and Mutual of America Life Insurance. General Reimer is currently on the Board of Directors for consulting firm Detica, formerly DeticaDFI and DFI International.



Joseph E. Robert Jr.*

Joseph E. Robert Jr. is founder, Chairman and Chief Executive Officer of J.E. Robert Companies, one of the world's largest private commercial real estate investment and asset management firms. Founded in 1981, J.E. Robert Companies, together with its financial and operating partners, has purchased and managed approximately 15,000 assets totaling \$28 billion across 17 countries. Mr. Robert is Chairman of Business Executives for National Security, the US-UAE Business Council, Fight For Children and the Washington Scholarship fund. He was awarded Honorary Doctorates from St. John's College and Mount Saint Mary's University as well as the highest civilian honor from the President of Colombia, La Orden de Boyacá.



Frank V. Sica*

Frank V. Sica is a Managing Partner at Tailwind Capital. From 1998 to 2005, Mr. Sica worked at Soros Fund Management, LLC where he was responsible for private equity and real estate investment activities. From 1981 to 1998 Mr. Sica worked at Morgan Stanley, where from 1988 to 1998 he was a Managing Director in the Merchant Banking Division. Mr. Sica is a Director of CSG Systems, Inc., jetBlue Airways, Kohl's Corporation, NorthStar Realty Finance Corporation and Safe Bulkers, Inc.



Frederick W. Smith

Frederick W. Smith is founder, chairman, president and chief executive officer of FedEx Corporation. Smith has served on the boards of several large public companies and the St. Jude Children's Research Hospital and Mayo Foundation Boards. He was formerly chairman of the Board of Governors for the International Air Transport Association and the U.S. Air Transport Association. Smith is a member of the Business Roundtable and the CATO Institute and is co-chairman of the Energy Security Leadership Council. He served as chairman of the U.S.-China Business Council and is the current chairman of the French-American Business Council.



The Honorable Jeffrey H. Smith

Jeffrey Smith is a partner at Arnold & Porter LLP. Mr. Smith rejoined Arnold & Porter in 1996 after serving as General Counsel of the Central Intelligence Agency. In May of 1993, Secretary of Defense Perry appointed Mr. Smith to the Commission to Review the Roles and Missions of the Armed Services. Previously, he chaired the Joint Security Commission to review security policy and practices in the defense and intelligence communities. He also served as the Chief of the Clinton Administration Transition Team at the Department of Defense. Mr. Smith has also served as the General Counsel of the Senate Armed Services Committee. Prior to working for the Senate, he was the Assistant Legal Adviser for Law Enforcement and Intelligence at the State Department.



Robert K. Utley III*

Robert Utley serves as Chairman of the Board and Chief Executive Officer for Inland American Communities, a real estate ownership, development and property management firm with operations nationwide. Utley is also the Chairman of the Board for The Utley Group, a privately controlled enterprise active in investments in real estate and operating companies, and currently a principal in numerous real estate partnerships and major shareholder in numerous other corporations. He is on the Advisory Board and Vice Chair for the Development Board for The University of Texas at Arlington. He is also a former Chairman of the Securities Board of the State of Texas and former Chairman of the Higher Education Legislative Political Action Committee.



The Honorable David Walker

David Walker is currently President and CEO of the Peter G Peterson Foundation. As Comptroller General of the United States and head of the Government Accountability Office he served as the federal government's chief auditor. Prior to this, he served as a partner and global managing director of Arthur Andersen LLP and in several government leadership positions, including as a Public Trustee for Social Security and Medicare and as Assistant Secretary of Labor for Pension and Welfare Benefit Programs. He is chairman of the United Nations Independent Audit Advisory Committee and also serves on the boards of the Committee for a Responsible Federal Budget and the Partnership for Public Service.



Josh S. Weston*

Josh Weston was CEO and Chairman of ADP, the largest payroll and tax filing processor in the world. He currently serves on the boards of Gentiva Health Services and J.Crew. His active pro bono boards include Committee for Economic Development (CED), Business Executives for National Security (BENS), Atlantic Health System (three hospitals), International Rescue Committee (IRC), Liberty Science Center (N.J.), N.J. Performing Arts Center, United Nations Association, WNET/Channel 13 (public TV), and Yeshiva University. Mr. Weston received the BENS Eisenhower award in 1994.

ADVISORS



Peter Andrejev

Peter Andrejev has 30 years of professional experience supporting government acquisition programs in the development of major defense, intelligence, and civilian systems and capabilities. As a Principal in Booz Allen Hamilton, he directs the firm's Systems Engineering and Integration (SE&I) service area. He was named the 2000 National Cost Estimator/ Analyst of the Year by the Society of Cost Estimating and Analysis (SCEA) and currently serves as its Director of Certification.



Sandy Apgar

Sandy Apgar is a Senior Advisor on real estate to the Boston Consulting Group (BCG), a Senior Scholar at the Woodrow Wilson Center, convener of the non-partisan Forum on Privatization and Partnerships, and lead author of "The Promise of Public-Private Partnerships." As Assistant Secretary of the Army for Installations and Environment from 1998-2001, Mr. Apgar was responsible for military infrastructure, and established the Army's housing privatization program. His work includes the introduction of acquisition and contract reforms, including competitive sourcing, request for qualifications, community development and management plans, and new venture funding.



David J. Berteau

David J. Berteau is senior adviser and director of the Center for Strategic and International Studies Defense-Industrial Initiatives Group, where he leads research related to the health and management of the defense industrial base, including projects on defense acquisition reform. Mr. Berteau serves on Defense Science Board task forces on the defense industrial structure and on integrating commercial systems into defense. He also serves on the Secretary of the Army's Commission on Army Acquisition and Program Management in Expeditionary Operations.



The Honorable Claude M. Bolton Jr.

Claude M. Bolton Jr. served as the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASAALT) before becoming the Executive-In-Residence for the Defense Acquisition University in January 2008. As ASAALT he was the Army Acquisition Executive, the Senior Procurement Executive, and the Science Advisor to the Secretary of the Army. Over more than thirty years of active military service, he served as commander, Air Force Security Assistance Center; Program Executive Officer for the Air Force fighter and bomber programs; and was the first Program Manager for the Advance Tactical Fighter technologies program. He retired as a major general in the U.S. Air Force.



Pierre Chao

Pierre Chao is a non-resident senior associate with the Defense Industrial Initiatives Group at the Center for Strategic & International Studies and Managing Partner at Renaissance Strategic Advisors. He was a Senior Fellow at CSIS from 2003-2007. Before joining CSIS, he was a managing director and senior aerospace/defense analyst at Credit Suisse First Boston, where he was responsible for following the U.S. and global aerospace/defense industry. He was a member of the 2005 Defense Science Board (DSB) Summer Study (Assessment of Transformation), 2006 DSB Summer Study (Strategic Technology Vectors), and the 2006/2007 DSB Task Force on the Health of the Defense Industry.



William J. Cooper

Mr. Cooper is an Associate with Booz Allen Hamilton's Modeling, Simulation, Wargaming and Analysis Team. He has directly supported the efforts of the Joint Staff J-8 in the development and implementation of the process for identification, validation and approval of joint capabilities. He has also worked with the Office of the Secretary of Defense Acquisition policy staff to synchronize the acquisition and requirements processes. Over the last six years, he has worked with three Vice Chairmen to identify ways to improve the requirements process. Mr. Cooper retired from the Air Force in 2001 after 28 years of service.



Ronald T. Kadish

Ron Kadish is a vice president at Booz Allen Hamilton who specializes in support for the U.S. Air Force, Department of Defense, and the National Aeronautics and Space Administration. Mr. Kadish served as chairman of the Defense Acquisition Performance Assessment, a Federal Advisory Commission that examined the strengths and weaknesses of the defense acquisition process. Before he left active duty, Mr. Kadish directed the DoD Missile Defense Agency, where he served as the acquisition executive for all ballistic missile defense systems and programs. He also commanded the Electronic Systems Center, which is the Air Force Acquisition Center for Command, Control, and Intelligence.



Steven Myers

Mr. Myers has extensive experience in program management, systems engineering, and technology development for U.S. government programs. He founded the competition management and program support services firm SM&A and served as its Chairman & CEO for twenty-five years. He grew the company to nearly \$100 million in revenue and supported over 1,200 U.S. government acquisitions with a total value of more than \$340 Billion. Some notable programs include Joint Strike Fighter, Future Combat Systems, National Missile Defense, Space Based Infrared System, Tomahawk Cruise Missile, Milstar, International Space Station, Advanced Solid Rocket Motors, and US Visit. The Company was sold in 2008. He is President & CEO of Dolphin Capital Holdings, which invests in companies with innovative business strategies. He was recently named Chairman of the National Security Task Force for the Pacific Council on International Policy.



Steven L. Schooner

Before joining the George Washington University Law School faculty in 1998, Professor Schooner was the associate administrator for procurement law and legislation at the Office of Federal Procurement Policy in the Office of Management and Budget. His scholarship focuses primarily on federal government contract law and public procurement policy. He is the faculty adviser to the ABA's Public Contract Law Journal and also serves on the Procurement Round Table and the advisory board of the Government Contractor. He served as senior associate dean for academic affairs of the Law School from 2006 to 2008.



Carol Staubach

Carol Staubach joined Booz Allen Hamilton as a principal focusing on the National Reconnaissance Office (NRO) market, and later became vice president. She spent 33 years in the Central Intelligence Agency, the last fifteen of which were on detail to the National Reconnaissance Office. Ms. Staubach served as the Director, Advanced Systems and Technology (AS&T) where she managed the NRO space technology research program.



Karen Wilson

Ms. Karen Wilson is the director of Acquisition Policy and Industrial Affairs with The Boeing Company. She has held a variety of acquisition, ethics, supply-chain, finance, and legal positions in the government (Office of the Secretary of Defense and the Defense Logistics Agency) and in industry (Honeywell International/AlliedSignal Aerospace, Hughes Aircraft Company, and TRW). She represents Boeing in a number of leadership positions with trade associations in pursuit of acquisition excellence and is a frequent lecturer and author on government contract issues.



Christopher R. Yukins

Christopher R. Yukins is Associate Professor of Government Contracts Law and Co-Director of the Government Procurement Law Program at George Washington University. He is counsel to the firm Arnold & Porter LLP. He was for several years a trial attorney with the U.S. Department of Justice, where he handled trials and appeals involving bid protests and contract claims against the U.S. government. He teaches on government contract formations and performance issues, bid protests, Contract Disputes Act litigation, and comparative issues in public procurement, and focuses especially on emerging public policy questions in U.S. procurement.

STAFF

Cliff Ainsworth Communications Director

Michael Doubleday Senior Vice President, Communications

Henry L. (Butch) Hinton, Jr. Senior Vice President, Policy

Abigail Lackman Research Associate

Tim Little Research Associate

Clinton E. Long Director for Publications/ Web

Susan Maybaumwisniewski Vice President, Policy (Project Director) **Erik Medeby** Research Associate

Christian Mirabella Research Associate

Paul E. Taibl Vice President, Policy (Writer)

Joe Walsh Research Associate

Jennifer Weedon Research Associate

* BENS Board of Directors

APPENDIX C - A PRELIMINARY PILOT STUDY: THE DEFENSE INFORMATION SYSTEMS AGENCY COOPERATIVE REVIEW

In February 2008, with the encouragement of the then-Deputy Secretary of Defense, BENS, in cooperation with the Defense Information Systems Agency (DISA) reviewed several procurements of an information technology (IT) capability or service with a goal of identifying and quantifying legislative, regulatory, cultural and organizational impediments that contribute to the breakdown in the overall acquisition system.⁶⁷ DISA was a particularly apt target for this pilot project because IT is a distinctly different subset of all the Pentagon's procurements and because DISA operates in a joint environment managing acquisitions for all the military services.

We conducted a series of interviews with DISA and other officials seeking to identify specific procurement inefficiencies from the perspective of the program manager. More than 20 acquisition process performance issues emerged from the interviews, but five sources of instability in the acquisition process predominated:

- Application of acquisition law, regulation and policy
- Managing joint programs and reacting to Service-specific concerns
- Management flexibility vs. oversight
- Funding stability for joint-service programs
- Lack of ownership on part of oversight organizations

The take-away from that study was that, although the program managers we interviewed might be closest to the product or service being procured, the instabilities in the acquisition process were the downstream consequences of actions reaching back to Congressional intent and the law itself.

OBSERVATIONS FROM THE DISA COOPERATIVE REVIEW

Extrapolated from our DISA work, the following are observations about some of the proximate and ultimate contributors to the shortcomings in the process. We find them broadly applicable to the entire enterprise.

1. LEGAL

Congress, in its deliberative process of compromise, has an inherent preference to leave terms undefined and provisions unclear so that no one side's solutions are precluded. The executive branch is thus put in a position of interpreting the provision, often without legislative history to guide it. Further, some Congressional pronouncements exist only in "report language" or "Sense of Congress" resolutions, which while not exactly law, precisely, are often implemented as if they had such force.

Dating to the report of the President's Blue Ribbon Commission on Defense Management (Packard Commission) in 1986, there have been at least nine commissions and panels that have urged reform to the acquisition process. Starting with the Federal Acquisition Streamlining Act of 1994, Congress sought to give DoD greater authorities over its acquisition system. Other legislation and regulation followed: the Information Technology Management Reform Act of 1995, the Federal Acquisition Reform Act of 1996, revisions to Part 15 of the Federal Acquisition Regulations in 1997, the Services Acquisition Reform Act of 2003. The problem with these and subsequent items of legislation (Title VIII of the National Defense Authorization Acts stretching back to 2004 have stipulated 301 individual constraints regarding acquisition policy, management and related matters) is that reform-minded legislation is simply not practical because it attempts to impose uniform requirements for acquisition programs, despite that fact that no two programs are alike.

Another complaint frequently made is that the Goldwater-Nichols Department of Defense Reorganization Act of 1986 (Public Law 99-433) needs to be re-examined with respect to the acquisition chain of command. Removing the Service Chiefs from that chain is widely thought to have contributed to the "lack of ownership" problem that undermines sound acquisition practices and encourages instability.

2. **REGULATORY**

Prior regulatory changes have effectively elevated the "administration" of acquisition over the purposes of acquisition. In the words of former Deputy Secretary of Defense John Hamre, "[W]e raised to highest priority the 'gunsmithing' of the acquisition process, but we lost the 'marksmanship' of purpose—what are we trying to accomplish?" Although the DoD 5000-series guidance was drastically compressed in the 2003 revision, the system remains process-driven and encrusted in layers of regulatory and policy stricture.

In the 1990s, the end of the Cold War and the rise of technical innovation and excellence in the commercial private sector encouraged the government to move to procurement of commercial items over items developed solely for the use of the government. DoD Commercial Acquisition Policy received emphasis beginning in 2001, but the transition has been slow and uneven. Much of the cause is traced to acquisition processes designed to procure hardware end-items, not cutting edge, rapid turnover technology, which is more typically an information technology, software, subsystem or component part.

One glaring shortcoming of today's process is that while over 60 percent of procurement dollars go to the purchase of services (and IT), the actual process is geared toward the procurement of major systems, the tellingly named Major Defense Acquisition Programs (MDAPs). The regulatory regime is not geared for, nor is the acquisition workforce adequately trained in, procurement of services. This shortcoming is even more pronounced in the oversight and management of service contracts, which are in increasing number being administered with non-organic contractor assistance.⁶⁸

3. CULTURAL

An acquisition culture exists throughout DoD. Acquisition culture—here defined as the behavior of the participants in the acquisition process in DoD, the Congress and industry—is an interaction of the participants rather than a methodological procedure. Deborah Frank writing in the Acquisition Review Quarterly, Summer 1997, describes it this way: "Given this acquisition culture, participants operate within its formal and informal rules and expectations. Roles and rules are defined; the importance of winning is understood. Program survival is intertwined with participants' needs all participants. These include the military services and the Office of the Secretary of Defense (OSD), which feel a need to perpetuate a mission; contractors, who want to sustain business and acquire profits; overseeing organizations, which want to find and fix problems; Congress, which needs to satisfy the public (and individual members, their constituencies); and program managers, who want to maintain or enhance their reputations. To further complicate the culture, the short-term involvement of many participants encourages short term payoffs." With regard to the latter, the author might well have added "and encourages deferral of engaging looming problems."

The environment into which any would-be acquisition reform is introduced is inescapably political. That said, Congress must be a willing participant to fundamental reform, i.e., willing to relinquish several degrees of micromanagement and willing to place itself into active oversight of the "process" instead of the "programs."

A cultural derivative of the political environment is the relationship between buyer and provider, e.g., DoD and the commercial/defense sectors keep each other at arm's length and remain adversarial. Such a structure inhibits the free flow of information and imposes a regulatory cost burden on industry to ensure compliance with the system's rules.⁶⁹

4. ORGANIZATIONAL

Large bureaucracies (although today's acquisition workforce is smaller by historical standards⁷⁰) are established in DoD to administer the acquisition system. Such organizational arrangements create unbreakable "fiefdoms" that add to the length of time it takes to make decisions and give rise to a risk-averse climate in which accountability is suppressed.

According to the Defense Acquisition Performance Assessment, organizational values, which may differ between process owners and participants, often lead to incompatible behaviors. They point to unintended negative consequences of organizational processes and practitioners operating independently of one another. If organizations are the process owners, concerned with regulatory compliance, cost, schedule, program control and oversight, they must contend also with other participants—both inside and outside the organization—who have different goals and values. On the inside, the workforce may be interested from a personal standpoint in stability, gaining skills, experience, job satisfaction and promotion. Their outside industrial partners have corporate interests at heart: survival, growth, predictability, stockholder value.

APPENDIX D – SYNOPSES OF RECOMMENDATIONS FROM PREVIOUS STUDIES, ANALYSES, COMMISSIONS AND REPORTS

There have been numerous blue ribbon panels, commissions, task forces, studies, investigations, articles, reviews, and books published on virtually every aspect of the acquisition process. These selected studies highlight aspects of importance to this Task Force and provide a starting point for discussion. The selected studies are:

- 1. The 1986 Packard Commission
- 2. The 1992 GAO Report on Weapons Acquisition
- 3. The 1993 Report of the Acquisition Law Advisory Panel
- 4. The 2004 CSIS Beyond Goldwater-Nichols Phase I study
- 5. The 2005 CSIS Beyond Goldwater-Nichols Phase II study
- 6. The 2006 Defense Acquisition Performance Assessment
- 7. The 2007 Expeditionary Contracting Study
- 8. The 2008 CSIS Beyond Goldwater-Nichols Phase 4 study: Invigorating Defense Governance
- 9. The 2008 GAO report on the DoD Requirements Process

1. *"A Formula for Action: A Report to the President on Defense Acquisition" The President's Blue Ribbon Commission on Defense Management was published in April 1986.* Informally known as the Packard Commission, it was established by the executive order of President Reagan partly in response to the public's shaken confidence in the effectiveness of the acquisition system. Its goal was to examine the bulk of the Pentagon's defense management policies and procedures, including budget processes, the procurement system, legislative oversight, and the leadership structure of the Defense Department, in order to provide recommendations that would help improve the effectiveness and stability of resource allocation for defense.

The Packard Report outlines basic problems with the defense acquisition system that are deeply entrenched and have developed over several decades in an increasingly bureaucratic and overregulated process. While the commission notes that these problems are usually not due to outright fraud or dishonesty, there were a number of frequently recurring issues in the majority of cases examined that demonstrated a larger set of underlying problems with the entire system. It should be noted that the commission only investigated major weapons systems as they would yield the largest cost savings figures should more effective policies be put in place.

Packard's Overview of the Acquisition Process. Describing what most experts have come to agree are common systemic problems in the acquisition process, the process begins with the establishment of "military requirements" for a new weap-on before development begins. Establishing the need for this (weapon) system is usually accomplished through concepts known as *user pull* and *technology push*, where users (including the Services) either "consider" future equipment specs relative to current capabilities or outright push for the adoption of new technology. Both of these methods increase the phenomenon known as "goldplating," or the inclusion of desirable features that are not worth the extra cost. A small team is then assembled to define a weapon system to meet these requirements and "market" it to the government; and, with funding approved, the Defense Department program team is enlarged and provides detailed specifications in preparation for the Pentagon to invite industry to bid on the program.

Though competitive proposals from contractors may expose various technical problems, the report observes that this all takes place in an environment that discourages deviating from established specifications, creating a situation where tradeoffs between performance and cost are not considered. The result is that the participant with the most "optimistic" bid in terms of cost is awarded the contract, which tends to be negotiated on a firm, fixed-price basis. Once a successful bidder is chosen, the program is launched by DoD, where it is subject to changes and revisions based on pressure exerted by special interest groups on the program managers. While trying to balance these competing demands, program managers must also "sell" the program to Service leaders, OSD, and Congressional committees and subcommittees, a process

made more difficult by contractor advocacy groups. These pressures may cause the program manager to spend most of his time briefing his program, as opposed to actually managing and providing oversight over it.

Between a lack of accountability for costs, performance, and schedule *at any level* as well as an increasingly beleaguered professional managerial class, the commission notes that the defense acquisition system in the United States faces a number of systemic problems that must be fixed.

Legislative Recommendations. Congress should create (by statute) a new position of Under Secretary of Defense (Acquisition) and authorize a Level II appointment in OSD. This new USD would have solid industrial expertise and full-time responsibility over the entire defense acquisition system, including supervising the planning and performance of new projects. The Army, Navy and Air Force should each establish a comparable senior position filled by a top-level civilian Presidential appointee. These "Service Acquisition Executives" should appoint a number of Program Executive Officers responsible for a reasonable and defined number of acquisition programs.

In terms of workforce, the Defense Department should substantially reduce the number of acquisition personnel to streamline lines of authority and cut red tape. Concurrently, federal law should establish expertise requirements and the education opportunities for all civilian contractors and civilian acquisition personnel. Lastly, federal laws governing procurement should be re-codified into a single, greatly simplified statute applicable government-wide.

Regulatory Recommendations. DoD should use regulatory means to enhance program stability in two fundamental ways. First, the Pentagon should fully institutionalize "baselining" for major weapon systems at the initiation of full-scale engineering development. Second, both DoD and Congress should expand the use of multi-year procurement for high-priority systems. Additionally, federal law and DoD regulations should provide for substantially increased use of commercial-style competition, emphasizing quality and established performance as well as price. This will not only attract qualified suppliers and secure quality product performance at lower prices, but it will also address the Pentagon's penchant for focusing too much on how the manufacturing process is done rather than quality control.

Cultural Recommendations. Beginning with the establishment of "military requirements" and onward, there is a clear lack of substantive involvement by those who properly understand cost, schedule, and performance implications relative to proposed technical requirements or changes added to them. From assessing the adequacy of weapons to defining system specs to negotiated development contracts, possible trade-offs based on cost and performance are routinely ignored in favor of maintaining the status quo. This ultimately leads to a lack of effective management over these programs. Program Managers, unable to balance competing demands from special interest advocates, the Pentagon, and Congress, inevitably become a class of "supplicants" for these programs as opposed to managers. This results in a lack of conditioning and specialized training among managers to look for inconsistencies between performance, schedule, and authorized funding, resulting in a high number of cost overruns.

DoD should increase its use of technology and reliance on private industry. High priority should be put on building and testing prototype systems to demonstrate new technology and provide a basis for realistic cost estimates prior to a full-scale development decision. This should be done with all weapon systems, as the only consistently reliable way to get information regarding performance is by using prototypes that embody new technology. Operational testing and research and development should employ extensive informal competition with streamlined processes. The Defense Advanced Research Projects Agency (DARPA) should engage in prototyping and other work on joint programs and in areas not adequately emphasized by the Services.

DoD should make greater use of components, systems, and services available "off the shelf" in private industry. New or custom-made items should only be developed when they are not readily available or adequate to meet military requirements.

Organizational Recommendations. Emphasis is placed on balancing cost and performance and enhancing the quality of acquisition personnel. Per the former, the report calls for a restructured Joint Requirements and Management Board (JRMB)

co-chaired by the recommended USD for Acquisition and the Vice Chairman of the Joint Chiefs. The JRMB should define weapon requirements for development providing an early trade-off between cost and performance. Through this restructuring, the JRMB can make decisions on whether or not full-scale development on programs would be initiated, thus ultimately making it responsible for "affordability" or "make-or-buy" programs.

In addition, DoD needs to attract and retain high-caliber professionals for its acquisition program. Improvements should be made in the senior-level appointment system, and the Secretary of Defense should have increased authority to establish flexible personnel management policies necessary to improve defense acquisition. Comparable improvements are also needed for middle management and line personnel as well as a higher pay and a career mobility management system.

2. The General Accounting Office (GAO) released its seminal report, *Weapons Acquisition: A Rare Opportunity for Lasting Change* (GAO/NSIAD-93-15), in December 1992 shortly after the fall of the Soviet Union. GAO identified two of the most prevalent factors needing to be addressed in the defense acquisition process: program cost increases and schedule delays. GAO points out that cost and schedule estimates are interdependent, reinforcing each other and possibly disrupting the efficiency of the acquisitions process. A schedule delay, assuming program scope is not reduced, will likely drive program cost up. Likewise, a cost increase will likely prolong a program schedule, unless more money becomes available. The report stressed two underlying causes of these problems: cultural and organizational.

Culture is described as the collective patterns of behavior exhibited by the participants in the acquisition process as well as the incentives for that behavior. Participants include the various components of the Department of Defense, Congress, industry, and critics. Cultural factors do much to explain why problems are so resilient and go beyond issues such as technical risks, estimation errors, and oversight shortcomings. The acquisition culture has become an environment that promotes "selling" programs and includes behavior fraught with unfounded optimism and parochialism. Program sponsors often lack the incentives to present objective risk assessments, report realistic cost estimates, or perform thorough tests of prototypes when such measures run the risk of exposing programs to disruption, deferral, or even cancellation. As a result there is an unacceptable level of cost growth, performance problems, and schedule delays. In this sense, acquisition system problems are the collective responsibility of all the participants.

Cultural Recommendations. Cultural changes must be directed at the system of incentives that has become self-sustaining. Incentives must motivate the participants to produce better program outcomes by emphasizing program affordability over program survival. One suggestion is to reward program managers for being forthright about program alternatives, costs, and risks; parochialism and undue optimism should be penalized. A collective effort must be made on behalf of the acquisition participants, especially within DOD and Congress because it is their actions that dictate the incentives that drive the process.

An additional, exacerbating factor is that of turnover. As the short tenures typical of high-level DOD acquisition executives make it difficult for them to change the system of incentives, other participants can wait out reforms they oppose. GAO found that any successful reform measures will be contingent on the commitment, skills, leadership, and dedication of all participants in the defense acquisition process.

Organizational Recommendations. DOD acquisition policies require diligent analyses of mission needs, costs, and alternatives to ensure that cost-effective solutions are matched to valid needs before resources are committed. It takes additional time and money to accommodate an expansion in program scope, to overcome technical or production problems, or to restructure a program to absorb funding reductions. Cost and schedule problems often result from flaws within the estimates themselves. The desire of program sponsors to keep cost estimates as low as possible and present attractive milestone schedules has encouraged the use of unreasonable assumptions about the pace and magnitude of the technical effort, material costs, production rates, and savings from competition. In some cases, acquisition cost estimates have been kept low by excluding relevant program costs, such as the cost of training equipment, which should be included in program cost estimates. This is particularly pertinent when more than one service participates in similar mission areas.
"Concurrency," which can be broadly defined as the practice of beginning production before the completion of product development, testing, and evaluation, can be used to expedite the acquisition and deployment of weapon systems. However, the critical function of the independent operational test and evaluation suffers. Costlier program readjustments may need to be made in the future.

Minimization of overlap and duplication among weapon systems that perform the same or similar missions is strongly recommended. To accomplish this, departments must communicate to identify systems that could be mutually beneficial. Program officers should also be required to submit an up-front determination of how much money can be afforded for a new program, bounded by a range that reflects uncertainty. The range of costs should be wider early in a program when uncertainty is greater and narrowed as the program matures.

3. The "DoD Advisory Panel on Streamlining and Codifying Acquisition Laws," also known as the "Section 800 Panel," was commissioned by Congress in 1993 and directed the Department of Defense to establish a panel drawn from both the public and private sectors outlining a series of statutory reform recommendations designed to simplify the acquisitions process. Time constraints precluded examination of regulations, executive orders, and case law, limiting the review to over 800 laws surrounding the acquisitions process. Designed to create a practical plan of action with specific recommendations to Congress on how to eliminate any laws unnecessary for the establishment of buyer/seller relationships, ensure the financial and ethical integrity of defense procurement programs, and protect the best interests of DoD, the Panel's charter called for legislative rather than regulatory reform, clearly understanding that often burdensome regulations are mandated by statute. The panel's mission was to provide advice on:

- Streamlining the defense acquisitions process and preparing a proposed code of relevant acquisition laws;
- Eliminating acquisition laws that are unnecessary for the establishment and administration of the buyer/seller relationship in procurement;
- Ensuring the continuing financial and ethical integrity of defense procurement programs.

Legislative Recommendations. Congress has given clear guidance in many defense authorization bills that document the need for more effective integration among commercial and military technology. The panel's conclusions and recommendations are separated into eight areas each discussed as follows:

Contract Formation

These statutes include the fundamental elements that mandate and implement the policy of open competition in the acquisition process. The panel recommended changes to address the need for a balance between an efficient procurement system and the sound implementation of socioeconomic processes by prioritizing the usage of commercial and other nondevelopmental items, both as components and end items.

The Panel proposed modifying the Truth in Negotiations Act to (1) stabilize the threshold for cost or pricing data at \$500,000; and, (2) better utilize the forces of the commercial marketplace by expanding and clarifying exceptions for adequate price competition.

Amendments should be made to speed the resolution of protests under the current system administered by the Government Accountability Office and the General Services Administration Board.

Contract Administration

The Panel sought to organize the statutes that address the business relationship between DOD and contractors removing numerous duplications and repetitions. They also suggested focusing on removing obstacles to greater participation from small businesses and commercial entities.

Service-Specific and Major Systems Statutes

The Panel recommended eliminating obsolete and excessively overlapping statutes through a series of sweeping consolidations. To help focus this effort, it suggested identifying broad policy objectives and reporting requirements that do not impose undue administrative burdens.

Socioeconomic Laws, Small Business, and Simplified Acquisition Threshold

The Panel determined that the pressing need in this area was to establish standardized thresholds and criteria for applying socioeconomic laws to DoD procurements so that DoD could better support small businesses and minority contracting requirements as mandated by Congress.

Standards of Conduct

Concerned with consolidating existing ethical requirements rather than creating new ones, they were particularly focused on the rule-making process in regards to government procurement, contractor certifications, and false claims, recognizing that various administrative procedures mandated by statutes can be confusing and add cost.

Intellectual Property

The government must respect the market-driven norms of proprietary invention and entrepreneurial innovation. The panel recommended (1) statutory changes that allow the Secretary to utilize data rights policies that protect commercially valuable technology; (2) amendment of the Bayh-Dohl Act to encourage the rapid filing of applications working on federally-funded research; (3) the elimination of mandatory government recoupment of non-recurring costs in defense products offered through foreign military sales programs; (4) enacting limitations on the imposition and duration of secrecy orders applied to certain inventions; and, (5) enhancing the government's authority to secure copyright protection for computer programs developed for the government.

Commercial Procurement

The Truth in Negotiations and Competition in Contract Act states that commercial items should be used whenever they satisfy the requirements of the Department of Defense. The Panel recommends reforming DoD's buying processes to conform to the private sector list of laws that specifically exempts the purchase of a commercial item; thus any commercial item meeting the definition of that term is exempt from statutory contract requirements listed in the law.

Defense Trade and Cooperation

There are as many legislative barriers to cooperation in the international arena on defense trade and cooperation as there are in the domestic context. Their recommendations were that (1) DoD acquisition policy be consistent and reciprocal with the acquisition and trade policies of US allies; (2) DoD's acquisition policy be consistent with the promotion of a strong US defense technology, industrial, and mobilization base; and, (3) DoD acquisition policy must be coordinated with defense industrial base requirements, allied logistics support, standardization, and sales of US equipment to foreign allies.

4. The Center for Strategic and International Studies (CSIS) published Beyond Goldwater-Nichols (BG-N) Phase I report

in March 2004. The study takes a broad view of defense reform, as is necessary in the new strategic era. BG-N recognizes that for the United States to fully seize opportunities and confront threats in the 21st century both DoD and its partners in the U.S. government must adapt to new strategic circumstances, and defense reform may no longer be confined simply to the institutions and functions of DoD. Concluding that the U.S. national security apparatus requires significant reforms to meet the challenges of a new strategic era, DoD must adapt not only to the post-Cold War, post-9/11 security environment but also must cope with many "hidden failures" that, while not preventing operational success per se, stifle necessary innovation and continue to squander critical resources in terms of time and money. Many organizational structures and processes initially constructed to contain a Cold War superpower in the Industrial Age are inappropriate for 21st century missions in an Information Age.

The key issues that Phase 1 identified for defense reform were: Rationalizing Organizational Structures in the Department of Defense; Toward a More Effective Resource Allocation Process; Procuring Joint Capabilities; Strengthening Civilian Professionals in Defense and National Security; Improving Interagency and Coalition Operations; and Strengthening Congressional Oversight.

5. Beyond Goldwater-Nichols: U.S. Government and Defense Reform for a New Strategic Era: Phase 2 Report was published in July 2005. Focusing upon the entire U.S. national security structure, it purports that in an era of fast-moving, unpredictable challenges, government must be more agile and makes the case that facilitating action is preferable to incentivizing inaction. With a focus on eliminating redundancies that produce inefficiency and conflict, while assuring maximum alignment of authority and accountability to include clear political accountability to the public through the President and the Congress, the study asserts that the strategic issue to address is to find a way to shift DoD's traditional human, physical, and financial assets to parts of the defense enterprise that address new and increasingly complicated national security threats. Fundamentally, DoD must implement a less monolithic acquisition process with greater agility, flexibility, and willingness to identify tolerable risks.

Legislative Recommendations. Restore the authority of the Service Chiefs over the execution of acquisition programs. [Goldwater-Nichols Department of Defense Reorganization Act of 1986 (P.L. 99-433-October 1, 1986) gave each service secretary sole responsibility for the acquisition function.]

Regulatory Recommendations. There are often inconsistencies in managerial operations, where acquisition managers apply a combined corpus of federal, OSD, and Service rules to drive program development, which can be confusing or inefficient.

Cultural Recommendations. To build a truly joint organization, the demand-oriented Joint Requirements Oversight Council (JROC) must replace the Service Vices with the COCOM Deputies and add civilian representation.

Organizational Recommendations. CSIS identified two major bureaucratic hurdles: highly centralized oversight and conflicting guidance. There has been an increasing amount of OSD-level review including milestone, pre-decision, integrated product team, working integrated product team, and overarching integrated product team reviews. The OSD-level acquisition organization needs to be the strategic planner who identifies and invests in the technologies that result in enhanced capabilities to meet current and future challenges.

The report recommends restructuring the Office of the Undersecretary for Acquisition, Technology and Logistics to focus on technology--how it could be used to address future threats, and how best to procure it. Authority over the management of acquisition programs should be returned to the Service Chiefs.

To reduce duplication of effort, BG-N recommends combining the logistics and transportation functions into a single U.S. Logistics Command and fusing much of the J-4 with its counterpart in the Deputy Undersecretary of Defense, who will report to the Office of the Secretary of Defense.

A DoD-wide rapid acquisition process should be established to attend to pressing needs that straddle multiple Services, with a universal set of policies and criteria for rapid acquisition and requisite waivers and exemptions from regulations that impede rapid acquisition.

In order to meet the challenge of rising personnel costs and retention problems, DoD needs to "maximize its return" on its investments in service members.

Build a COCOM-centric process for identifying and advocating joint capability requirements through an enhanced IPL process and that identifies long-term capability needs of the functional commands in order to determine whether a separate Joint Capability Command is necessary. 6. The Defense Acquisition Performance Assessment (DAPA) Report was commissioned by Acting Deputy Secretary of Defense Gordon England and reported out in January 2006. Similar to the environment establishing the Packard Commission, a "crisis of confidence" from DoD leadership and Congressional Committees were cited as reasons to form the DAPA after recent reports documented massively accelerated cost growth in major defense programs and no appreciable improvement in the defense acquisition system despite the many recommendations and reform attempts of the past two decades. The panel comprehensively considered every aspect of acquisition, including requirements, organization, legal foundations, decision methodology, resource allocation, and oversight. After reviewing more than 1,500 documents on acquisition reform issues, holding open forums for public input, and soliciting experts and government and industry acquisition professionals, the DAPA Report generated recommendations that sought to simplify and restructure acquisition with a clear alignment of responsibility, authority, and accountability.

The report is noteworthy both for its accounting for so much of written acquisition literature and its comprehensive discussion of issues and concerns from a "recent" standpoint. In general, current acquisition strategies are too optimistic and do not adequately address critical issues or consider competition motivators outside of cost; others do not consider manufacturing and production base issues or competitive technology maturation and risk reduction. Many major decisions on major acquisition programs proceed with inadequate data relating to both technical maturity and the stability of requirements. The current oversight process is not effective; where it is, it is often considered burdensome and dilutes accountability for program performance. Effective personnel policies and training programs are needed to provide highly qualified Program Managers and other staff with crucial skills to manage development and production. Lastly, and perhaps with a mark of finality, overruns are not only tolerated, but are anticipated and expected as standard procedure with little to no consequences. This is done in concert with the government.

Legislative Recommendations. Congress must clear up overlaps in legislative oversight as well as possibly restructure legislative requirements governing profit in order to provide better value for defense contractors. Legislation should be sought that establishes the Service Acquisition Executives as Five-Year Fixed Presidential Appointments renewable for a second fiveyear term and retains high-performance military personnel in the acquisition workforce.

Regulatory Recommendations. So that Combatant Commanders play a leading role in defining capability shortfalls, senior military leadership become more involved in managing the requirements process and the requirement generation process be better informed about maturing technologies, DAPA recommends that the Joint Capabilities Integration Development System (JCIDS) be replaced with the Joint Capabilities Acquisition and Divestment Plan (JCADP). The Joint Requirements Oversight Council should integrate COCOMs' analyses into a time-phased, fiscally-informed JCADP, which should guide the development of Materiel Solution solicitations.

Enhance the Programming, Planning, Budget, and Execution system stability by programming to high confidence estimates for all accounts and establishing a distinct Stable Program Funding Account.

Operational testing should be more realistic and limited in its ability to add new performance requirements. A new category should be made for an Initial Operational Test and Evaluation result that allows COCOMs to accept useful deployable capabilities. Test planning and criteria development should reflect testing in an environment and threats identified by COCOMs, not the test community. Program Managers should be given the authority to defer non-Key Performance Parameter-related requirements, and the Joint Oversight Council should be required to grant approval of all operational testing in environments other than those in the Test and Evaluation Master Plan.

Cultural Recommendations. A risk-based source selection process should be adopted that will incentivize industry to aggressively deliver at or below cost. This would discourage the present environment of a "Conspiracy of Hope," which occurs when industry is encouraged to propose unrealistic costs, optimistic performance and understate technical risk estimates during the acquisition solicitation process, with the Pentagon being encouraged to accept these proposals as foundation baselines.

Shift to Time Certain Development and make "schedule" a Key Performance Parameter.

Overall, the acquisition system should be replaced with one that recognizes the importance of time-to-need and the critical role that technology maturity plays in achieving program success. Therefore, changes need to be made for program baselines and program managers' abilities regarding Milestones and technology adoption.

DoD should establish regular roundtable discussions with executives from industry to share and align industry and defense strategic planning as a means of counteracting the limited competition among the reduced base of defense contractors.

Establish a Blue Ribbon panel of owners of large and small businesses that are not traditional defense suppliers to create a set of recommendations on eliminating barriers to working with the government.

Organizational Recommendations. Establish a dedicated Four-Star Acquisition Systems Command at the Service level to consolidate responsibilities and streamline the acquisition oversight process.

Make acquisition a core competency in the Services, comparable to the combat arms.

Direct changes to the DoD 5000 series to require government insight and favor formal competition over make/buy decisions for major subsystems where a Lead System Integrator acquisition strategy is involved.

7. The Report of the Commission on Army Acquisition and Program Management in Expeditionary Operations, commissioned by the Secretary of the Army, dated October 31, 2007 and entitled "Urgent Reform Required: Army Expeditionary Contracting," explains the need for increasing the stature, quantity, quality, and career development of both military and civilian contracting personnel. Since the end of the Cold War, the Operational Army has transitioned into an Expeditionary Army. However, significant components of the Institutional Army have not yet made the transition needed to support those operations. These components include: defining operational requirements, financial management, personnel, contracting and contract management, training and education, and doctrine, regulations, and processes. Further in the same time frame, the military's increased reliance on contractors has increased the workload, tempo, and complexity of the acquisition and program management process. This report asserts that addressing the contracting failures evident in expeditionary operations will require a systematic change in the Army's acquisition system.

Legislative Recommendations. Although contracting is an essential aspect of expeditionary operations, the Army currently treats this as a peripheral issue and not an Army "core competence." There are no General Officers responsible for Army contracting; rather, this responsibility is diffused among many organizations within CONUS and in the field, resulting in poor performance, waste, and even fraud. To address this critical problem, Congress must authorize the creation of a core set of additional General Officers assigned to the Secretary of the Army specifically for contracting positions. The report recommends the creation of ten (10) new General Officer positions and one (1) Senior Executive Service (SES) billet permanently assigned to contracting. These Officers would bring contracting from the Army's periphery to the core by leading the assignment of officers, enlisted personnel, and civil servants vital to this area.

Reductions in acquisition personnel over recent decades have further weakened the Army's contracting abilities. The report advocated a 25% increase in the contracting workforce (an additional 400 military and 1000 civilian contracting professionals). Concurrently, the Army needs to rewrite its personnel policies for civilian contractors as these policies presently impede the use of civilians in expeditionary operations. Army policy can incentivize civilian participation in combat areas by offering life insurance, long-term health care, extended temporary promotion and tax benefits, and avenues for civilian prequalification in expeditionary operations.

In addition, the report recommends expanding the Defense Contract Management Agency (DCMA) staffing in order to address failures in both Army and Defense post-award contract management. It also calls for setting up an Overseas

Contingency Operations Transfer Fund and ending the practice of incremental funding which has proven to be inefficient, burdensome, and wasteful.

Regulatory Recommendations. The Federal Acquisition Regulation (FAR) and the Defense Federal Acquisition Regular Supplement (DFAR) are not appropriately tailored to expeditionary contracting. It takes a highly skilled and experienced contracting officer – individuals in very short supply at the moment – to be able to navigate and apply these regulations in the high-stress, quick-paced expeditionary environment. Expeditionary contracting officers need a quick reference tool amenable to training exercises prior to deployment. An Expeditionary Contracting Manual that provides acquisition rules of engagement, taking the various phases of an expeditionary operation into consideration in crafting its regulations, is urgently needed.

Cultural Recommendations. Perhaps the most enduring and trenchant obstacle to reforming the Army acquisition process is institutional culture. Army 'culture' focuses on war-fighting and consequently neither recognizes the critical and complex nature of contracting nor rewards people in the contracting community. Contracting personnel tend to be characterized incorrectly as 'shoppers' rather than viewed as true professionals. Further compounding the problem is the Army's general lack of appreciation of the complexity of service contracts, which today comprise the bulk of outsourced items.

Army culture must recognize that the stakeholders outside the contracting community (i.e. war fighters and the Institutional Army) play a critical role within the contracting process. Establishing General Officers for contracting is the first and most vital step needed to drive this cultural change. As one G.O. interviewed by the Commission explained, "Until you put Generals back in charge of contracting, the career field will continue to get no respect or resources." Secondly, the Army must change its approach towards acquisitions training and career development in the following respects:

- Amend Command School curriculum to include instruction on the role of contactors in expeditionary operations. Operational commanders in particular must understand their responsibilities vis-à-vis the contracting community.
- Define a career path for contracting professionals in the Army. This would include funding career planning programs. Army military personnel need to start their contracting career much earlier than they do at present.
- Contracting personnel must interface with their customer the war fighter on the ground.

The report lauds the U.S. Special Operations Command as an exemplary model demonstrating how to meld the contracting function with war fighters successfully.

Organizational Recommendations. The Army's current organization gives no contracting commands the responsibility to synchronize all aspects of contracting below the Army Secretariat level. Instead, multiple commands have responsibility for contracting, which leads to confusion and inconsistent policy interpretations. The report advises creating a single Army Contracting Command, reporting to the Commanding General of Army Materiel Command, charged with developing a relevant and ready expeditionary contracting capability. This Command would have directive authority over all Army contracting capabilities and provide a single focal point for ascertaining the status and readiness of the Army-wide contracting workforce.

Further modifications will be necessary to streamline the Command's authority, including:

- The establishment of contract planning (requirements definition) positions, with the operations and training staff conducting planning exercises at the corps, division, and brigade combat team levels.
- The creation of a separate Army Contracting Promotion Board for both military and civilian contracting professionals to ensure the functional independence of contracting professionals.

The report also details a reorganization scheme that would enable the Army to draw on multiple resources to meet any surge requirement for expeditionary contracting support.

8. March 2008 brought the final installment of CSIS's Beyond Goldwater-Nichols (BG-N) project assessment of defense reform. Invigorating Defense Governance takes a strategic view, focusing on the future efforts of the next U.S. Secretary of Defense and the Secretary's senior-most aides to fulfill priority objectives. With so many prior reform efforts on which to build, the BG-N study team sought to identify the key problems inhibiting effective performance in the Department of Defense (DoD) and the barriers to reform that prevented earlier proposals from taking root. It concludes that many proposed changes have faltered because they failed to account for and find ways to alter the likely behavior of individuals and organizations.

Legislative Recommendations. Create a Quadrennial National Security Review across all instruments of national power. Pilot a competitive analysis precursor to the next QDR. Eliminate much of the detail in the present QDR law. Eliminate the National Military Strategy and direct the CJCS to provide an annual risk assessment, with SECDEF comments, in its stead.

Regulatory Recommendations. Strengthen the use of goal-oriented performance measurement and assessment tools throughout DoD.

Cultural Recommendations. SECDEF should use the quarterly meeting process to drive home his highest priorities and allow stakeholder input.

Organizational Recommendations. Consolidate existing strategic guidance into two documents, one that drives planning in the mid to long term and an annual document that drives near term processes and priorities. Increase joint analytic capacity. Enhance COCOMs' force development expertise, access, and capacities.

As Goldwater-Nichols taught, the ability to affect incentive structures is the most indispensable ingredient of any successful reform. Attempts to simply rework organizational wiring diagrams or create new and seemingly more nimble processes will fail unless they are buttressed by changes in the underlying incentives that motivate individual and organizational actions. The keys to effective governance will ultimately be found not in a proscribed set of institutionalized processes, but in the ability of the secretary of defense and his principal civilian and military advisers, working closely with Congress, to make good and timely decisions and ensure their quick execution.

9. In September of 2008, the Government Accountability Office (GAO) submitted a report entitled "Defense Acquisitions: DOD's Requirements Determination Process Has Not Been Effective in Prioritizing Joint Capabilities" that highlights several of the issues surrounding DoD acquisition decision-making. Reviewing the Joint Capabilities Integration and Development System (JCIDS), GAO found that since its inception in 2003 DoD had not effectively integrated its processes with JCIDS, resulting in individual services continuing to make 67% of initial capabilities proposals, with little involvement of the Combatant Commands (COCOM).

Regulatory Recommendations. With nearly all JCIDS capability proposals passing validation, the system is currently adding to an acquisitions portfolio that contains more programs than resources can support. This lack of prioritization is the opposite of successful commercial companies who must make tough decisions and create a balanced portfolio under tight fiscal guidelines that addresses "needs" over "wants." Additionally, GAO found that 80% of programs enter the acquisition system without meeting previous milestones or undergoing a major review of the system.

Cultural Recommendations. GAO notes that while DoD has begun initiatives to improve JCIDS, the military services tend to address capabilities that identify mid- to long-term challenges while COCOMs seek results for immediate needs. This disparity between immediate and long-term needs serves to push the services to continue ordering capabilities outside the JCIDS structure, missing potential efficiencies and cost savings. GAO recommends that the SECDEF direct the CJCS to develop an analytic approach to review and validate proposals more efficiently and ensure that the most pressing near, mid- and long-term capabilities are met.

Organizational Recommendations. The JCIDS process has proven to be lengthy, with an average of 10 months to validate a need. Echoing the DAPA panel recommendations that concluded JCIDS did not meet war fighter needs in a timely manner, GAO recommends JCIDS replacement with a COCOM-led requirements process where services and defense agencies compete to provide solutions. With the continued reliance on stove-piped solutions to address capability needs, DoD is losing opportunities to improve joint war-fighting capabilities. The lack of agreement on requirements for the Army's Warrior program and the Air Force's Predator program underscore this issue. The GAO suggests the SECDEF divert capability development planning resources over to the COCOMs and the functional capabilities board. This would give the COCOMs the funds and manpower to adequately review and plan capacity strategy with an eye towards the joint mission.

APPENDIX D – SELECTED BIBLIOGRAPHY

DEFENSE ACQUISITION-RELATED LEGISLATION

- 1. Goldwater-Nichols Department of Defense Reorganization Act of 1986, P.L. 99-433
- 2. Defense Acquisition Improvement Act of 1986, P.L. 99-591
- 3. Government Performance and Results Act of 1993, P.L. 103-62
- 4. Federal Acquisition Streamlining Act of 1994, P.L. 103-255
- 5. Clinger-Cohen Act of 1996 (The Information Technology Management Reform Act of 1996), P.L. 104-106
- 6. FY 1996 Defense Authorization Act, P.L. 104-106, required DoD to improve the performance of depot maintenance and repair
- 7. Revisions to Part 15 of the Federal Acquisition Regulations, September 30, 1997
- 8. FY 1998 Defense Acquisition Act, P.L. 105-85, redefined depot maintenance and repair and led to the 50/50 rule, Section 2466 of U.S. Code (Title 10). See the FY 2001 Defense Authorization Act, P.L. 106-259
- 9. Federal Activities Inventory Reform Act of 1998, P.L. 105-270, through the use of OMB Circular A-76
- 10. Services Acquisition Reform Act of 2003, Title XIV, P. L. 108-136
- 11. FY 2004 National Defense Authorization Act, P.L. 108-136, Title VIII
- 12. FY 2005 National Defense Authorization Act, P.L. 108-375, Title VIII
- 13. FY 2006 National Defense Authorization Act, P.L. 109-163, Title VII, especially Section 812
- 14. FY 2007 National Defense Authorization Act, P.L. 109-364, Title VII, especially Section 804
- 15. FY 2008 National Defense Authorization Act, P.L. 110-181, Title VIII
- 16. Weapon Systems Acquisition Reform Act of 2009, P.L. 111-23, May 22, 2009

WORKFORCE LEGISLATION

- 1. Defense Acquisition Workforce Improvement Act of 1990, P.L. 101-510
- 2. Defense Acquisition Workforce Improvement Act of 1991 P.L. 102-25, in particular, changes made to DAWIA in the FY 2004 NDAA and FY 2005 NDAA, Section 812
- 3. FY 1996 Defense Authorization Act: reductions ordered of 15,000 and a plan produced to reduce the acquisition workforce by 25% over 5 years
- 4. FY 1996 Defense Authorization Act (Section 4308) established a demonstration program for improving acquisition workforce improvement
- 5. FY 1997 Defense Authorization Act: further reduction of 15,000
- 6. FY 1998 Defense Authorization Act: further reduction of 25,000 with ability to waive 15,000 subject to SECDEF approval
- 7. FY 1999 Defense Authorization Act, further reductions of 25,000, unless waived by SECDEF to 12,500
- 8. FY 2004 Defense Authorization Act P.L. 108-136

COMMISSIONS, REPORTS AND DOCUMENTS

- 1. 1977 Summer Study Report of the Acquisition Cycle Task Force: DeLauer Study (March 1978) http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA058443&Location=U2&doc=GetTRDoc.pdf
- 2. The President's Blue Ribbon Commission on Defense Management (The Packard Commission), Final Report June 30, 1986 http://www.ndu.edu/library/pbrc/pbrc.html
- 3. The Defense Management Report, 1989 http://www.history.army.mil/acquisition/research/pdf_materials/report_cheny.pdf
- 4. Weapons Acquisition: A Rare opportunity for Lasting Change, GAO/NSIAD-93-15/December 1992 http://www.gao.gov/products/NSIAD-93-15
- Critical Issues in the Defense Acquisition Culture: Govt and Industry View from the Trenches (Dec. 1994 Program Integration Office of the USD)

 $http://www.history.army.mil/acquisition/research/pdf_materials/crit_issues_def_acq_culture.pdf$

6. Defense Acquisition Reform, Phase 2 (Aug. 1994, DSB) http://www.acq.osd.mil/dsb/reports/darphasetwo.pdf

- 7. Defense Acquisition Reform, Phase 3 (May 1996, DSB) http://www.acq.osd.mil/dsb/reports/defensephasethree.pdf%20
- 8. Acquisition Workforce Sub-Panel (March 1998, DSB) http://www.acq.osd.mil/dsb/reports/acqworksub.pdf
- 9. Acquisition Reform Phase IV Subpanel on R&D (1999, DSB) http://www.acq.osd.mil/dsb/reports/acqreformfoursub.pdf
- 10. Defense Acquisition Reform, Phase 4 (July 1999) http://www.acq.osd.mil/dsb/reports/acqreformfour.pdf
- 11. The Impact of the Packard Commission's Recommendations on Reducing Cost Overruns on Defense Acquisition Contracts (1999 Acquisition Quarterly Review) http://www.dau.mil/pubs/arq/99arq/searle.pdf
- 12. Creating a Government that Works Better and Costs Less: The Gore Report on Reinventing Government, 1993 http://govinfo.library.unt.edu/npr/library/nprrpt/annrpt/redtpe93/execsum.html
- 13. The Department of Defense Plan for Streamlining the Bureaucracy, 1993 http://www.dod.mil/pubs/foi/reading_room/797.pdf
- 14. A Mandate for Change, (memo) Secretary of Defense William Perry, February 9, 1994 http://www.library.dau.mil/PerryWJ_AcqReform_Feb94.pdf
- 15. Establishment of the office of the Deputy Under Secretary of Defense for Acquisition Reform, 1994 http://www.dau.mil/pubs/arq/94arq/presto.pdf
- 16. Directions for Defense, Roles and Missions Commission of the Armed Forces report to Congress, the Secretary of Defense, and the Chairman of the Joint Chiefs of Staff, 1995 http://oai.dtic.mil/oai/oai?&verb=getRecord&metadataPrefix=html&identifier=ADA295228
- 17. Defense Weapons System Acquisition, GAO, 1997 http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA321464&Location=U2&doc=GetTRDoc.pdf
- 18. The Defense Reform Initiative, 1997 http://www.fas.org/man/docs/dri/cover.htm
- 19. The Road Ahead: Accelerating the Transformation of the Department of Defense Acquisition and Logistics Processes (Gansler, 2000) https://www.dodmantech.com/pubs/TheRoadAhead_2Jun00.pdf
- 20. Into the 21st Century: A Strategy for Affordability, 1999 http://www.dod.mil/pubs/affordability04091999.pdf
- 21. Cancellation of DoD 5000-series documents, Wolfowitz, 2000 http://findarticles.com/p/articles/mi_m0KAA/is_6_31/ai_97908582
- 22. Bureaucracy to Battlefield, Donald Rumsfeld, September 10, 2001 http://www.defenselink.mil/speeches/speech.aspx?speechid=430
- 23. Transformation Planning Guidance, Rumsfeld, 2003 https://www.dodmantech.com/pubs/Transformation%20Guidance-Apr03.pdf
- 24. DoD 5000-series, 2003 http://www.corrdefense.org/Key%20Documents/DoDD%205000-1.pdf http://www.corrdefense.org/Key%20Documents/DODI%205000-2.pdf
- 25. Performance of Commercial Activities Circular No. A-76 (Revised) 2003 http://www.whitehouse.gov/omb/circulars/a076/a76_rev2003.pdf
- 26. Beyond Goldwater Nichols, Phase 2 report , CSIS, 2005 http://www.csis.org/media/csis/pubs/bgn_ph2_report.pdf

- 27. The Quadrennial Defense Review, 2006 https://www.dodmantech.com/pubs/QDR-2006.pdf
- 28. Defense Acquisition Performance Assessment (DAPA), 2006 http://www.acq.osd.mil/dapaproject/documents/DAPA-Report-web/DAPA-Report-web-feb21.pdf
- 29. The Joint Capabilities Integration and Development System, 2007 http://www.dtic.mil/cjcs_directives/cdata/unlimit/3170_01.pdf
- 30. Defense Acquisition Transformation (Section 804) Report to Congress, February and June 2007 http://www.defenselink.mil/pubs/pdfs/804Reportfeb2007.pdf http://www.defenselink.mil/pubs/pdfs/804JulFinalReport_to_Congress.pdf
- 31. Beyond Goldwater Nichols, Phase 4 report Invigorating Defense Governance, CSIS, 2008 http://www.csis.org/component/option,com_csis_pubs/task,view/id,4380/type,0/
- 32. Creating an Effective National Security Industrial Base for the 21st Century: An Action Plan to Address the Coming Crisis, DSB, July 2008 http://www.acq.osd.mil/dsb/reports/2008-07-DIST.pdf
- 33. Department of Defense Policy and Procedures for the Acquisition of Information Technology, DSB, March 2009 http://www.acq.osd.mil/dsb/reports/2009-04-IT_Acquisition.pdf
- 34. Defense Software (Nov 2000, DSB) http://www.acq.osd.mil/dsb/reports/defensesoftware.pdf
- 35. Logistics Transformation Phase II (Jan 2001, DSB) http://www.acq.osd.mil/dsb/reports/log2.pdf
- 36. Defense Science & Technology 2001 Summer Study (May 2002, DSB) http://www.acq.osd.mil/dsb/reports/sandt.pdf
- 37. Future of the Aircraft Carrier (Oct 2002, DSB) http://www.acq.osd.mil/dsb/reports/acof.pdf
- 38. Acquisition of National Security Space Programs (May 2003, DSB) http://www.acq.osd.mil/dsb/reports/space.pdf
- 39. Enabling Joint Force Capabilities (2003, DSB) http://www.acq.osd.mil/dsb/reports/efjo.pdf
- 40. Future Strategic Strikeforce (2004, DSB) http://www.acq.osd.mil/dsb/reports/fssf.pdf
- 41. 2005 Summer Study on Transformation: A Program Assessment. Volume II: Supporting Reports (DSB) http://www.acq.osd.mil/dsb/reports/2006-04-DSB_SS_Transformation_Report_Vol_2.pdf
- 42. 2005 Summer Study- Transformation: A Progress Assessment Vol. I (Feb. 2006, DSB) http://www.acq.osd.mil/dsb/reports/2006-02-DSB_SS_Transformation_Report_Vol_1.pdf
- 43. Management Oversight in Acquisition Organization (2005, DSB) http://www.acq.osd.mil/dsb/reports/2005-03-MOAO_Report_Final.pdf
- 44. Patriot System Performance (2005, DSB) http://www.acq.osd.mil/dsb/reports/2005-01-Patriot_Report_Summary.pdf
- 45. Shaping the Civilian Acquisition Workforce of the Future (The Acquisition 2005 Task Force) http://www.acq.osd.mil/dpap/Docs/report1000.pdf
- 46. The Roles and Authorities of the Director of Defense Research and Engineering (Oct. 2005, DSB) http://www.acq.osd.mil/dsb/reports/2005-10-DDRE_Final.pdf
- 47. 2006 Summer Study: Information Management for Net-Centric Ops, Vol. 1 (DSB) http://www.acq.osd.mil/dsb/reports/2007-04-IM_Vol_I.pdf

- 48. 2006 Summer Study: Information Management for Net-Centric Operations Vol II (DSB 2007) http://www.acq.osd.mil/dsb/reports/2007-04-IM_Vol_II.pdf
- 49. Defense Acquisition Performance Assessment Report (DAPA 2006) http://www.frontline-canada.com/Defence/pdfs/DAPA-Report-web.pdf
- 50. Manufacturing Technology Program (Feb 2006, DSB) http://www.acq.osd.mil/dsb/reports/2006-02_Mantech_Final.pdf
- 51. Defense Acquisition: Overview, Issues, and Options for Congress (June 2007, CRS) http://www.library.dau.mil/CRS_RL34026_Jun07.pdf
- 52. Gansler Commission on Army Expeditionary Contracting (2007) http://www.army.mil/docs/Gansler_Commission_Report_Final_071031.pdf
- 53. Creating an Effective National Security Industrial Base for the 21st Century: An Action Plan to Address the Coming Crisis (July 2008, DSB) http://www.acq.osd.mil/dsb/reports/2008-07-DIST.pdf
- 54. Development Test and Evaluation (May 2008, DSB) http://www.acq.osd.mil/dsb/reports/2008-05-DTE.pdf
- 55. Integrating Commercial Systems into the DOD Effectively and Efficiently (Feb. 2008, DSB) http://www.acq.osd.mil/dsb/tors/TOR-2008-02-13-Integrating_Commercial_Systems.pdf
- 56. Pre-Milestone A Systems Engineering: A Retrospective Review and Benefits for Future Air Force Systems Acquisition (2008, NRC) http://www.nap.edu/catalog.php?record_id=12065#toc
- 57. Creating a DoD Strategic Acquisition Platform (April 2009, DSB) http://www.acq.osd.mil/dsb/reports/2009-04-Acq_Platform.pdf

GAO REPORTS

- 1. GAO/NSIAD-91-11 Acquisition Reform: Defense Management Report Savings Initiatives http://archive.gao.gov/d21t9/142879.pdf
- 2. GAO/NSIAD-93-15 Weapons Acquisition: A Rare Opportunity for Lasting Change http://archive.gao.gov/d36t11/148208.pdf
- 3. GAO/NSIAD-93-155 Commercial Practices: DOD Could Save Millions by Reducing Maintenance and Repair Inventories http://archive.gao.gov/t2pbat5/149586.pdf
- 4. GAO-HR 93-07 High Risk Series: Defense Weapons Systems Acquisition http://archive.gao.gov/d36t11/148225.pdf
- 5. GAO/HR-95-4 High Risk Series: Defense Weapons Systems Acquisition http://www.gao.gov/archive/1995/hr95004.pdf
- 6. GAO/T-OCG-95-22 Federal Acquisition: Trends, Reforms, Challenges http://www.gao.gov/archive/2000/cg00007t.pdf
- 7. GAO/NSIAD-96-106 Acquisition Reform: Efforts to Reduce the Cost to Manage and Oversee DOD Contracts http://www.gao.gov/archive/1996/ns96106.pdf
- 8. GAO/NSIAD-96-162 Best Practices: Commercial Quality Assurance Practices Offer Improvements for DOD http://www.gao.gov/archive/1996/ns96162.pdf
- 9. GAO/NSIAD-96-177 Combat Air Power: Joint Mission Assessments Needed Before Making Program and Budget Decisions http://www.gao.gov/archive/1996/ns96177.pdf

- 10. GAO/NSIAD-96-53 Acquisition Reform: Military-Commercial Pilot Program Offers Benefits but Faces Challenges http://www.gao.gov/archive/1996/ns96053.pdf
- 11. GAO/NSIAD 97-105 Combat Air Power: Joint Mission Assessments Could Enhance Investment Decisions http://www.gao.gov/archive/1997/ns97105t.pdf
- 12. GAO/NSIAD-97-108 Major Acquisitions: Significant Changes Underway in DOD's Earned Value Management Process http://www.gao.gov/archive/1997/ns97108.pdf
- 13. GAO/NSIAD-97-22BR Acquisition Reform: Implementation of Title V of the Federal Acquisition Streamlining Act of 1994 http://www.gao.gov/archive/1997/ns97022b.pdf
- 14. GAO/NSIAD-97-23 Weapons Acquisition: Better Use of Limited DOD Acquisition Funding Would Reduce Costs http://www.gao.gov/archive/1997/ns97023.pdf
- 15. GAO/NSIAD-97-99R Defense Programs: Opportunities to Reform Key Business Practices http://archive.gao.gov/paprpdf1/158389.pdf
- 16. GAO-HR-97-6 High-Risk Series: Defense Weapons System Acquisitions http://www.gao.gov/archive/1997/hr97006.pdf
- 17. GAO/NSIAD 98-56 Best Practices: Successful Application to Weapon Acquisitions Requires Changes in DOD's Environment http://www.gao.gov/archive/1998/ns98056.pdf
- GAO/NSIAD 98-81 Acquisition Reform: Implementation of Key Aspects of the Federal Acquisition Streamlining Act of 1994 http://www.gao.gov/archive/1998/ns98081.pdf
- 19. GAO/NSIAD-98-56 Best Practices: Successful Applications to Weapons Programs Requires Changes in DOD's Environment http://www.gao.gov/archive/1998/ns98056.pdf
- 20. GAO/T-NSIAD-98-123 Defense Acquisition: Improved Program Outcomes Are Possible http://www.gao.gov/archive/1998/ns98123t.pdf
- 21. GAO/NSIAD 99-206 Best Practices: DOD Training Can Do More to Help Weapon System Programs Implement Best Practices http://www.gao.gov/archive/1999/ns99206.pdf
- 22. GAO/NSIAD-99-95 Defense Reform Initiative: Progress, Opportunities, and Challenges http://archive.gao.gov/f0902b/161766.pdf
- 23. GAO/T-NSIAD-99-116 Defense Acquisition: Best Commercial Practices Can Improve Program Outcomes http://www.gao.gov/archive/1999/ns99116t.pdf
- 24. GAO/NSIAD-00-33 Acquisition Reform: DOD's Guidance on Using Section 845 Agreements Could be Improved http://www.gao.gov/archive/2000/ns00033.pdf
- 25. GAO/NSIAD-00-74 Joint Strike Fighter Acquisition: Development Schedule Should Be Changed to Reduce Risks http://www.gao.gov/new.items/ns00074.pdf
- 26. GAO/NSIAD-00-75 Defense Acquisitions: Need to Revise Acquisition Strategy to Reduce Risk for Joint Air-to-Surface Standoff Missile
 - http://www.gao.gov/archive/2000/ns00075.pdf
- 27. GAO/T-NSIAD-00-132 Joint Strike Fighter Acquisition: Development Schedule Should Be Changed to Reduce Risks http://www.gao.gov/archive/2000/ns00132t.pdf
- 28. GAO/T-NSIAD-00-173 Defense Acquisitions: Decisions on the Joint Strike Fighter Will Be Critical for Acquisition Reform http://www.gao.gov/archive/2000/ns00173t.pdf

- 29. GAO/T-OCG-00-7 Federal Acquisition: Trends, Reforms, and Challenges http://www.gao.gov/archive/2000/cg00007t.pdf
- 30. GAO-01-244 Major Management Challenges and Program Risks: Department of Defense http://www.gao.gov/pas/2001/d01244.pdf
- 31. GAO/NSIAD-02-630 Acquisition Workforce: Department of Defense's Plans to Address Workforce Size and Structure Challenges http://www.gao.gov/new.items/d02630.pdf
- 32. GAO/NSIAD-02-701 Best Practices: Capturing Design and Manufacturing Knowledge Early Improves Acquisition Outcomes http://www.gao.gov/new.items/d02701.pdf
- 33. GAO-02-469-T Defense Acquisition: DOD Faces Challenges in Implementing Best Practices http://www.gao.gov/new.items/d02469t.pdf
- 34. GAO-02-499T Contract Management: Taking a Strategic Approach to Improving Service Acquisitions http://www.gao.gov/new.items/d02499t.pdf
- 35. GAO/T-NSIAD-03-645T Best Practices: Better Acquisition Outcomes Are Possible If DOD Can Apply Lessons From F/A-22 Program http://www.gao.gov/new.items/d03645t.pdf
- 36. GAO/T-NSIAD-03-716T Contract Management: Comments on Proposed Services Acquisition Reform Act http://www.gao.gov/new.items/d03716t.pdf
- 37. GAO-03-1073 Defense Acquisitions: Improvements Needed in Space Systems Acquisition Management Policy http://www.gao.gov/new.items/d031073.pdf
- 38. GAO-03-281 Acquisition Management: Agencies Can Improve Training on New Initiatives http://www.gao.gov/new.items/d03281.pdf
- 39. GAO-03-476 Defense Acquisitions: Assessments of Major Weapon Programs http://www.gao.gov/new.items/d03476.pdf
- 40. GAO-03-52 Defense Acquisitions: Factors Affecting Outcomes of Advanced Concept Technology Demonstrations http://www.gao.gov/new.items/d0352.pdf
- 41. GAO-03-574T Sourcing and Acquisition: Challenges Facing the Department of Defense http://www.gao.gov/new.items/d03574t.pdf
- 42. GAO-03-98 Major Management Challenges and Program Risks: Department of Defense http://www.gao.gov/pas/2003/d0398.pdf
- 43. GAO/NSIAD-04-722 Information Technology: DoD's Acquisition Policies and Guidance Need to Incorporate Additional Best Practices and Controls http://www.gao.gov/new.items/d04722.pdf
- 44. GAO-04-379R Defense Acquisitions: Risks Posed by DOD's New Space Systems Acquisition Policy http://www.gao.gov/new.items/d04379r.pdf
- 45. GAO-04-393 Defense Acquisitions: Stronger Management Practices Are Needed to Improve DOD's Software-Intensive Weapon Acquisitions http://www.gao.gov/new.items/d04393.pdf
- 46. GAO-04-53 Defense Acquisitions: DOD's Revised Policy Emphasizes Best Practices, but More Controls Are Needed http://www.gao.gov/new.items/d0453.pdf
- 47. GAO-04-759 Defense Acquisitions: Space-Based Radar Effort Needs Additional Knowledge before Starting Development

http://www.gao.gov/new.items/d04759.pdf

- 48. GAO-05-182 Defense Acquisitions: Information for Congress on Performance of Major Programs Can Be More Complete, Timely, and Accessible http://www.gao.gov/new.items/d05182.pdf
- 49. GAO-05-255 Defense Acquisitions: Plans Need to Allow Enough Time to Demonstrate Capability of First Littoral Combat Ships http://www.gao.gov/new.items/d05255.pdf
- 50. GAO-05-301 Defense Acquisitions: Assessments of Selected Major Weapon Programs http://www.gao.gov/new.items/d05301.pdf
- 51. GAO-05-570R Defense Acquisitions: Incentives and Pressures That Drive Problems Affecting Satellite and Related Acquisitions http://www.gao.gov/new.items/d05570r.pdf
- 52. GAO-08-1060 Defense Acquisitions: DOD's Requirements Determination Process Has Not Been Effective in Prioritizing Joint Capabilities http://www.gao.gov/new.items/d081060.pdf

APPENDIX F – GLOSSARY OF ACRONYMS

ACAT AOA	Acquisition Category Analysis of Alternatives	FAR	Federal Acquisition Regulation	NDS	National Defense Strategy
СВА	Capabilities-Based Assessments	FASA	Federal Acquisition and Streamlining Act of 1994	NII	Networks and Information Integration
CJCS	Chairman of the Joint Chiefs of Staff	FFRDC	Federally Funded Research and	NMS	National Military Strategy
CLS	Contractor Logistics Support	FYDP	Development Center Future Years Defense	NSS	National Security Strategy
cocom conus	Combatant Commander Contiguous United	GAO	Program Government	OSD	Office of the Secretary of Defense
CSIS	States Center for Strategic and	HASC	Accountability Office U.S. House of	PA&E	Program Analysis and Evaluation
DAE	International Studies		Representatives Armed Services Committee	PEO	Program Execution Officer
DAL	Defense Acquisition Executive	ICD	Initial Capabilities Document	PGC	Policy Guidance Council
DAPA	Defense Acquisition Performance Assessment	IED	Improvised Explosive	P&L Criteria PM	Profit and Loss Criteria
DARPA	Defense Advanced	IPL	Device Integrated Priority List	PM PPBES	Program Manager Planning, Programming,
	Research Projects Agency	IRS	Internal Revenue Service		Budgeting and Execution System
DAWIA	Defense Acquisition Workforce Improvement	it Jcadp	Information Technology Joint Capabilities	QDR	Quadrennial Defense Review
DCMA	Act Defense Contract		Acquisition and Divest- ment Plan	REF	Rapid Equipping Force
DCMIX	Management Agency	JCIDS	Joint Capabilities	SAE	Service Acquisition Executive
DDRE	Director of Defense Research and Engineer-		Integration and Develop- ment System	SARA	Services Acquisition Reform Act of 2003
DFARS	ing Defense Federal Acquisition Regulation	JIEDDO	Joint Improvised Explosive Device Defeat Office	SASC	U.S. Senate Armed Services Committee
DISA	Acquisition Regulation Supplement Defense Information	JRMB	Joint Requirements and Management Board	SECDEF	United States Secretary of Defense
DISA	Systems Agency	JROC	Joint Requirements	SES	Senior Executive Service
DoD	Department of Defense		Oversight Council Joint Urgent Operational	USD(A)	Under Secretary of Defense for Acquisition
DOT&E	Developmental Operational Test and Evaluation	JUONS	Needs Statement	USD(AT&L)	Under Secretary of Defense for Acquisition,
DSMC	Defense Systems	КРР	Key Performance Parameter		Technology and Logistics
	Management College	MDAP	Major Defense		
FAA	Federal Aviation Administration	MRAP	Acquisition Program Mine Resistant Ambush Protected Vehicle		

END NOTES

¹ Robert M. Gates, Secretary of Defense, remarks to Business Executives for National Security at their annual Eisenhower Award Dinner in Washington, DC, May 15, 2008.

² The terms "acquisition system" and "acquisition process" are used interchangeably in this report.

³ President Obama signed the Weapon Systems Acquisition Reform Act of 2009, P.L. 111-23, on May 22, 2009. BENS, on behalf of the Task Force, had written to Congress in support of the legislation. Some of the law's provisions are echoed in this report, but the Task Force encourages the Congress to go further in changing the fundamental basis of the acquisition process and does so in this report.

⁴ 1970 Blue Ribbon Defense Panel (Fitzhugh Commission).

⁵ Creating a DoD Strategic Acquisition Platform, Report of the Defense Science Board, April 2009

⁶ The President's Blue Ribbon Commission on Defense Management (The Packard Commission), Final Report June 30, 1986. <u>http://www.ndu.edu/library/pbrc/pbrc.html</u>

⁷ Letter from the Chairman of the House Committee on Armed Services to General Charles G. Boyd, USAF (Ret.), BENS President & CEO, September 16, 2008.

⁸ Letter from the Chairman of the Senate Committee on Armed Services to General Charles G. Boyd, USAF (Ret.), BENS President & CEO, October 1, 2008.

⁹ Dennis C. Blair, Intelligence Community Annual Threat Assessment, Statement for the Senate Select Committee on Intelligence, February 12, 2009, p. 2.

¹⁰ Letter from Gordon England, Deputy Secretary of Defense, to General Charles G. Boyd, USAF (Ret.), BENS President & CEO, February 13, 2008.

¹¹ A summary of the pilot study, "The Defense Information Systems Agency Cooperative Review," is in Appendix C.

¹² Goldwater-Nichols Department of Defense Reorganization Act of 1986, P.L. 99-43.

¹³ Weapons Acquisition: A Rare Opportunity for Lasting Change, GAO/NSIAD-93-15, December 1992. See chapter 5.

¹⁴ Gary Christle, "The Abiding Cultural Problem: Accountability, Consequence, and the 129th Study," Defense AT&L, March-April 2008, p. 28.

¹⁵ Creating a DoD Strategic Acquisition Platform, Defense Science Board, April 2009.

¹⁶ "Invigorating Defense Governance," A Beyond Goldwater-Nichols Phase 4 Report, CSIS, March 2008.

¹⁷ See Department of Defense Directive 7045.20, Subject: Capability Portfolio Management, September 25, 2008.

¹⁸ Defense Acquisitions: DoD Must Balance its Needs with Available Resources and Follow an Incremental Approach to Acquiring Weapon Systems, GAO-09-431T, March 3, 2009.

¹⁹ Defense Acquisitions: DoD's Requirements Determination Process Has Not Been Effective in Prioritizing Joint Capabilities, GAO-08-1060, September 2008.

²⁰ "Defense Acquisitions: Assessments of Selected Weapons Programs," GAO-08-467-SP, March 2008.

²¹ Urgent Business for America: Revitalizing the Federal Government for the 21st Century, Report of the National Commission on Public Service, January 2003.

²² *Transforming the Defense Industrial Base: A Roadmap,* Office of the Deputy Under Secretary of Defense for Industrial Policy, February 2003.

²³ Creating an Effective National Security Industrial Base for the 21st Century: An Action Plan to Address the Coming Crisis, Report of the Defense Science Board Task Force on Defense Industrial Structure for Transformation, July 2008.

²⁴ Pre-Milestone A and Early-Phase Systems Engineering: A Retrospective Review and Benefits for Future Air Force Acquisition, National Research Council, National Academies of Science, 2008, p. 18. <u>http://www.nap.edu/catalog/12065.html</u>

²⁵ The definition of "systems engineering" appears to be highly contentious within acquisition-related institutions. It is defined here as "the iterative process of producing useful products through the effective combination of two or more interactive elements." It is a process that is in large part conducted through tradeoff analysis and optimization. And, most importantly, it takes an enterprise view of the acquisition system. This definition appears to be dissimilar to that implied in the most recent acquisition legislation, which appears to see systems engineering as a discipline that consists of using principles and best practices to enhance reliability, availability and maintainability of current systems under development without regards to trades or alternatives. It is a programmatic rather than enterprise approach. See P.L. 111-23, The Weapon Systems Acquisition Reform Act of 2009, May 22, 2009.

²⁶ "Invigorating Defense Governance", A Beyond Goldwater-Nichols Phase 4 Report, CSIS, March 2008.

 27 See Department of Defense Directive 7045.20, Subject: Capability Portfolio Management, September 25, 2008. For example, the JROC delegated authority to the deputy commander of Joint Forces Command (JFCOM) for all command and control (C2) capabilities. This change allows JFCOM to make recommendations for final validation of C² capabilities to the JROC and represent the war fighter in the trade-off discussions in the C² CPM.

²⁸ Chairman of the Joint Chiefs of Staff Instruction, CJCSI 3170.01G, Joint Capabilities Integration and Development System, March 1, 2009, C-3.

²⁹ DoD News Briefing With Secretary Gates From the Pentagon, April 6, 2009. <u>http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=4396</u>

³⁰ Defense Acquisition Performance Assessment (DAPA), January 2006, pp. 35-43.

³¹ "Defense Acquisitions: Perspectives on Potential Changes to Department of Defense Acquisition Management Framework," GAO-09-295R, February 27, 2009.

³² Capability Requirements Identification and Development Processes Review, Defense Business Board, October 2008.

³³ P.L. 111-23, The Weapon Systems Acquisition Reform Act of 2009, May 22, 2009.

³⁴ Creating an Effective National Security Industrial Base for the 21st Century: An Action Plan to Address the Coming Crisis, Report of the Defense Science Board Task Force on Defense Industrial Structure for Transformation, July 2008.

³⁵ See also: Report to the Secretary of Defense: Task Group on a Strategic Relationship model between the Department of Defense and Industrial Base, Report FY08-3, Defense Business Board, July 2008.

³⁶ Defense Acquisition Workforce: Issues for Congress, Congressional Research Service Report 98-938F, March 11, 1999, p. CRS-1.

³⁷ "Urgent Reform Required: Army Expeditionary Contracting," Report of the Commission on Army Acquisition and Program Management in Expeditionary Operations, October 31, 2007, p. 30.

³⁸ DoD News Briefing With Secretary Gates From The Pentagon, U.S. Department of Defense Office of the Assistant Secretary of Defense (Public Affairs), April 06, 2009. <u>http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=4396</u>

³⁹ Ibid., p. CRS-4-11.

⁴⁰ Report of the Acquisition Advisory Panel to the Office of Federal Procurement Policy and The Congress, January 2007, p. 344.

⁴¹ DoD News Briefing with Secretary Gates from the Pentagon, April 6, 2009.

http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=4396

⁴² Fiscal Year 2008 National Defense Authorization Act, P.L. 110-181, Sect. 851 & 852.

⁴³ A Model of Strategic Human Capital Management, GAO Report 02-373SP, March 2002.

⁴⁴ Compilation of Federal Ethics Laws, Office of Government Ethics, December 31, 2008.

http://www.usoge.gov/laws_regs/compilation.aspx

⁴⁵ Title 10, USC, Sect. 1734, subject to certain waivers and exceptions.

⁴⁶ Defense Acquisitions: Assessments of Selected Weapon Programs, GAO-08-467SP, March 2008, p. 29.

⁴⁷ The Beyond Goldwater-Nichols series of reports go further, also recommending that the SAEs report to the Service Secretaries vice the DAE (that is, the USD(AT&L)). See *Beyond Goldwater-Nichols: US Government & Defense Reform for a New Strategic Era*, Phase 2 Report, July 2005, pp. 96-7.

⁴⁸ "Defense Management: Actions Needed to Overcome Long-standing Challenges with Weapon Systems Acquisition and Service Contract Management," GAO-09-362T, February 11, 2009.

⁴⁹ Fiscal Year 2009 Information Technology Budget, Office of Management and Budget, April 15, 2008.

⁵⁰ Antonie Boessenkool, "DoD IT Procurement Too Slow: Cartwright," DefenseNews.com, March 4, 2009.

⁵¹ Title XIV of Public Law 108-136, November 24, 2003.

⁵² "Civilian Surge: Key to Complex Operations: A Preliminary Report," National Defense University, December 2008.

⁵³ National Defense Authorization Act for FY 2008, P.L. 106-65, Sect. 887.

⁵⁴ Department of Defense Policy and Procedures for the Acquisition of Information Technology, Defense Science Board, March 2009.

⁵⁵ Section 841 of the National Defense Authorization Act (NDAA) for Fiscal Year 2008, P.L. 110-181, is the operative text for the Congressional Commission on Wartime Contracting. It is scheduled to make an interim report in 2009, with a final report in 2010. Other provisions of the NDAA of 2008 will be relevant to its work (e.g., Section 842 with regard to Inspectors General audits, sections 1221 and 1229), as well as other laws and subsequent legislation (i.e., NDAA FY 2009 (S.3001). ⁵⁶ Defense Acquisition Performance Assessment (DAPA), January 2006, p. 48.

⁵⁷ Defense Acquisitions: Assessments of Selected Weapon Programs, GAO-09-326SP, March 2009.

⁵⁸ Department of Defense Instruction 5000.02, December 2, 2008, Enclosure 3.

⁵⁹ To meet operational commanders' needs the Army's Rapid Equipping Force (REF) identifies requirements through a very streamlined application and vets them stringently. Generally the request is for a niche item that has an off-the-shelf solution or, at least, one with minimal change required. Testers employ a very narrow testing regime because the item will be used for a very specific solution. General Peter Chiarelli, the Army Vice Chief of Staff, praised the organization's contributions in Iraq and Afghanistan and urged the regular procurement system to follow example. He said, "It provides a great model for how we might improve the effectiveness and the efficiency of the current procurement system in the future. Rather than waiting seven years for ninety-five percent solutions, we should work to get capabilities out to war fighters as quickly as possible." Kate Brannen, "Chiarelli: Rapid Equipping Force Provides Great Model for Reform," Inside the Army, February 2, 2009.

⁶⁰ Department of Defense Policies and Procedures for the Acquisition of Information Technology, Defense Science Board, March 2009.

⁶¹ Review of Acquisition Program Costs, Defense Business Board, October 23, 2008.

⁶² Pre-Milestone A and Early-Phase Systems Engineering: A Retrospective Review and Benefits for Future Air Force Acquisition, National Research Council, National Academies of Science, 2008, p. 62.

⁶³ National Defense Authorization Act for Fiscal Year 2006, Title VIII, Sec. 801.

⁶⁴ For example, see OSD (AT&L) Memorandum, "Proper Use of Award Fee Contracts and Award Fee Provisions," April 24, 2007. Regarding allowable pass-through charges, see DFARS clauses at 252.215-7003 and 7004, May 2008. Also proposed rules on cost-accounting standards published in the Federal Register, Vol. 73, No. 170, September 2, 2008, p. 51261, still under adjudication.

⁶⁵ U.S. Defense Acquisition: An Agenda for Positive Reform, Aerospace Industries Association, November 2008.

⁶⁶ Carlo Munoz, "Panel: Despite Congressional Efforts, Fixed-Price Contracts Still a Long Way Off," DefenseAlert – Daily News, March 3, 2009.

⁶⁷ Business Executives for National Security, Defense Information Systems Agency: Cooperative Review, August 2008. <u>http://www.bens.org/mis_support/DISA_Project-08262008.pdf</u>

⁶⁸ Between fiscal years 2001 and 2008 DoD contracts for services have doubled, from \$98 billion to close to \$200 billion, yet its contracting career field grew by only about 1 percent. *Actions Needed to Overcome Long-standing Challenges with Weapon Systems Acquisition and Service Contract Management*, GAO-09-362T, February 11, 2009.

⁶⁹ The DoD Regulatory Cost Premium: A Quantitative Assessment, Coopers & Lybrand/TASC Project Team, December 1994.

⁷⁰ As of Fiscal Year 2007, the Federal Acquisition Institute reported there were 61,434 federal [contracting] acquisition workers, with more than half of those in DoD. This number is down from the 67,085 reported by the Institute in 1992.



1030 15th Street, NW, Suite 200 East Washington, DC 20005